

1 MANATT, PHELPS & PHILLIPS, LLP  
CRAIG A. MOYER (Bar No. CA 094187)  
2 PETER R. DUCHESNEAU (Bar No. CA 168917)  
11355 West Olympic Boulevard  
3 Los Angeles, CA 90064-1614  
Telephone: (310) 312-4000  
4 Facsimile: (310) 312-4224

5 GIBSON, DUNN & CRUTCHER LLP  
6 JEFFREY D. DINTZER (Bar No. CA 139056)  
DENISE G. FELLERS (Bar No. CA 222694)  
7 333 South Grand Avenue  
Los Angeles, CA 90071-3197  
8 Telephone: (213) 229-7000  
Facsimile: (213) 229-7520

9 Attorneys for Designated Party,  
10 GOODRICH CORPORATION

11 CALIFORNIA STATE WATER RESOURCES CONTROL BOARD  
12

13  
14 IN THE MATTER OF PERCHLORATE  
CONTAMINATION AT A 160-ACRE  
15 SITE IN THE RIALTO AREA  
(SWRCB/OCC FILE A-1824)  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Case No.: SWRCB/OCC FILE A-1824

**GOODRICH CORPORATION'S BRIEF**

Hearing Date: May 8-10 & May 15-17, 2007  
Time: 10:00 a.m.  
Place: San Bernardino County Auditorium

## TABLE OF CONTENTS

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

		<u>Page</u>
I.	INTRODUCTION .....	1
II.	BACKGROUND .....	4
III.	GOODRICH OPERATIONS.....	6
A.	Historical Background of Goodrich's Operations.....	6
	1. Goodrich Never Operated A Large-Scale Facility in Rialto .....	8
	2. The Production of Propellant at Goodrich in Rialto, California.....	10
	3. For the Most Part, Goodrich Operated a Research & Development Facility in Rialto .....	13
	4. Static Test Firing Bay .....	13
	5. Goodrich Disposed of All Propellant Waste in a Single Burn Pit .....	14
	6. There is No Evidence that Goodrich Used Trichloroethylene .....	16
	7. Safety .....	17
	8. Closure of the Goodrich Plant.....	18
B.	Goodrich's Operations in Rialto, California Did Not Result in Any Discharges to the Groundwater.....	20
	1. Goodrich's Burn Pit is NOT a Source of Perchlorate Contamination .....	22
	2. Goodrich's Production Process is NOT a Source of Perchlorate Contamination .....	23
	3. Goodrich's Former Static Test Bay is NOT a Source of Perchlorate Contamination .....	24
	4. The Salvaging of Sidewinder Motor Casings is NOT a Source of Perchlorate Contamination .....	24
	5. Goodrich's Former Operations are NOT a Source of TCE Contamination .....	25
C.	The Advocacy Team Fails To Provide Any Evidence Establishing That Goodrich Discharged Any Ammonium Perchlorate or TCE to the Groundwater .....	26
	1. The Advocacy Team Relies Almost Exclusively on the Testimony of Mr. Ronald Polzien.....	26
	2. The Advocacy Team Has Provided Incomplete or Misleading Support for its Position .....	32
	3. The Advocacy Team's Allegations Regarding Goodrich's Disposal Practices are Based on Pure Speculation – NOT Facts.....	33
	a. The <i>Facts</i> Establish That Goodrich Had One Burn Pit – NOT Two Burn Pits.....	33



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

b. There is No Evidence that Goodrich Used "Area D1" as a Second Disposal Pit..... 34

c. The Advocacy Team's Allegation that Water Was Used in Goodrich's Burn Pit is Based Solely Upon *Speculation* ..... 36

d. The Advocacy Team Has No Reliable Evidence To Support its Allegations That Propellant Remained in the Burn Pit After a Burn ..... 37

e. There is No Evidence that Scrap Propellant was Left in the Burn Pit Overnight..... 39

f. The Evidence Cited Does Not Support the Allegation that Goodrich Disposed of TCE in its Burn Pit ..... 40

4. The Advocacy Team's Allegations Regarding Goodrich's Static Test Firing Bay Lack Any Foundation in Fact ..... 41

a. No Scrap Propellant Remained in the Static Test Firing Bay After a Test Firing ..... 41

b. The Number of Motors Test Fired Each Week Is Far Less Than That Asserted by the Advocacy Team ..... 42

c. There is No Evidence For the Advocacy Team's Assertion That Misfires Occurred on a Daily Basis ..... 43

d. The Advocacy Team Provides No Support for the Assertion that Test Motors Were Reused ..... 43

e. There is No Credible Evidence that Water Was Used in the Static Test Firing Bay ..... 44

5. The Advocacy Team Cannot Cite to Any Evidence That Goodrich Used TCE ..... 45

6. The Advocacy Team Inflates the Size and Extent of Goodrich's Rialto Operations Without Any Factual Support ..... 46

a. Goodrich Operated at Full Production for Less Than Five Years..... 46

b. The Advocacy Team Exaggerates the Number of Loki I Motors Loaded at Goodrich ..... 47

c. The Advocacy Team Also Exaggerates the Number of Loki IIA Motors Loaded by Goodrich..... 47

d. Just as the Advocacy Team Exaggerates the Number of Loki IIA Motors Loaded, It Exaggerates the Number of Loki IIA Motors Test Fired ..... 49

e. The Cited Evidence Does Not Support The Advocacy Team's Estimate of the Number of Sidewinder Rocket Motors Manufactured at the Rialto Plant..... 50

f. The Advocacy Team Mischaracterizes Goodrich's Production of the Jet Assisted Take Off Rocket (JATO) ..... 51

g. The Advocacy Team Mischaracterizes Goodrich's Production of both the ASP 1 and ASP 4 Motors..... 51

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

h. The Cited Evidence Does Not Support the Allegations Regarding Goodrich's Production of Test Motors ..... 52

7. The Advocacy Team Mischaracterizes the Evidence Concerning Goodrich's Use of Ammonium Perchlorate ..... 52

8. The Advocacy Team Unsupported "Story" Regarding Goodrich's Production Process is Materially Misleading ..... 53

a. The Advocacy Team Recklessly Coins the Term "Water-Perchlorate Slurry" ..... 53

b. The Advocacy Team's Characterization of the Mixing Process is Not Supported by the Evidence ..... 54

c. The Advocacy Team's Characterization of the Trimming Process Is Not Consistent with the Evidence ..... 56

9. The Evidence Does Not Support the Allegation that the Sidewinder Salvage Project Resulted in Discharges of Propellant ..... 57

IV. PYROTRONICS CORPORATION ..... 59

A. Overview of Pyrotronics' Operations ..... 59

B. Pyrotronics' Fireworks Manufacturing ..... 61

1. Pyrotronics Purchased, Stored and Handled Substantial Quantities of Raw Perchlorate ..... 61

2. Pyrotronics' Use and Clean-up of the Press Rooms ..... 64

3. Pyrotronics' Use and Clean-up of the Mixing Rooms ..... 67

C. Pyrotronics' Waste Disposal Practices ..... 70

1. The Fireworks Burn Pit ..... 70

a. Pyrotronics Disposed of Pyrotechnic Waste Material in the Fireworks Burn Pit ..... 70

b. The Fireworks Burn Pit Was Used With the Approval and Oversight of the City of Rialto Fire Department and Other Public Agencies ..... 72

2. Pyrotronics Burned Waste Material At An Additional Location in Fire Zone 2 ..... 73

3. The McLaughlin Pit ..... 73

a. No Longer Permitted to Burn its Pyrotechnic Waste Material, Pyrotronics Built the McLaughlin Pit as an Alternate Means of Disposal ..... 73

b. The McLaughlin Pit Was Constructed With the Regional Board's Oversight and Approval ..... 75

c. Pyrotronics Disposed of Perchlorate-Laden Waste Powder and Off-Specification Fireworks in the McLaughlin Pit for Nearly Sixteen Years ..... 77

d. Pyrotronics'/Apollo's Operation of The McLaughlin Pit Continued Without Pause Even as Regional Board Inspectors Routinely Identified Violations of WDRs and Regulations ..... 80

1	e.	California Adopts Subchapter 15 Regulations .....	85
2	f.	Application of Subchapter 15 Regulations to "Existing" Waste Management Units.....	86
3	g.	Pyrotronics Fails to Submit Mandatory Monitoring Program; Which the Regional Board Fails to Require .....	88
4	h.	Subchapter 15 Provided Very Specific and Detailed Closure Requirements for Surface Impoundments .....	92
5	i.	Mr. Thompson Purchases the Southern Portion of the 160-Acre Parcel and Retains Mr. McLaughlin to Close the McLaughlin Pit.....	93
6	j.	Mr. Thompson Files a Proposed Site Plan And Environmental Information Form With the City Indicating that the McLaughlin Pit Must Be Closed Prior to Redevelopment of the Property.....	96
7			
8	k.	Without Authorization, Pyrotronics and Western Precast Products, Inc. Burned Approximately 54,000 pounds of Class I Hazardous Waste in the McLaughlin Pit; Buried the Pit and Paved Over It - While the Regional Board and the City Watched and Approved.....	108
9	l.	Data Indicates McLaughlin Pit Is a Major Source of Perchlorate Contamination .....	114
10			
11	D.	Multiple Fires and Explosions at the Pyrotronics' Facility Caused Spills and Releases of Perchlorate.....	115
12	E.	California Fireworks Display Company and the Testing of Aerial Display Fireworks .....	117
13	F.	Pyrotronics' Testing of Consumer Fireworks.....	118
14	V.	TROJAN FIREWORKS/ASTRO PYROTECHNICS .....	119
15	A.	Trojan's Manufacturing Operations .....	119
16			
17	1.	Purchase and Storage of Raw Chemicals Including Perchlorate .....	121
18	2.	Weighing and Mixing of Pyrotechnic Composition.....	122
19	3.	Waste Generated in the Weighing and Mixing Process.....	124
20	4.	Fireworks Press Operations.....	125
21	B.	Trojan's Storage of Live Waste .....	127
22	C.	Consumer Fireworks Testing .....	128
23	D.	Trojan's Testing of Aerial Display Fireworks .....	129
24	E.	Trojan's Open Burning of Waste Material.....	130
25	1.	Fireworks Burn Pit/Pyrotronics Site .....	130
26	2.	Bunker B-1 burns.....	131
27	F.	Fires and Explosions.....	132
28	VI.	RDF HOLDING COMPANY .....	134
	VII.	AMERICAN PROMOTIONAL EVENTS, INC. – WEST .....	137

1	A.	APE Handles a Large Volume of Potassium Perchlorate-Containing Consumer Fireworks on the 160-acre Parcel .....	137
2	B.	APE Burned "Off-Specification" Fireworks On Site .....	139
3	C.	APE Regularly Tests Consumer Fireworks at the Rialto Facility .....	141
4	D.	APE's Accumulation of Off-Specification Fireworks and Floor Sweepings in Building 51 .....	143
5	E.	Allegations That Ms. Cartagena Intentionally Buried Drums On the 160-acre Parcel.....	146
6	VIII.	DISPOSAL OF CONFISCATED FIREWORKS BROUGHT TO THE 160-ACRE PARCEL BY THE CITY, COUNTY, AND STATE .....	147
7	IX.	COUNTY OF SAN BERNARDINO AND ROBERTSON'S READY MIX.....	149
8	X.	THE REGIONAL BOARD'S DECISION TO PROSECUTE GOODRICH .....	154
9	XI.	THE REGIONAL BOARD STAFF AND THE CITY OF RIALTO REFUSE TO PROSECUTE TO KEN THOMPSON, INC.....	159
10	XII.	THE PROPOSED CAO FAILS TO ADDRESS RIALTO AMMUNITION STORAGE POINT AS A SOURCE OF CONTAMINATION.....	162
11	A.	Location and Extent of RASP Site.....	162
12	B.	History of RASP Site.....	163
13	C.	The DOD has violated Regional Board Orders.....	165
14	D.	TCE Use and Disposal at the RASP Site.....	167
15	E.	Perchlorate Use and Disposal at the RASP Site.....	170
16	XIII.	USE OF CHILEAN NITRATE FERTILIZER CANNOT BE DISREGARDED AS A SOURCE OF PERCHLORATE CONTAMINATION.....	171
17	A.	The Advocacy Team's Disregarding of Chilean Nitrate Fertilizer is Unsupported and Contrary to the Evidence .....	173
18	B.	Chilean Nitrate Fertilizer Used In Agricultural Activities Is A Known Source Of Perchlorate Groundwater Contamination.....	175
19	1.	Chilean Nitrate Fertilizer Contains Perchlorate.....	175
20	2.	The Application of Fertilizer Makes it Very Susceptible to Causing Groundwater Contamination.....	175
21	3.	The Regional Board and Other Agencies Have Recognized Chilean Nitrate Fertilizer as a Source of Perchlorate Groundwater Contamination.....	176
22	C.	The Historical Uses Of Chilean Fertilizer In The Rialto Area Explain The Presence Of Perchlorate In The Rialto-Colton Basin.....	177
23	1.	Chilean Fertilizer Was Widely Used in the Fruit Growing Industry Throughout the U.S. and California in the Early-to-mid 20th Century.....	177
24	2.	Citrus Farming Was Widespread in the Rialto Area During the Early-to-mid-1900s.....	178
25	3.	Chilean Nitrate Fertilizer Was Commonly Used By Early Citrus Growers in the Rialto Area.....	179

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

4. Vast Quantities of Widespread Irrigation Caused Perchlorate to Reach Groundwater in the Basin..... 180

5. Historical Agricultural Activities Are Located In Very Close Proximity to Wells Throughout the Area Overlying the Rialto Groundwater Management Zone..... 181

XIV. LEGAL ARGUMENTS ..... 182

A. The Advocacy Team Bears The Burden Of Proof And Must Prove Its Case By A Preponderance Of The Evidence ..... 182

B. Goodrich is not Liable Under Cal. Water Code Section 13304..... 183

1. The Advocacy Team Has Violated The Hearing Notice And Cannot Deviate From Its Charging Papers..... 185

2. The Original Section 13304 and Its Successive Amendments Are Not Retroactive and Goodrich's Acts Were Legal At The Time They Occurred..... 186

a. Section 13304 is Not Retroactive..... 186

b. Subsequent Amendments to Cal. Water Code Section 13304 Have Not Made it Retroactive, But Rather Confirm that It Was Not Intended to Apply to Acts Before Its Passage..... 190

c. Even if the State Board Erroneously Interprets Section 13304(j) as providing Retroactive Effect, the Advocacy Team Bears the Burden of Proving that Acts Occurring Before 1981 Were Contrary to Laws or Regulations "At the Time They Occurred."..... 193

(1) Goodrich is Not Liable For Continuous or Passive Migration..... 195

(2) Goodrich Did Not Violate the Dickey Water Pollution Act..... 196

(a) There is No Evidence of a Discharge to Waters at the Time of Goodrich's Operations..... 197

(b) There is No Evidence that a Discharge from Goodrich's Operations caused Pollution or a Nuisance at the time..... 199

(3) Advocacy Team has Not Proven that Goodrich Negligently or Intentionally Discharged Waste..... 200

(4) There is No Evidence that Goodrich Violated Any Other Laws at the Time..... 202

(a) Goodrich did not violate Health and Safety Code Sections 5410-5462..... 203

(b) Goodrich did not Violate Fish and Game Code Section 5650..... 204

(5) Goodrich Did Not Commit A Public Nuisance ..... 205

3. Goodrich Is Not Liable Under Section 13304 Even If Existing Standards Apply ..... 207

1	a.	Goodrich Did Not Cause or Permit Waste to be Discharged or Deposited Into Waters of the State.....	208
2	b.	There is No Proof that Any Discharge by Goodrich Has Caused or Threatens to Create "Nuisance" or "Pollution".....	208
3			
4	C.	The State Board Has No Authority To Order Goodrich To Reimburse Water Purveyors For Past Or Ongoing Costs Or To Order Water Replacement.....	211
5			
6	1.	Water Code Section 13304(c)(1) only permits recovery of Government Agency Cleanup Costs Pursuant to a Civil Action.....	211
7			
8	2.	Section 13304 Impermissibly Affords Water Replacement.....	212
9	a.	The Water Replacement and Reimbursement Provisions Are Not Retroactive.....	212
10	b.	The Water Replacement and Reimbursement Provisions Are Preempted by CERCLA and the City of Rialto Is Collaterally Estopped from Advancing Related Claims.....	215
11			
12	(1)	Water Code Section 13304's Water Replacement Provisions Conflict with the NCP and are Preempted by CERCLA.....	215
13			
14	(2)	The federal District Court has twice ruled that the Water Purveyors may not evade the NCP.....	218
15	(3)	The City of Rialto is Collaterally Estopped from Advancing Claims Related to Water Replacement and Reimbursement.....	219
16			
17	c.	The Advocacy Team Has Not Proven That Wells are "Affected" by Goodrich.....	221
18	d.	Water Replacement Cannot be Ordered Where No Water Standards Are Exceeded.....	221
19	D.	An Order Pursuant To Water Code Section 13267 Is Inappropriate.....	224
20	E.	Goodrich Is Not Subject To Joint And Several Liability.....	227
21	1.	Section 13304 Imposes a Several Obligation Only.....	227
22	2.	Severable Liability Is Further Appropriate Because the Injury Imposed is Divisible.....	228
23	a.	Traditional Tort Principles Dictate that Liability Is Severable In This Proceeding.....	228
24	b.	Liability Under California's Principal Hazardous Waste Remediation Law is Apportioned According to Fault.....	230
25	3.	The State Board Is Estopped from Imposing Joint and Several Liability.....	230
26	a.	The State's Actions Concerning the McLaughlin Pit and Robertson's Ready-Mix.....	231
27	(1)	McLaughlin Pit.....	231
28			

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

- (2) Robertson's Ready-Mix.....232
- b. The State Has Violated Section 13304 and Must Share Liability.....233
- c. The State Is Now Estopped from Seeking and Imposing Joint and Several Liability.....234
- F. The Statute Of Limitations Precludes This Action And The Equitable Doctrine Of Laches Estops The State Board From Issuing A Cleanup And Abatement Order .....235
- G. Res Judicata And Collateral Estoppel Preclude The State Board From Issuing A New Cleanup And Abatement Order .....237
- XV. GOODRICH WAS COMPLYING WITH FEDERAL GOVERNMENT REQUIREMENTS AND IS NOT LIABLE UNDER CONFLICTING STATE LAWS.....238
- A. Goodrich Was Required to Burn Waste in Accordance with Federally Imposed Standards .....239
- 1. Goodrich Was Required to Burn Waste Ammonium Perchlorate .....241
- a. Goodrich Was Drafted Into the Cold-War Effort to Produce Solid-Rocket Boosters to Compete with the Soviet Union .....241
- b. Ammonium Perchlorate Is a Vital Ingredient in Solid-Rocket Propellant .....242
- c. The United States Military Carefully Controlled How Ammonium Perchlorate Was Handled and Destroyed.....243
- (1) Military Manuals Directed Contractors to Burn Waste Propellant.....244
- (2) Goodrich Complied with These Manuals.....246
- 2. Goodrich Was Required to Burn Waste Solvent That Had Been Contaminated with Ammonium Perchlorate and Propellants.....247
- B. Goodrich Was Complying With Valid Legal Regulations Created Pursuant to Federal Law: Conflicting State Laws Are Preempted.....248
- 1. The Military Has Statutory Authority to Promulgate Regulations Applicable to Its Procurement Activities .....249
- 2. Under the Supremacy Clause, Conflicting California Laws and Regulations Are Preempted by Valid Federal Regulations Governing the Operation of the Burn Pit.....250
- 3. California Civil Code Section 1714.6 Prohibits Enforcement Against Goodrich .....252
- C. The Government Contractor Defense Operates to Shield Goodrich from Liability Under Competing State Law Requirements .....253
- 1. The Government Contractor Defense Applies Whenever a Conflict Exists Between Federal Law and State Law With Regard to a Government Contractor's Activities .....253

1	2.	The Government Contractor Defense Protects Contractors When Hazardous Materials Are Released as the Result of the Federal Government's Discretionary Decisions.....	256
2			
3	XVI.	OTHER POTENTIALLY LIABLE PARTIES WERE NOT NAMED IN THE CAO AND HAVE BEEN BLATANTLY IGNORED .....	260
4	A.	Pyrotronics' Operations Cannot be Overlooked .....	261
5	B.	Ken Thompson is Liable For Groundwater Contamination Because He Accepted Responsibility to Close the McLaughlin Pit; Improperly Closed the Pit; and Still Owns the Pit Today .....	263
6			
7	C.	The State of California Is Responsible For The Contamination Generated By Pyrotronics .....	265
8	1.	The Regional Board "Permitted" Discharges to Occur from the McLaughlin Pit and Robertson Ready Mix Under Water Code Section 13304(a).....	265
9			
10	2.	The Regional Board is Liable Under Government Code Section 815.6 as it Failed to Discharge its Subchapter 15 Duties .....	266
11			
12	3.	The Regional Board's Perchlorate "Investigation" Was Designed to Avoid Scrutiny of the Board's Own Misconduct .....	269
13	D.	City of Rialto is a Responsible Party .....	270
14	1.	The City Did Not Enforce a Mitigation Measure Requiring Proper Cleanup of the McLaughlin Pit .....	270
15	2.	The City Was, and Is, Well Aware of the Perchlorate Usage at the Rialto Fireworks Facilities .....	272
16	XVII.	CCAIEJ AND ENVIRONMENT CALIFORNIA WILL NOT PROVIDE ANY ADDITIONAL INFORMATION RELEVANT TO THE PRESENT PROCEEDINGS .....	273
17	A.	Environment California .....	274
18	1.	Ms. Jahagirdar has no relevant firsthand knowledge.....	276
19	2.	Ms. Jahagirdar possesses no expert knowledge on any relevant issue .....	279
20	3.	Ms. Jahagirdar also may not present the publications of Environment California or any other hearsay .....	284
21	B.	CCAIEJ .....	284
22	C.	This Testimony Demonstrates That Environment California and CCAIEJ Have No Relevant Evidence To Add To These Proceedings .....	293
23	XVIII.	A REVIEW OF THE REGIONAL BOARD'S ACTIONS REVEALS STARTLING MOTIVATIONS THAT SHOULD BE ADDRESSED BY THE STATE BOARD.....	293
24	A.	Gerald Thibeault and Kurt Berchtold .....	294
25	B.	Robert Holub .....	299
26	1.	Chilean Nitrate as a Source of Perchlorate Contamination .....	300
27			
28			



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

2. The Physical Distinction of the Perchlorate Plume Emanating from the Property Adjacent to the Mid-Valley Landfill and from the 160-acre site..... 301

3. The General Characteristics of Perchlorate..... 302

4. The Regional Board's Regulatory History regarding the McLaughlin Pit..... 303

5. Data and Findings regarding TCE and Perchlorate discharges at and from the Property, and Impacts of Perchlorate and TCE on the Municipal Water Supply..... 307

C. Ann Sturdivant..... 313

D. Kamron Saremi ..... 322

XIX. ADDITIONAL SUBMISSIONS OF EVIDENCE IN REBUTTAL WILL BE NECESSARY ..... 330

XX. CONCLUSION ..... 331

1           **I. INTRODUCTION**

2           For the second time in five years, Goodrich is being forced to defend itself against  
3 baseless allegations brought by the Santa Ana Regional Water Board Staff. In 2002, the  
4 first time the "Advocacy Team" issued a CAO accusing Goodrich of contaminating the  
5 Rialto/Colton Groundwater Basin with perchlorate and TCE, the Regional Board held a  
6 full hearing and rescinded the CAO due to a lack of evidence. Today, the Advocacy  
7 Team's evidence is no stronger than it was in 2002. Indeed, the Advocacy Team cannot  
8 present a single witness that can testify that discharges from Goodrich's operations have  
9 even reached groundwater or threaten to reach groundwater.

10           Goodrich is being dragged through this costly and time-consuming procedure  
11 again not because there is any new found evidence of its responsibility for the  
12 contamination of the Rialto/Colton Basin, but rather because the Advocacy Team is  
13 under tremendous pressure from the public and from local and state politicians to find  
14 someone, regardless of their culpability, to cleanup the Rialto/Colton Basin. Goodrich,  
15 along with the other entities named in this proceeding, simply have been singled out  
16 from numerous former and current operators on the 160-acre site, many of which used  
17 and disposed of large amounts of perchlorate on the site.

18           The pressure to find a scapegoat, without any evidence of responsibility, however,  
19 is not a permissible reason to seek to lay blame on Goodrich. This is particularly true  
20 where, as here, the evidence pointing to the actual culpable parties is so clear. The  
21 evidence is overwhelming that contamination in the Rialto/Colton Basin was caused by  
22 years of manufacturing, testing, and disposing of fireworks on the 160-acre site. The  
23 poorly constructed, negligently maintained disposal pool used by fireworks  
24 manufacturers for more than fifteen years to dispose of tons of off-spec fireworks,  
25 propellants, and chemical mixtures containing perchlorate at the site is the only  
26 confirmed source of perchlorate contamination in groundwater on the 160-acre parcel.

27           The McLaughlin Pit, as the Apollo/Pyrotronics fireworks hazardous waste surface  
28

1 impoundment has come to be known, was no secret to the Regional Board staff. In fact,  
2 the Regional Board staff actually approved a WDR for the disposal of 3,000 gallons per  
3 day of pyrotechnic wastes containing high concentrations of perchlorate into the pit.  
4 Members of the Advocacy Team, and other senior management of the Santa Ana  
5 Regional Board staff, personally observed and documented numerous violations at the  
6 McLaughlin Pit over the years, including contaminated water overflowing from the Pit.  
7 Yet the Regional Board staff did nothing. Under the Regional Board staff's supervision,  
8 the McLaughlin Pit fell into disrepair as thousands upon thousands of pounds of  
9 pyrotechnic waste were dumped into it, creating one of the most dangerous hazardous  
10 waste sites in the Santa Ana Region. Yet still the Regional Board staff did nothing. Not  
11 once did the Regional Board staff cite Pyrotronics, issue any penalties against  
12 Pyrotronics or even threaten any action.

13 This was despite regulations that the Regional Board was mandated to enforce  
14 that required monitoring to determine if the pit had leaked – monitoring that was never  
15 performed – and that required perchlorate to be sampled for when leaks are detected at  
16 hazardous waste surface impoundments such as McLaughlin Pit. When it came time to  
17 close the McLaughlin Pit in 1987, the Regional Board staff failed to require Apollo,  
18 Pyrotechnics, or anyone else to comply with applicable Subchapter 15 regulations  
19 regarding closure. More surprisingly, the Regional Board staff decided the area under  
20 the pit was clean based on only one sample – a sample that failed to test for perchlorate,  
21 nitrate, or any of the likely contaminants that were leaking from the obviously corroded  
22 pool. In fact, extraordinarily high levels of perchlorate have been detected in the entire  
23 400-foot soil column under the McLaughlin Pit, with sample results showing perchlorate  
24 concentrations of hundreds of thousands of parts per billion in the soil under the pit. As  
25 result of the Regional Board staff's failure to properly regulate the Pit, failure to properly  
26 close it, and failure to require any effective sampling to determine leakage, massive  
27 releases of perchlorate into the soil and groundwater at the 160-Acre site occurred.

28 The City of Rialto, also a prosecutor in this proceeding, is not without blame with

1 regard to the McLaughlin Pit. The City issued a negative declaration for the subsequent  
2 development of the property on which the McLaughlin Pit is located, but never enforced  
3 its mitigation measures. According to the City's mitigation measures, Ken Thompson,  
4 Inc., the subsequent owner of the McLaughlin Pit, was to properly and lawfully close the  
5 Pit and obtain approval from several agencies after having done so. But there is no  
6 evidence that a proper closure of the McLaughlin Pit ever occurred or that Ken  
7 Thompson, Inc. ever got required agency approvals. Indeed, it was the City that stood  
8 by as Ken Thompson's consultant – who lacked the professional licenses required by  
9 regulation – burned 54,000 pounds of hazardous waste in the pit in violation of  
10 numerous federal and state laws. And it was the City of Rialto that was the only  
11 governmental agency that signed off on the illegal burn.

12 The result of the Regional Board staff's and the City of Rialto's neglect is that the  
13 McLaughlin Pit was permitted to leach perchlorate contaminated waste into the ground  
14 for decades, contaminating the Rialto/Colton Basin.

15 Simply because Goodrich conducted limited operations in Rialto approximately 50  
16 years ago does not support issuing the subject CAO against Goodrich. Moreover, while  
17 Goodrich has always maintained its innocence, Goodrich's history with the Regional  
18 Board has always been one of cooperation. Goodrich provided four million dollars to  
19 water purveyors and spent millions more investigating not only the 160-acre parcel but  
20 also contamination miles downgradient of the 160-acre parcel. The results of this  
21 thorough investigation are conclusive—Goodrich did not cause or contribute to the  
22 groundwater contamination in the Rialto/Colton Basin.

23 This brief will show, with overwhelming evidence, that: (1) Goodrich did not  
24 discharge any TCE or ammonium perchlorate into the groundwater;  
25 (2) Pyrotronics/Apollo's operations on the 160 acre site, including its use of the  
26 McLaughlin Pit, discharged massive amounts perchlorate into the groundwater, and  
27 (3) the Regional Board staff's and the City of Rialto's negligent oversight of the operation  
28 and closure of the McLaughlin Pit allowed water containing high concentrations of

1 perchlorate to reach and contaminate the Rialto/Colton Groundwater Basin.

2 **II. BACKGROUND**

3 After ten years of investigation and five years of cooperation and investigation by  
4 Goodrich costing millions of dollars, the Advocacy Team still has no credible evidence to  
5 issue a cleanup and abatement order, or Section 13267 order, to Goodrich. Yet, it  
6 persists in seeking to have the Draft Amended Cleanup and Abatement Order, No. R8-  
7 2005-0053, adopted (the "Draft CAO"). Draft Amended Cleanup and Abatement Order,  
8 No. R8-2005-0053; Letter from Jorge Leon to Tam Doduc and Karen O'Haire, February  
9 27, 2007 (stating that Draft CAO constitutes pleading for this proceeding). The  
10 Advocacy Team's request should be summarily denied and the Draft CAO should be  
11 dismissed by the State Water Resources Control Board (the "State Board").

12 The Draft CAO alleges that Goodrich is liable under Water Code Section 13304  
13 for operations that occurred in Rialto, California from 1957 to 1964. Draft CAO, Findings  
14 ¶¶ 27-34. The Advocacy Team claims that Goodrich's operations on a 160-acre parcel  
15 in Rialto "have caused or permit waste, i.e., perchlorate and/or trichloroethylene (TCE),  
16 to be discharged or deposited where it is, or probably will be, discharged into waters of  
17 the state." Draft CAO, Finding ¶ 1. Through the Draft CAO, the Advocacy Team seeks  
18 to order Goodrich and the other alleged dischargers to (1) essentially investigate and  
19 remediate the entire Rialto-Colton groundwater basin, which by the Advocacy Team's  
20 own estimate would cost hundreds of millions of dollars; (2) provide water replacement  
21 or contingency plans for 16 public drinking water wells as far away as six miles; and (3)  
22 even authorize the Executive Officer, a member of the Advocacy Team, to order the  
23 alleged dischargers to reimburse water purveyors for millions of dollars in costs  
24 purportedly incurred in cleaning up waste, abating the effects of waste, supervising  
25 cleanup and abatement, and taking remedial action. Draft CAO, Order ¶¶ 1-13.

26 As demonstrated below, both the Draft CAO and the Advocacy Team's  
27 Memorandum of Points and Authorities ("Ad. Team P&A's") and exhibits submitted on  
28 March 27, 2007, lack any credible evidence demonstrating that a discharge occurred

1 from Goodrich's operations into waters of the state. Rather, the Advocacy Team's cases  
2 boils down to overly simplistic claims that perchlorate or TCE contamination is coming  
3 from the 160-acre parcel and, as a result, Goodrich should be saddled with liability. This  
4 approach is grossly inadequate as a matter of law and under the facts of this case and  
5 will not withstand judicial scrutiny. *The law does not tolerate such imprecision.* The  
6 evidence detailed below demonstrates that Goodrich's operations did not cause  
7 contamination to the groundwater and that there are numerous other potential sources of  
8 perchlorate and TCE on the 160-acre parcel and throughout the Rialto-Colton basin.  
9 They include the two decades of fireworks manufacturing by Pyrotechnics on the 160-acre  
10 parcel and its use of the Regional Board's sanctioned disposal impoundment (a.k.a. the  
11 "McLaughlin Pit"), the only confirmed source of perchlorate groundwater contamination  
12 on the 160-acre parcel according to the Advocacy Team's own account; the Robertson  
13 Ready Mix operations where the Regional Board permitted millions of gallons of water to  
14 wash through perchlorate contaminated soil; and the historic widespread application of  
15 Chilean Nitrate fertilizer in citrus orchards throughout the basin.

16 Likewise, the 2006 Draft CAO falls far short of any legal authority for its issuance.  
17 In seeking this relief, the Advocacy Team relies on many significant misunderstandings  
18 of the law. To start with, the Advocacy Team incorrectly assumes that the very statutes  
19 it seeks to prosecute Goodrich under, Cal. Water Code Sections 13304 and 13267, can  
20 be retroactively applied to conduct which began fifty years before these proceedings and  
21 ended years before the statutes' operative dates in 1970. This assertion runs contrary to  
22 case law that is nearly as old as this country that laws are not, and presumed not to be,  
23 retroactive, as well as the express provisions of and legislative history of the statute. As  
24 is evident below, even should the State Board erroneously seek to hold Goodrich liable  
25 under Water Code Section 13304, there is no evidence that Goodrich's acts violated any  
26 laws at the time of its operations in Rialto. In fact, Goodrich, a military government  
27 contractor, was required to comply with and follow specific military directives as to the  
28 handling and disposition of perchlorate and solvents. This alone precludes the State

1 Board from issuing an order to Goodrich. Equally misguided is the Advocacy Team's  
2 passing assertion that Goodrich is jointly and severally liable under Water Code Section  
3 13304. Both the law and the Regional Board's own hand in causing the contamination  
4 prohibit the imposition of joint and several liability on Goodrich.

5 For these and the reasons set forth herein, Goodrich respectfully requests that the  
6 State Board dismiss the Draft CAO in its entirety.

7 **III. GOODRICH OPERATIONS**

8 **A. Historical Background of Goodrich's Operations**

9 In the late 1950's The B.F. Goodrich Company, now Goodrich Corporation  
10 ("Goodrich"), made an unsuccessful attempt to enter the "Space Race" through the  
11 manufacturing of solid rocket propellant. See Ex. 10 (GRC-018833-51); see *a/so* Merrill  
12 Dec. ¶ 12. At the time, Goodrich was hoping to parlay its knowledge of binders used in  
13 the manufacturing of rubber, for such items as tires, to help it move into the solid rocket  
14 propellant business. *Id.*; see *also* Ex. 10 (GRC-018833-51) ("The solid rocket motor  
15 business is a promising field for which our chemical polymer knowledge fits us.") To that  
16 end, Goodrich started a small research and development team in Brecksville, Ohio to  
17 study solid rocket propellant. *Id.* Soon, Goodrich decided to open a facility in Rialto,  
18 California with the hopes of obtaining production contracts from the United States  
19 Department of Defense. *Id.*

20 In September of 1957, Goodrich transferred approximately ten people from  
21 Brecksville, Ohio to Rialto, California to begin setting up this new research and  
22 development facility. Wever Dec. ¶ 3. It was not until 1959 that Goodrich obtained a  
23 contract with the United States government for actual production of rocket motors. Ex. 1  
24 (KWKA00452123-29) (April 2, 1959 Negotiated Contract for Nord 18853); Ex. 52  
25 (KWKA00452143-82) (June 4, 1959 Negotiated Contract for Nord 18966). The first  
26 production contract Goodrich obtained was for the Loki motor, also referred to as the  
27 HASP (High Altitude Sounding Projectile). *Id.* Two years later, in 1961, Goodrich  
28 obtained a contract to produce the Sidewinder missile. See *e.g.*, Ex. 82

1 (KWKA00452529) (April 18, 1961 Navy Memo).

2 Goodrich operated on the Rialto property for just five years before it was forced to  
3 close its plant. During these five years, Goodrich attempted, unsuccessfully, to establish  
4 a full scale rocket motor production operation servicing United States government  
5 contracts. Unfortunately, Goodrich encountered difficulties in the production of both the  
6 Loki and the Sidewinder, ultimately forcing it to shut down its operations in 1963. See  
7 e.g. Ex. 54 (KWKA00452247-48); Ex. 57 (KWKA00452281); Ex. 60 (KWKA00452283);  
8 Ex. 65 (KWKA00452314); Ex. 74 (KWKA00452541-45); Ex. 12 (KWKA00452713-14);  
9 Ex. 14 (KWKA00452719-23); Ex. 95 (KWKA00452736-77); Ex. 96 (KWKA00452730-51)  
10 Ex. 98 (KWKA00452749-57); Wever Dec. ¶ 46. In total, **less than 1,000 production**  
11 **rockets were produced by Goodrich** in Rialto before the plant ceased operations. Ex.  
12 1 (KWKA00452123-29) (contract Nord 18853 totals 185 Loki motors); Ex. 52  
13 (KWKA00452143-182) (contract Nord 18966 totals 600 Loki motors); Ex. 74  
14 (KWKA00452541-45) (contract Nord 18966 reduced to 330 Loki motors); Ex. 93  
15 (KWKA00452719-23) (indicates a Sidewinder contract for 311 motors but cracking  
16 developed in Lot 3); Merrill Dec., Ex. A.

17 Unlike later operators on the Property, during its five years of operation, Goodrich  
18 had an excellent safety record – not one explosion occurred during Goodrich's tenure.  
19 Wever Dec. ¶ 6, 62; Haggard Dep., 38:25-39:8. To ensure the safety of the facility,  
20 Goodrich followed standard industry practices at that time, and the then-existing  
21 government regulations on the use, handling and disposal of chemicals used to make  
22 solid rocket motor propellant. Wever Dec. ¶¶ 6, 54; Haggard Dep., 38:25-39:8.

23 All of Goodrich's waste solid propellant was disposed of by burning in a burn pit:  
24 Sachara Dec. ¶ 9; Graham Dec. ¶ 5-6; Beach Dec. ¶ 11; Willis Dec. ¶ 19; Staton Dep.,  
25 24:22-25:2. The burning of propellant waste is a highly efficient means to dispose of this  
26 waste. Wever Dec. ¶¶ 54-55; Oxley Dec. ¶ 13-14; Merrill Dec. ¶ 15; Ustan Dec. ¶ 8.  
27 During Goodrich's entire short-lived tenure in Rialto, all scrap propellant, excess oxidizer,  
28 and spent solvents were promptly collected, placed in combustible containers and taken



1 to the burn pit for disposal. Sachara Dec. ¶ 9; Graham Dec. ¶ 5-6; Beach Dec. ¶ 11;  
2 Willis Dec. ¶ 19; *see also* Staton Dep., 24:22-25:2. Former Goodrich employees have  
3 repeatedly testified under oath that propellant and other chemicals (including oxidizer  
4 and solvent) were never left laying on the bare ground at the facility, were never buried  
5 at the site, and were never disposed of in a pond, ditch, leach field or landfill at the  
6 facility. Sachara Dec. ¶ 6; Holtzclaw Dec. ¶ 10-12; Graham Dec. ¶ 9-11; Beach Dec.  
7 ¶ 8; Willis Dec. ¶ 20; Shook Dep., 30:10-14, 53:2-60:6; Staton Dep., 15:5-17:23; Garee  
8 Dep., 79:1-23; Morris Dep., 36:6-38:24; Haggard Dep., 36:6-38:24, Hernandez Dec. ¶ 5-  
9 7; Bland Dec. ¶¶ 10-1; Ustan Dec. ¶ 8. Because Goodrich burned all combustible  
10 industrial waste, the available evidence leads to the conclusion that Goodrich's short  
11 lived and small-scale operation did not contaminate, and does not threaten to  
12 contaminate, the groundwater at the 160-Acre Parcel or the Rialto-Colton Basin. Oxley  
13 Dec. ¶ 13-14; Kavanaugh Dec. ¶ 90, 92-96, 98; Kresic Dec. ¶ 52-53.

14 **1. Goodrich Never Operated A Large-Scale Facility in Rialto**

15 Goodrich never operated a large-scale rocket production facility in Rialto. Merrill  
16 Dec. ¶ 24. Indeed, Goodrich principally produced two rockets – the Loki and the  
17 Sidewinder. Both of these rockets were relatively small, the Loki was approximately five  
18 feet long and three inches in diameter and held approximately 16.8 pounds of propellant.  
19 Ex. 4 (KWKA00452572-591); Merrill Dec. ¶ 23, Ex. A. Initially, the Loki I loaded at  
20 Goodrich used a Thiokol propellant. Wever Dec. ¶ 13; *see also* Ex. 54  
21 (KWKA00452247-48); Ex. 80 (KWKA00452271-77). Later on, after Goodrich  
22 researchers created their own proprietary propellant, the Loki II was produced using the  
23 new Goodrich formulation. *Id.* In total, less than 600 Lokis, including both the Loki I and  
24 the Loki II, were produced by Goodrich at its Rialto facility. Ex. 1 (KWKA00452123-29);  
25 Ex. 2 (KWKA00452202-3); Ex. 8 (KWKA00452314); Ex. 9 (KWKA00452557-59); Merrill  
26 Dec. ¶ 20, Ex. A.

27 The Sidewinder was a small air-to-air missile used by the United States military.  
28 Wever Dec. ¶ 14. The Sidewinder was approximately five feet long and between five to

1 eight inches in diameter and weighed approximately 55 pounds. Ex. 20387  
2 (KWKA00452050). Because of cracking in the propellant grain, Goodrich never  
3 completed its production contract with the United States Navy. As a result of the Navy  
4 cancelling this contract, fewer than 500 Sidewinder motors were loaded at Goodrich's  
5 facility in Rialto. Ex. 11 (KWKA00452643-44); Ex. 12 (KWKA00452713-14); Ex. 13  
6 (KWKA00452702-06); Ex. 14 (KWKA00452719-23); Ex. 15 (KWKA00452767-78); Ex. 17  
7 (KWKA00452740-43); Ex. 19 (KWKA00452634-37); Ex. 84 (KWKA00452616-20); Ex. 86  
8 (KWKA00452634-37); Ex. 89 (KWKA00452677-78).

9 While Goodrich also produced other motors, such as the ASP, RTV, Atmos and  
10 spherical motors, these motors were produced on a very small scale and were mainly for  
11 research and development purposes. Wever Dec. ¶¶ 10, 11, 12; Sachara Dec. ¶¶ 3, 15;  
12 Graham ¶ 4. It is unclear the exact number of these motors produced at Goodrich, but  
13 there is no evidence that any significant numbers were produced. Wever Dec. ¶¶ 10, 11,  
14 12. Moreover, other than the Atmos and spherical motors, there is no evidence that the  
15 propellant used in these motors contained ammonium perchlorate. Wever Dec. ¶¶ 10, 11,  
16 12; *see also* Graham Dec. ¶ 4.

17 In total, Goodrich produced well-under one thousand production rocket motors at  
18 its Rialto facility. Merrill Dec. ¶¶ 20, 25, Ex. A. Based on the relatively small size of these  
19 motors, the total amount of propellant burned at Goodrich's Rialto facility is less than  
20 12,000 pounds. Merrill Dec. ¶¶ 20-23, Ex. A. Dr. Claude Merrill, an expert in the field of  
21 rocket manufacturing who has worked for the United States Air Force since 1966 at the  
22 Edwards Rocket Site, has visited numerous government contractor facilities where  
23 propellant was manufactured and tested. Merrill Dec. ¶¶ 1-4. It is Dr. Merrill's opinion  
24 that the amount of propellant produced at Goodrich is far less than many other rocket  
25 facilities during this time (facilities the Advocacy Team claims are similar to that of  
26 Goodrich's Rialto facility). *See* Merrill Dec. ¶ 24 ("Based on my knowledge of other  
27 rocket production facilities, including that of Thiokol, Hercules, Aerojet, United  
28 Technologies, and Atlantic Research Corporation, it is my opinion that the Goodrich

1 operation in Rialto, California, in comparison to these other solid rocket manufacturers,  
2 was a very small operation. . . . Total Goodrich production estimate of solid rocket  
3 propellant at the Rialto plant was much less than 45,700 pounds; this total amount is  
4 about what was put into one Minuteman Stage 1 motor in 1961 (the Minuteman Stage 1  
5 motor contained approximately 45,000 pounds of solid propellant).”)

## 6 2. The Production of Propellant at Goodrich in Rialto, California

7 The entire propellant production process at Goodrich’s facility in Rialto, California  
8 took place indoors, including the lining of the motor casing, the oxidizer processing, the  
9 mixing of propellant, loading the propellant into rocket motors, curing the rocket  
10 propellant, and delivering finished products to the government. Wever Dec. ¶¶ 16-39.

11 The first stage in the process involved the lining of rocket motors themselves and  
12 took place inside the liner building. Wever Dec. ¶¶ 16. The lining process involved  
13 applying a layer of the binder system mixed with carbon black to the inside of the motor  
14 casing. Wever Dec. ¶¶ 16; Willis Dec. ¶¶ 4. This process did not require the use of  
15 ammonium perchlorate or solvent. *Id.* Upon completion of this process, the motor  
16 casings were taken to the casting/curing building. *Id.*

17 Before the propellant was mixed, the oxidizer was processed by the grinding,  
18 blending, and drying of the oxidizer. Goodrich had a very specific procedure regarding  
19 the handling of oxidizer at the Rialto facility, and in an effort to contain the small amounts  
20 of fugitive materials produced during the processing, all of the oxidizer was processed in  
21 a single building. Wever Dec. ¶¶ 17-26; *see also* Willis Dec. ¶¶ 5. A portion of the  
22 oxidizer, approximately 25%, was ground to produce a smaller particle size to achieve a  
23 specific burn rate. Wever Dec. ¶¶ 22-23. To grind the oxidizer, Goodrich used a small,  
24 laboratory sized hammermill. *Id.* During the grinding process, a screen and dust bag  
25 were used to minimize the amount of fugitive emissions. *Id.* After the grinding process,  
26 the ground oxidizer was placed into a drying oven. Wever Dec. ¶¶ 24; Willis Dec. ¶¶ 5.  
27 Once the ground oxidizer was dried, the ground and un-ground oxidizer was blended  
28 together in a V-shell blender. *Id.* After the blending process was completed, the

1 processed oxidizer was transported to the mixing building. Wever Dec. ¶ 24.

2 After the ingredients were transported to the mixing building, the oxidizer was  
3 placed into a mixer along with the other propellant ingredients according to a specific  
4 "recipe" and specified sequence. Wever Dec. ¶ 27. The transfer of the oxidizer from the  
5 transfer vessel into the mixer was a clean and dustless procedure. *Id.* ¶ 29. Indeed, the  
6 entire mixing process did not result in any fugitive emissions of chemicals. Wever Dec. ¶  
7 30. After a batch of propellant was mixed, the uncured propellant was transferred to a  
8 transfer vessel and taken to the casting and curing building on a wheeled cart. Wever  
9 Dec. ¶ 30, 34; Willis Dec. ¶ 8.

10 For most of Goodrich's operations, a 100 gallon mixer and 25 gallon mixer was  
11 used in the production process. Wever Dec. ¶ 28; Sachara Dec. ¶ 5; Ustan Dec. ¶ 11.  
12 Towards the very end of Goodrich's tenure, a new 150 gallon mixer building was  
13 constructed. Sachara Dec. ¶ 5. Due to the sudden cancellation of the Sidewinder  
14 production contract, this 150 gallon mixer was used at most on one occasion. Sachara  
15 Dec. ¶ 5.

16 The casting and curing building consisted of one room with four separate curing  
17 pits (or ovens). Wever Dec. ¶ 34-35. The propellant was loaded into the motor casings  
18 from the transfer vessel by gravity through a funnel. Wever Dec. ¶ 36. Once the motor  
19 casing was full, the funnel valve was closed and moved to the next motor casing to be  
20 loaded. *Id.* There were no fugitive emissions during the process of transferring the  
21 propellant from the transfer vessel to the motor casing. *Id.* After the casting process, a  
22 mandrel was placed in the motor casing. Wever Dec. ¶ 38. The propellant was then  
23 allowed to cure for a specific period of time at a specific temperature to allow the  
24 propellant to harden in the motor casing. Wever Dec. ¶ 39. Once the propellant was  
25 cured and the motors had cooled, the motors were removed from the curing pits and any  
26 tooling, including the mandrel, was removed. *Id.*

27 After the curing process, a very small amount of propellant was trimmed from the  
28 motor casing. Wever Dec. ¶ 40 ("Because the tooling was designed to minimize the

1 amount of hand trimming, very little trimming was necessary, I am confident that it was  
2 less than 1/10% of the total material loaded into the motor.”); Willis Dec. ¶ 10; Beach  
3 Dec. ¶ 5; Sachara Dec. ¶ 11; Haggard Dep., 74:19-77:7; Bland Dec. ¶ 8 (“It is my best  
4 estimate that less than half a pound of cured propellant was trimmed from each Loki  
5 motor.”); Ustan Dec. ¶ 12. Due to the design of the tooling utilized by Goodrich, very  
6 little trimming was actually necessary. Wever Dec. ¶ 40; Beach Dec. ¶ 5; Haggard Dep.,  
7 74:19-77:22. Indeed, with respect to the Sidewinder rocket motor, there was little or no  
8 trimming necessary. Wever Dec. ¶ 40; Beach Dec. ¶ 5; Sachara Dec. ¶ 11. All  
9 propellant trimmings were placed in a combustible container for later transport to the  
10 burn pit for burning. Wever Dec. ¶ 40; Beach Dec. ¶ 5; Willis Dec. ¶ 10; Sachara Dec. ¶  
11 11; Bland Dec. ¶ 8; Ustan Dec. ¶ 12.

12 The buildings utilized in the production process were built in such a fashion to  
13 ensure that emissions, if any, were self contained within the building. Wever Dec. ¶ 20.  
14 The small amount of waste generated in the production process was all sent to the burn  
15 pit and burned. Beach Dec. ¶ 4, 11; Sachara Dec. ¶ 9; Wever Dec. ¶¶ 26, 31, 32, 37,  
16 40; Ustan Dec. ¶ 8. The buildings utilized for the oxidizer processing were fully enclosed  
17 and were cleaned after use by sweeping material off the floor and wiping down  
18 equipment. Wever Dec. ¶ 23-26. All excess oxidizer (including any sweepings and the  
19 rags used to clean the equipment), scrap propellant and spent solvent were collected,  
20 placed in combustible containers, and sent to the burn pit for disposal. Wever Dec. ¶ 23-  
21 26, 31, 32. Any remaining propellant in either the transfer vessel or the mixer was  
22 removed using beryllium spatulas and placed into combustible containers for later  
23 transport to the burn pit for burning. Wever Dec. ¶ 31-32; Willis Dec. ¶ 7; Haggard Dep.,  
24 40:11-46:11. The mixer and transfer vessel were then cleaned with solvent. *Id.* The  
25 spent solvent and/or rags containing spent solvent were then placed in combustible  
26 containers for later transport to the burn pit for burning. Wever Dec. ¶ 31-32; Willis Dec.  
27 ¶ 7.

28 Goodrich did not produce propellant on a daily basis, instead, it was produced on

1 an as needed basis, dictated by the production schedule. Wever Dec. ¶ 42; Beach Dec.  
2 ¶ 6; Haggard Dep., 151:5-20, 156:17-157:23, 199:2-22. Former Goodrich employees  
3 testified that propellant was not mixed several times per week. Wever Dec. ¶ 42.

### 4 3. For the Most Part, Goodrich Operated a Research & 5 Development Facility in Rialto

6 Much of Goodrich's operations in Rialto, California involved the research and  
7 development of different propellant formulations. While ammonium perchlorate was a  
8 common oxidizer used in these experimental propellants, it was not the only oxidizer  
9 used. Sachara Dec. ¶ 4. The mixing of propellant for research and development  
10 purposes was similar to that of propellant made for production purposes, but on a much  
11 smaller scale. Wever Dec. ¶ 43; Graham Dec. ¶ 4.

12 Also, as part of research and development, the researchers and lab technicians  
13 conducted various tests on the properties of the propellant, including strand burning  
14 tests and tensile strength tests. Shook Dep., 19:2-22 (heat combustion test and specific  
15 gravity test); Morris Dep., 20:8-21:10 (strand burning test); Holtzclaw Dec ¶ 3; see  
16 generally Graham Dec. ¶ 4; Ustan Dec. ¶ 3-4. These tests did not create a significant  
17 amount of waste. Shook Dep., 31:2-19, 47:1-8; Morris Dep., 31:11-33:2. Any waste  
18 propellant and oxidizer that was created during the research and development process  
19 was disposed of by burning in the burn pit. Graham Dec. ¶ 5; Sachara Dec ¶ 3, 9;  
20 Wever Dec. ¶ 43; Morris Dep., 31:11-33:2.

### 21 4. Static Test Firing Bay

22 As part of both its production and research and development operations,  
23 Goodrich used a static test bay to test fire motors several times a week – test firings did  
24 not occur every day. Staton Dep., 38:20-21; Garee Dep., 157:5-23; Wever Dec. ¶ 50-52;  
25 Graham Dec. ¶ 7. Most of the motors tested were small research and development  
26 motors, designed to test experimental propellant. Staton Dep., 38:22-24; Wever Dec. ¶  
27 43, 50; Graham Dec. ¶ 4. However, one motor from each batch of production rockets  
28 were tested in the static test bay. Wever Dec. ¶ 50.

1 After a static test firing was completed, the propellant was completely burned,  
2 meaning no propellant remained inside the motor casing or on the ground around the  
3 static test bay. Sachara Dec. ¶ 8; Graham Dec. ¶ 7; Wever Dec. ¶ 52; Staton Dep.,  
4 36:5-29, 75:5-16; Garee Dep., 25:4-25, 33:5-20, 47:2-9, 277:6-16, 279:2-17, 285:2-13;  
5 Haggard Dep., 122:14-123:14; Morris Dep., 44:3-46:7; Ustan Dec. ¶ 10. No water was  
6 used in connection with the testing of rocket motors at the test bay. Sachara Dec. ¶ 8;  
7 Graham Dec. ¶ 7; Willis Dec. ¶ 18; Wever Dec. ¶ 52; Staton Dep., 26:1-8, 36:15-20.

8 The static test firing bay is not a disposal site, despite allegations to the contrary  
9 by the Advocacy team. As confirmed by the repeated testimony of former Goodrich  
10 employees, the test firing of research and development motors and production motors  
11 did not generate any waste because **all of the propellant was consumed in the test**  
12 **firing**. Sachara Dec. ¶ 8; Graham Dec. ¶ 7; Wever Dec. ¶ 52; Staton Dep., 36:5-14,  
13 75:5-16; Garee Dep., 25:4-25, 33:5-20, 47:2-9, 277:6-16, 279:2-17, 285:2-13; Haggard  
14 Dep., 122:14-123:14; Morris Dep., 44:3-46:7. Moreover, it is the opinion of Dr. Claude  
15 Merrill, who has conducted motor test firings over decades, that “once a high ammonium  
16 perchlorate concentration, solid propellant motor is ignited, the propellant completely  
17 burns” and that “there would be no scrap propellant remaining after igniting a motor in  
18 the Goodrich static test firing bay, even if there was a ‘failure’ of the motor itself.” Merrill  
19 Dec. ¶ 16.

#### 20 5. Goodrich Disposed of All Propellant Waste in a Single Burn Pit

21 Despite the Advocacy Team’s allegations to the contrary, the Goodrich plant in  
22 Rialto contained a **single burn pit** – this fact is confirmed by the testimony of numerous  
23 former Goodrich employees, including Mr. Lou Staton, the former supervisor of the burn  
24 pit. Wever Dec. ¶ 53; Graham Dec. ¶ 5; Willis Dec. ¶ 19; Beach Dec. ¶ 11; Sachara  
25 Dec. ¶ 9; Staton Dep., 21:25-22:1, 27:4-14; Garee Dep., 83:2-87:9; Hernandez Dec. ¶ 7;  
26 Ustan Dec. ¶ 8; see *also*, Bennett Dec. ¶ 16. The testimony of former employees  
27 confirms that Goodrich’s one burn pit was located near the static test firing stand.  
28 Sachara Dec. ¶ 9; Wever Dec. ¶ 53; Beach Dec. ¶ 11.

1 As confirmed by Mr. Dwight Wever, the former safety engineer responsible for  
2 setting the burn pit procedures, and consistent with industry and government standards  
3 at that time, Goodrich required that “[a]ll oxidizer waste, including ammonium  
4 perchlorate, and propellant waste generated at the Rialto plant was disposed of in the  
5 burn pit, without exception. In addition, all spent solvent and rags used with solvent  
6 were disposed of in the burn pit, without exception.” Wever Dec. ¶¶ 53-54; Ex. 118  
7 (Ordnance Manual, ORD-M 7-224, § 27); Ex. 117 (Explosives Manual, TO 11A-1-34);  
8 Ex. 50 (Destruction Manual TM9-1903); Ex. 110 (1956 Safety Procedures); *see also*  
9 Sachara Dec. ¶ 12; Graham Dec. ¶ 5; Willis Dec. ¶ 7; Beach Dec. ¶¶ 4-5, 11.

10 The frequency of the burns was based on the production schedule; in other  
11 words, a burn was conducted after each batch of propellant was manufactured. Wever  
12 Dec. ¶ 60. Material placed in the burn pit was burned immediately; no scrap was left  
13 outside or in the burn pit overnight, or for extended periods of time. Wever Dec. ¶ 55;  
14 Willis Dec. ¶ 19; Staton Dep., 57:2-58:8, 63:6-16; Garee Dep., 83:2-87:18; Hernandez  
15 Dec. ¶ 7; Ustan Dec. ¶ 8. The burn pit was never rinsed with water, and burns did not  
16 occur during rainy or windy conditions. Wever Dec. ¶¶ 57-60; Staton Dep., 26:1-15.

17 Material to be burned was placed in cardboard containers and then transferred to  
18 the burn pit in push carts. Wever Dec. ¶¶ 26, 31, 32, 37, 40, 55. These containers were  
19 carefully stacked into the burn pit in a very specific order. Wever Dec. ¶ 56. First, the  
20 combustible containers of excess propellant from the mixer along with the minimal  
21 trimmings were placed into the burn pit, then any excess oxidizer (again contained in  
22 combustible containers) was placed into the burn pit, and last, any rags or any solvent  
23 containing propellant or oxidizer (along with any dust masks or gloves worn by Goodrich  
24 operators) was placed on top. Wever Dec. ¶ 56. The burn was ignited through the use  
25 of a remote igniter operated by a battery from the test stand. Wever Dec. ¶ 58.

26 As would be expected given the nature of rocket propellant, the material burned  
27 very fast and very hot. Wever Dec. ¶ 58; Graham Dec. ¶ 6. No material remained in the  
28 burn pit after a burn. Wever Dec. ¶ 58; Beach Dec. ¶ 11; Willis Dec. ¶ 19; Graham Dec.



1 ¶ 6; Staton Dep., 25:23-25, 98:4-7, 98:11-25; Garee Dep., 190:2-193:8, 270:1-11.

2 Because of the manner in which Goodrich's propellant related waste was  
3 handled, virtually all of it (including the oxidizer and spent solvent) was consumed in the  
4 fire, and thus not discharged into the environment. Recent tests performed by an expert  
5 in chemical engineering have shown that propellants burned in a burn pit, such as the  
6 one used by Goodrich, produce virtually undetectable concentrations of perchlorate in  
7 the residual ash. Oxley Dec. ¶ 12-14. Dr. Jimmie Oxley, a Professor of Chemistry at the  
8 University of Rhode Island and Co-Director of the Forensic Science Partnership,  
9 conducted numerous burns using propellant formulations similar to those used by  
10 Goodrich, and concluded that the percentage of perchlorate remaining (out of the  
11 original propellant burned) was only 0.002%. Oxley Dec. ¶¶ 1, 12. These tests clearly  
12 show that burning is an extremely efficient means to dispose of perchlorate containing  
13 wastes and that Goodrich did not discharge perchlorate into the soil or groundwater  
14 through its use of a burn pit at its Rialto facility.

15 **6. There is No Evidence that Goodrich Used Trichloroethylene**

16 Despite the multiple assertions and assumptions made by the Advocacy Team,  
17 there is no evidence that Goodrich used Trichloroethylene ("TCE") at its Rialto facility.  
18 Indeed, several former Goodrich employees affirmatively testified that *TCE was not*  
19 *used* in any part of Goodrich's operations in Rialto. Haggard Dep., 54:10-23 ("Q. Do  
20 you recall there ever being an instance where you used a chemical called  
21 trichloroethylene to clean the mixers? A. Not to my knowledge."); Garee Dep., 122:6-  
22 123:18; Morris Dep., 39:3-25 ("Q. Are you familiar with a solvent called  
23 trichloroethylene? A. Yes. Used that in the Air Force. Q. Did you ever use  
24 trichloroethylene at the Goodrich facility? A. No."); Shook Dep., 29:2-19; Holtzclaw Dec.  
25 ¶ 9 ("I recall that acetone was used at the Rialto facility to clean the carriages where  
26 propellant was cured. I do not recall any other solvent being used at the facility. I do not  
27 recall ever seeing Trichloroethylene or hearing of any employees using Trichloroethylene  
28 at the facility."); Willis Dec. ¶ 13 ("During the entire length of my employment at

1 Goodrich, I never used and I did not see other employee[s] use trichloroethylene at  
2 Goodrich's Rialto facility."); Hernandez Dec. ¶ 3 ("To my knowledge, only MEK and  
3 acetone were stored at Goodrich. I do not recall the solvent trichloroethylene ever being  
4 stored at Goodrich."); Bland Dec. ¶ 10.

5 The only witness the Advocacy Team relies upon to establish that Goodrich used  
6 TCE is Mr. Dwight Wever, but Mr. Wever, after careful reflection, testified that he cannot  
7 recall what type of solvent was used at the Goodrich facility in Rialto:

8 I am aware that a solvent was used to clean the mixing equipment,  
9 but at this time I have no recollection of the specific solvent used in  
this process.

10 Wever Dec. ¶ 32. Indeed, Mr. Wever, cannot identify exactly what type of solvent was  
11 used for any cleaning purpose at Goodrich. Wever Dec. ¶ 32. Simply stated, the  
12 Advocacy Team cannot cite to one piece of evidence, either documentary or testimonial,  
13 to support the assertion that Goodrich used or disposed of TCE at its Rialto facility. See  
14 Haggard Dep., 54:10-23; Garee Dep., 122:6-123:18; Morris Dep., 39:3-21; Shook Dep.,  
15 29:2-19; Holtzclaw Dec. ¶ 9; Willis Dec. ¶ 13; Wever Dec. ¶ 32; see also Sachara Dec. ¶  
16 10; Beach Dec. ¶ 4; Graham Dec. ¶ 8.

## 17 7. Safety

18 Continuously throughout its tenure in Rialto, California, Goodrich required that all  
19 employees follow safety procedures to not only protect the employees from risk of injury  
20 but also to comply with the government and industry standards of the time. Wever Dec.  
21 ¶¶ 6, 54. Mr. Dwight Wever, the former safety engineer at Goodrich's Rialto facility,  
22 personally ensured that all employees obtained the requisite safety training for the safe  
23 handling of propellant and hazardous materials. *Id.* Goodrich's dedication to safety is  
24 evidenced by the facility's outstanding safety record – no major explosion or fire  
25 occurred during Goodrich's tenancy. Wever Dec. ¶ 62; Graham Dec. ¶ 13; Willis Dec. ¶  
26 20; Holtzclaw Dec. ¶ 5; Haggard Dep., 38:25-39:8; Ustan Dec. ¶ 6.

27 All waste propellant and oxidizer was managed pursuant to the safety regulations.  
28 Wever Dec. ¶ 54. Testimony of numerous former Goodrich employees confirms that for

1 safety reasons, propellant, oxidizer, or solvent was never left laying on the ground at the  
2 facility or buried on the site. Sachara Dec. ¶ 6; Holtzclaw Dec. ¶¶ 10-12; Graham Dec.  
3 ¶¶ 9-11; Beach Dec. ¶ 8; Willis Dec. ¶ 20; Shook Dep., 30:10-14, 53:2-60:6; Staton  
4 Dep., 15:5-17:23; Garee Dep., 79:1-23, 79:1-23; Morris Dep., 36:6-38:24; Haggard Dep.,  
5 36:6-38:24; Wever Dec. ¶¶ 63-66; Hernandez Dec. ¶¶ 5-7; Bland Dec. ¶¶ 10-11; Ustan  
6 Dec. ¶¶ 6,8.

7 Despite the Advocacy Team's assertions to the contrary, there is not one piece of  
8 evidence establishing that Goodrich buried any material in the area referred to as "D-1"  
9 in the southern portion of Goodrich's former facility. Not one witness has testified that  
10 Goodrich buried any waste propellant there; indeed, to the contrary, former Goodrich  
11 employees unanimously agree that Goodrich never buried waste propellant. Sachara  
12 Dec. ¶ 6; Holtzclaw Dec. ¶¶ 10-12; Graham Dec. ¶¶ 9-11; Beach Dec. ¶¶ 8-9; Willis Dec.  
13 ¶ 20; Shook Dep., 30:10-14, 53:2-60:6; Staton Dep., 15:5-17:23; Garee Dep., 79:1-23;  
14 Morris Dep., 36:6-38:24; Haggard Dep., 36:6-38:24; Wever Dec. ¶ 61; Hernandez Dec.  
15 ¶ 6. The Advocacy Team cannot point to one historical document establishing that  
16 Goodrich buried any waste propellant. The only "evidence" the Advocacy Team can  
17 point to is a historical, aerial photograph showing that Revetment O-1 (as named by the  
18 Rialto Ammunition Storage Point) was "modified" during Goodrich's years of operations.  
19 Ad. Team P&As, 94. This simple fact does not establish that Goodrich buried anything  
20 in that vicinity. Indeed, any such practice would have violated Goodrich's safety  
21 procedures, the applicable government regulations and was not the industry practice at  
22 the time – every former Goodrich employee testified that these procedures were *always*  
23 followed at the facility.

#### 24 8. Closure of the Goodrich Plant

25 Shortly after Goodrich began production of the Sidewinder motor, in November of  
26 1962, Mr. Dwight Wever (the project manager for the Sidewinder) discovered cracks in  
27 the propellant grain of the Sidewinder motors. Wever Dec. ¶ 46; Ex. 12  
28 (KWKA00452713); Ex. 13 (KWKA00452702). Upon discovering this problem, all

1 production of the Sidewinder motor was stopped and ultimately Goodrich lost its contract  
2 with the United States Navy. Wever Dec. ¶ 46; Ex. 98 (KWKA00452749); Ex. 15  
3 (KWKA00452767). However, Goodrich was required to return the Sidewinder motor  
4 casings to the Navy – meaning that Goodrich was required by the Navy to remove the  
5 cracked propellant from these casings and return them to the government. Wever Dec.  
6 ¶ 47.

7 In order to remove the cracked propellant from the Sidewinder casings, Goodrich  
8 developed a cutting tool and stand that was designed to auger the cured propellant out  
9 of the motor casing. Wever Dec. ¶ 47; Haggard Dep., 113:2-121:25, 210:5-213:9; Bland  
10 Dec. ¶ 9. Once the propellant was augured out of the casing, the casing was cleaned  
11 with rags and solvent to clean any remaining propellant and/or liner from the casing.  
12 Wever Dec. ¶ 47; Bland Dec. ¶ 9. No water was used to remove propellant from the  
13 Sidewinder casing during the auguring process. Wever Dec. ¶ 47; Haggard Dep.,  
14 211:25-213:11. All of the removed propellant, any rags, and any spent solvent was  
15 placed in combustible containers and sent to the burn pit for burning. Wever Dec. ¶ 47;  
16 Bland Dec. ¶ 9.

17 Former Goodrich employees, such as Mr. Jimmie Haggard, who actually assisted  
18 in this process and witnessed the removal process first hand, agree that *at no time* was  
19 any of the propellant removed from the Sidewinder casings thrown or left on the bare  
20 ground.

21 Mr. Dintzer: Did you ever observe any scrap propellant laying  
22 on the ground when you came by [the Sidewinder  
23 salvage area] either to work or after you had left or  
just incidentally being there?

24 Mr. Haggard: No.

25 Mr. Dintzer: Did you ever hear that anybody had complained  
26 about the dumping of scrap propellant on the  
ground?

27 Mr. Haggard: No.

28 Mr. Dintzer: Did you ever hear of anybody complaining about  
the dumping of solvent on the ground?

1 Mr. Haggard: No.  
2 Haggard Dep., 119:23-120:8; *see also* Haggard Dep., 119:4-8 (“Q. If someone said that  
3 there was scrap propellant laying all over the ground as this process was going on, the  
4 removal of propellant from the Sidewinders, would that statement be untrue? A. Yes.”);  
5 *see also* Wever Dec. ¶ 47 (“I did not observe any of the propellant removed from the  
6 casings or solvent used spilled on the ground.”). Moreover, at no time was any solvent  
7 used during this removal process ever dumped and/or spilled on the bare ground.  
8 Wever Dec. ¶ 47; Haggard Dep., 119:9-13, 120:6-8.

9 As a result of the problems encountered with the Sidewinder motors, Goodrich  
10 lost its contract with the United States Navy and ultimately was forced to close its Rialto  
11 facility. By May of 1963, the Navy was looking for another contractor to complete the  
12 Sidewinder project. Ex. 98 (KWKA00452749-57). Goodrich never obtained another  
13 contract from the United States government and by July of 1963, just seven months after  
14 discovering the cracks in the Sidewinder, Goodrich lost the Sidewinder contract, and was  
15 forced to begin closing its Rialto facility. Ex. 15 (KWKA00452767-78); *see also* Wever  
16 Dec. ¶ 48.

17 **B. Goodrich’s Operations in Rialto, California Did Not Result in Any**  
18 **Discharges to the Groundwater**

19 The Advocacy Team’s Memorandum of Points and Authorities is glaringly devoid  
20 of any evidence establishing that Goodrich’s operations in Rialto, California resulted in a  
21 discharge to the groundwater in the Rialto/Colton groundwater basin. Pursuant to  
22 California state law, the Advocacy Team bears the burden of proving that Goodrich  
23 contaminated the groundwater, or that Goodrich threatens to contaminate the  
24 groundwater. But, the Advocacy Team has provided no evidence that any perchlorate  
25 used by Goodrich in its operations has actually contaminated, or threatens to  
26 contaminate, the groundwater in the Rialto/Colton basin. Instead, the Advocacy Team  
27 alleges only that Goodrich used perchlorate in its former operations and that the  
28 groundwater in the Rialto/Colton basin is contaminated with perchlorate. Ad. Team

1 P&As, 62-79. The Advocacy Team then leaps to the conclusion that the contamination  
2 in the Rialto/Colton basin must be from Goodrich's operations, at least in part. Ad. Team  
3 P&As, 93-109. The Advocacy Team admits that it does not know whether the  
4 perchlorate contamination in any given well or soil sample is actually from Goodrich's  
5 operations. Saremi Dep., 305:6-19, 307:15-308:13, 455:22-459:18, 656:19-24;  
6 Sturdivant Dep., 627:1-11, 646:20-647:4, 649:2-22; 651:17-652:9, 717:15-23; Holub  
7 Dep., 933:8-23, 934:2-15, 935:2-5, 93:10-15, 984:25-985:4, 985:18-21, 988:20-23.

8 More importantly, by ignoring this critical link in establishing actual contamination  
9 (or threatened contamination), the Advocacy Team fails to consider the transport  
10 mechanism necessary for any perchlorate to travel through the approximately 400 feet  
11 vadose zone and reach groundwater. Kresic Dec. ¶ 54. Due to the lack of water used in  
12 Goodrich's operations, the vertical transport of perchlorate through the approximately  
13 400 foot thick vadose zone could only have been driven by the natural infiltration of  
14 rainwater. Kavanaugh Dec. ¶¶ 27-28; Kresic Dec. ¶ 18. Given that the climate in Rialto,  
15 California is arid (the 50-year average rainfall is approximately 15.4 inches of rain per  
16 year), the natural infiltration is insufficient to carry residual perchlorate through the  
17 vadose zone to a depth where groundwater is present. Kresic Dec. ¶¶ 24-25, 54;  
18 Kavanaugh Dec. ¶ 29. Dr. Nevin Kresic, a hydrogeologist and modeling expert, has  
19 developed and ran models of the vadose zone underneath the property in Rialto,  
20 California. Kresic Dec. ¶ 20. Dr. Kresic's results demonstrate that if there were any  
21 residual perchlorate from Goodrich's operations it would have never reached the  
22 groundwater in the Rialto/Colton groundwater basin. Kresic Dec. ¶¶ 25, 52.

23 The Advocacy Team points to four potential sources of perchlorate contamination  
24 from Goodrich's former operations: (1) Goodrich's burn pit; (2) Goodrich's production  
25 process (including a 150-gallon mixer); (3) the static test firing bay; and (4) the  
26 sidewinder salvaging process. However, the overwhelming evidence establishes that if  
27 there were any potential perchlorate discharges from these operations, they were  
28 miniscule at best and thus never reached the groundwater nor threatens to reach

1 groundwater in the Rialto/Colton basin.

2           **1. Goodrich's Burn Pit is NOT a Source of Perchlorate**  
3           **Contamination**

4           It is undisputed that Goodrich **burned** its solid rocket propellant waste in a burn  
5 pit – former Goodrich employees unanimously testified to this fact and the Advocacy  
6 Team admits this in the Draft Cleanup and Abatement Order. See Wever Dec. ¶¶ 53-54;  
7 Sachara Dec. ¶ 12; Graham Dec. ¶ 5; Willis Dec. ¶ 7; Beach Dec. ¶¶ 4-5; Draft CAO,  
8 33(j). The evidence also conclusively shows that Goodrich was **required** to incinerate  
9 waste ammonium perchlorate and solvent contaminated with propellant in a burn pit.  
10 Ex. 118 (Ordnance Manual, ORD-M 7-224, § 27); Ex. 117 (Explosives Manual, TO 11A-  
11 1-34); Ex. 50 (Destruction Manual TM9-1903); Ex. 110 (1956 Safety Procedures).

12           Importantly, the overwhelming testimony of former Goodrich employees  
13 establishes that after a burn **nothing remained in the burn pit**. Wever Dec. ¶ 58;  
14 Beach Dec. ¶ 11; Willis Dec. ¶ 19; Graham Dec. ¶ 6; Staton Dep., 25:23-25, 98:4-7,  
15 98:11-25; Garee Dep., 190:2-193:8, 270:1-11. This firsthand knowledge is corroborated  
16 by tests performed by a leading expert in chemical engineering, Dr. Jimmie Oxley, which  
17 confirm that propellants burned in a burn pit, such as the one used by Goodrich, are  
18 completely consumed and that the levels of perchlorate remaining in the residual ash are  
19 virtually undetectable at approximately 0.002%. Oxley Dec. ¶¶ 12-14. The fact that  
20 Goodrich also burned oxidizer and spent solvent in its burn pit does not change this  
21 conclusion; indeed, “any additional oxidizer, such as ammonium perchlorate, only makes  
22 the burn cleaner.” Oxley Dec. ¶¶ 13. Moreover, Dr. Merrill, an expert in the industrial  
23 practices of rocket facilities, conservatively estimates that Goodrich destroyed  
24 approximately 9,599 pounds of ammonium perchlorate (much of which was contained in  
25 scrap propellant) by burning, during the entire length of Goodrich's operations. Merrill  
26 Dec., Ex. A. Even with this conservative estimate of the amount of perchlorate burned,  
27 less than one pound of perchlorate remained in the residual ash after burning. See  
28 Merrill Dec., Ex. A; Oxley Dec. ¶¶ 13-14; Kavanaugh Dec. ¶ 23.

1 This minute amount of perchlorate is clearly insignificant given the extent of  
2 perchlorate contamination in the Rialto/Colton Groundwater Basin. Kavanaugh Dec.  
3 ¶¶ 90. Moreover, regardless of the mass of residual perchlorate left after burning,  
4 modeling of the vadose zone underlying the burn pit clearly demonstrates that the burn  
5 pit cannot be a source of perchlorate contamination in groundwater. Kresic Dec. ¶¶ 24-  
6 25, 52. Thus, the scientific evidence conclusively establishes that because all of  
7 Goodrich's waste propellant was disposed of by burning, Goodrich's burn pit is not a  
8 source of perchlorate contamination in the Rialto/Colton groundwater basin. Oxley Dec.  
9 ¶¶ 12-14; Kavanaugh Dec. ¶ 92; Kresic Dec. ¶ 52.

## 10 2. Goodrich's Production Process is NOT a Source of Perchlorate 11 Contamination

12 As indicated above, the testimony of all the former Goodrich employees  
13 collectively confirms that all propellant waste (including oxidizer waste) from Goodrich's  
14 production processes was sent to the burn pit to be burned. As stated above, the burn  
15 pit itself is not a source of contamination. And, as discussed above, there is no evidence  
16 that any significant quantities of perchlorate were discharged during the production  
17 process itself. Even if minimal amounts of perchlorate were released to the environment  
18 (in the form of incidental mop water), the quantity released would not provide a sufficient  
19 transport mechanism for that perchlorate to travel through the vadose zone and reach  
20 groundwater. Kavanaugh Dec. ¶¶ 34, 95.

21 The Advocacy Team relies heavily on the use of a "150 Gallon Mixer" by Goodrich  
22 as a source of perchlorate contamination. But the available evidence shows that this  
23 "larger," 150-gallon mixer was installed during the end of Goodrich's operations and was  
24 either never used or only used on one occasion. Sachara Dec. ¶ 5. And the Advocacy  
25 Team cites no evidence, because there is not any, that indicates that Goodrich's brief  
26 use of that mixer would have resulted in any release of perchlorate. The minimal usage  
27 of this mixer and absence of any evidence indicating a release of perchlorate or the  
28 application of the large amount of water necessary to transport perchlorate through the



1 vadose zone to groundwater, leads to the conclusion that Goodrich's operation in the  
2 area of the former 150-gallon mixer has not resulted in contamination of the  
3 groundwater. Kavanaugh Dec. ¶ 33.

4 **3. Goodrich's Former Static Test Bay is NOT a Source of**  
5 **Perchlorate Contamination**

6 The evidence establishes that the static test firing bay is not a source of  
7 perchlorate contamination. Both the testimony of former Goodrich employees and  
8 expert testimony confirm that no scrap propellant remained in either the static test firing  
9 bay or the motor casing after a test firing. Sachara Dec. ¶ 8; Graham Dec. ¶ 7; Wever  
10 Dec. ¶ 52; Staton Dep., 36:5-20, 75:5-16; Garee Dep., 25:4-25, 33:5-20, 47:2-9, 277:6-  
11 16, 279:2-17, 285:2-13; Haggard Dep., 122:14-123:14; Morris Dep., 44:3-46:7; Merrill  
12 Dec. ¶¶ 16, 29; Oxley Dec. ¶¶ 12-14. As indicated above, the burning of rocket  
13 propellant is highly efficient (particularly when contained under pressure in a motor  
14 casing); thus, perchlorate in any resulting ash from the test firing of rocket motors at  
15 Goodrich would be virtually undetectable. Oxley Dec. ¶¶ 12-14. Again, such a minute  
16 amount of perchlorate remaining in ash (0.002%) is not a likely source of perchlorate in  
17 the Rialto/Colton groundwater basin. Kavanaugh Dec. ¶ 35. Even if minimal amounts of  
18 perchlorate were released to the environment in the form of ash, there is no evidence  
19 that the substantial amounts of water necessary to transport perchlorate through the  
20 vadose zone to groundwater were present at the test bay. Sachara Dec. ¶ 8; Graham  
21 Dec. ¶ 7; Willis Dec. ¶ 18; Wever Dec. ¶ 52; Staton Dep., 26:1-8. Absent large amounts  
22 of water, there is no mechanism for any residual perchlorate to reach the groundwater  
23 through the approximately 400 feet of vadose zone. Kavanaugh Dec. ¶ 35.

24 **4. The Salvaging of Sidewinder Motor Casings is NOT a Source of**  
25 **Perchlorate Contamination**

26 The available credible testimony of former Goodrich employees, and the  
27 testimony of a propellant manufacturing expert, confirms that no water was used in the  
28 Sidewinder salvaging process and that all scrap propellant was disposed of by burning in

1 the burn pit. Wever Dec. ¶¶ 45, 47; Haggard Dep., 211:25-213:11; Merrill Dec. ¶ 19.  
2 Because no water was used in the removal process, the only transport mechanism for  
3 any incidental discharge of perchlorate (if any even occurred) is natural rainfall.  
4 Kavanaugh Dec. ¶ 32. This natural infiltration is insufficient to carry any residual  
5 perchlorate through the entire vadose zone. Kavanaugh Dec. ¶ 32. Therefore, both the  
6 eyewitness testimony and scientific evidence demonstrate that the salvaging process did  
7 not result in any perchlorate contamination in the groundwater beneath the Property.  
8 Kavanaugh Dec. ¶¶ 32, 94.

9 **5. Goodrich's Former Operations are NOT a Source of TCE**  
10 **Contamination**

11 Goodrich's former operations are not a source for any TCE contamination in the  
12 Rialto/Colton groundwater basin. There is absolutely no credible documentary or  
13 testimonial evidence that Goodrich used or disposed of TCE at its Rialto facility. Instead,  
14 the testimony of former Goodrich employees indicates that Goodrich more likely used  
15 acetone, cyclohexanone, and/or MEK for cleaning purposes. Haggard Dep., 54:10-23;  
16 Garee Dep., 122:6-123:18; Morris Dep., 39:3-25; Shook Dep., 29:2-19; Holtzclaw Dec.  
17 ¶ 9; Willis Dec. ¶ 13; Wever Dec. ¶ 32; see also Sachara Dec. ¶ 10; Beach Dec. ¶ 4;  
18 Graham Dec. ¶ 8; Bland Dec. ¶ 9-10. Finally, TCE to reach the groundwater it would  
19 require the disposal of an extremely large amount of the pure solvent to overcome the  
20 residual capacity of the vadose zone. Kavanaugh Dec. ¶ 39. There is no evidence of  
21 such a wide scale disposal of TCE by Goodrich, and in fact, the sampling data refutes it.  
22 Kavanaugh Dec. ¶ 38.

23 Moreover, the evidence establishes that any spent solvent (including rags) was  
24 burned in the burn pit. Wever Dec. ¶¶ 53-56. Because the spent solvent was disposed  
25 of in this manner, it is likely that it was completely consumed in the fire and not  
26 discharged to the environment. See, e.g., Oxley Dec. ¶¶ 13-14. Sampling results from  
27 the former burn pit also confirm that the burn pit is not a source of TCE contamination at  
28 the property. Kresic Dec. ¶¶ 36-38, 53. Thus, there is no evidence that any solvent was

1 discharged to the environment as a result of Goodrich's disposal practices, and the  
2 scientific evidence demonstrates that Goodrich's operations were not the source of any  
3 TCE detected in groundwater under the property.

4 **C. The Advocacy Team Fails To Provide Any Evidence Establishing That**  
5 **Goodrich Discharged Any Ammonium Perchlorate or TCE to the**  
6 **Groundwater**

7 **1. The Advocacy Team Relies Almost Exclusively on the**  
8 **Testimony of Mr. Ronald Polzien**

9 The Advocacy Team relies heavily on the testimony of a single witness, Mr.  
10 Ronald Polzien, and simply ignores the extensive testimony of other former Goodrich  
11 employees. The Advocacy Team's unwavering reliance on selected testimony of Mr.  
12 Polzien is seriously undermined upon a review of his entire deposition transcript  
13 (including the cross examination) and the credible testimony of other former Goodrich  
14 employees.

15 Stuningly, the Advocacy Team continues to rely upon Mr. Polzien's testimony  
16 even after his extensive contradictions were brought to light during the discovery  
17 process. Holub Dep., 290:18-291:3 (Mr. Holub concedes that Mr. Polzien provided  
18 contradictory testimony); Sturdivant Dep., 307:16-308:15, 317:16-320:17 (Ms. Sturdivant  
19 agrees that Mr. Polzien provided contradictory testimony). Even more alarming is Ms.  
20 Sturdivant's admission that the Advocacy Team relies heavily on Mr. Polzien's  
21 testimony, despite the fact that ***no one at the Regional Board recalls reviewing Mr.***  
22 ***Polzien's complete deposition transcript.*** Sturdivant Dep., 291:13-16, 667:23-668:7;  
23 Holub Dep., 246:22-247:2, 262:4-10, 276:8-278:17. A complete review of the cross  
24 examination of Mr. Polzien establishes that he either contradicts or simply retracts his  
25 prior testimony on virtually every salient point relied upon by the Advocacy Team and  
26 completely undermines Mr. Polzien's credibility as a witness in this proceeding.

27 For instance, early on in his deposition Mr. Polzien testified, under oath, regarding  
28 a conversation he had back in 1962 with Mr. Japs, who at the time was the technical  
manager at Goodrich and the mayor of Rialto. Mr. Polzien testified that:

1 Mr. Japs was giving me a ride home . . . and he waved to . . . the  
2 new wellheads going in for the water company. . . . **[A]t the time I**  
3 **was very concerned about solvents.** I don't know that we were  
4 particularly happy with the water we were getting anyway, but  
solvents were on my mind. I had no knowledge of perchlorate and I  
reminded him in a few words do you realize that [Goodrich's] burn  
pit is directly in line with those wellheads?

5 Polzien Dep., 156:1-158:6 (emphasis added). Mr. Polzien stated that in response to his  
6 concerns about the drinking water Mr. Polzien received at his house, Mr. Japs simply  
7 dismissed him. Polzien Dep., 353:8-18. Then, after being confronted with the fact that  
8 he sold his house three years after his conversation with Mr. Japs, but he did not  
9 disclose being "very concerned" about Rialto's drinking water to the buyers of his home,  
10 Mr. Polzien retracted his sworn testimony and conceded that:

11 At the time – I think we have gone over this many times that **I was**  
12 **not concerned and I had no evidence.** . . . This house was sold in  
13 1965. My objection to Mr. Japs – or my discussion with Mr. Japs  
14 occurred in 1962. I hope you take note that – of the time difference  
and that if **I had really been concerned, I would have notified**  
**them;** and I would certainly have moved earlier.

15 Polzien Dep., 388:17-389:9 (emphasis added). Ms. Helie, the buyer of Mr. Polzien's  
16 house in 1965, later confirmed that, despite Mr. Polzien's repeated testimony that he  
17 was concerned about the groundwater in 1962, he never disclosed that to her when she  
18 purchased his house in 1965. Helie Dep., 78:10-21, 83:9-15, 91:13-21. When asked  
19 whether the Advocacy Team should so heavily rely upon the testimony of somebody  
20 who either lied to his home buyers, or lied under oath, Ms. Sturdivant answered "I don't  
21 know about what he did. . . . I think he was testifying under oath." Sturdivant Dep.,  
22 687:2-17.

23 The Advocacy Team relies heavily upon Mr. Polzien's testimony regarding the  
24 production processes utilized by Goodrich, including oxidizer processing, mixing,  
25 casting, curing, trimming, lining and finishing processes. Ad. Team P&As, 65-68. Yet,  
26 Mr. Polzien admits that he never worked in production at Goodrich and never witnessed  
27 the production process while employed at Goodrich:

28

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

- Mr. Polzien never saw the grinding, blending, weighing or drying of oxidizer at Goodrich. Polzien Dep., 587:25-588:20.
- Mr. Polzien never witnessed the mixing of propellant at Goodrich. Polzien Dep., 588:23-589:4.
- Mr. Polzien never saw the loading or curing of rocket motors at Goodrich. Polzien Dep., 589:14-592:15.
- Mr. Polzien never saw the trimming operation at Goodrich. Polzien Dep., 728:25-729:5.
- Mr. Polzien never witnessed the cleaning operations of any of the buildings or equipment used in the production process. Polzien Dep., 693:25-697:11, 456:16-19.

How can the Advocacy Team rely so heavily on the testimony of a former employee who has no firsthand knowledge on the topics for which they cite him? And, how can the Advocacy Team simply ignore the testimony of other former employees who actually worked in the production process and disagree with Mr. Polzien's uninformed testimony? The Advocacy Team never explains why it finds Mr. Polzien credible – never explains why it ignores these other witnesses, such as Mr. Haggard, Mr. Beach, Mr. Willis, and Mr. Wever who actually worked and/or supervised the production and cleaning processes, whose testimony contradicts Mr. Polzien – never explains why it continued to rely on Mr. Polzien even after it became clear at his deposition that he repeatedly gave false statements under oath. The Advocacy Team simply has nothing other than Mr. Polzien's uncorroborated testimony to support its reckless allegations.

The Advocacy Team also relies heavily on Mr. Polzien to provide support for the uncorroborated fact that ammonium perchlorate was used in all of the propellant produced at Goodrich. Ad. Team P&As, 69-75. Yet, Mr. Polzien testified that he did not have comprehensive knowledge regarding the use of ammonium perchlorate at the Goodrich facility:

- Mr. Polzien does not recall ever seeing ammonium perchlorate delivered to the Goodrich facility. Polzien Dep., 621:16-22.
- Mr. Polzien never saw the processing of ammonium perchlorate at Goodrich. Polzien Dep., 587:25-589:4.

1 • Mr. Polzien does not know the specific recipes with respect to  
2 any of the propellant produced by Goodrich. Polzien Dep.,  
3 686:16-687:1

4 The Advocacy Team cites Mr. Polzien's testimony to support its assertions  
5 regarding Goodrich's use of multiple burn pits at its Rialto facility. Ad. Team P&As, 76-  
6 78. However, even Mr. Polzien never testified that Goodrich operated more than one  
7 burn pit. In fact, to the contrary, Mr. Polzien testified that **Goodrich only had one burn**  
8 **pit**. Polzien Dep., 289:6-10 ("Q. Was there only one burn pit utilized in the Goodrich  
9 facility? . . . A. As far as I know or my experience, there's only one."). At least on this  
10 point, Mr. Polzien's testimony is consistent with the testimony of every other former  
11 employee who said that Goodrich operated a single burn pit at the Rialto facility. Wever  
12 Dec. ¶ 53; Graham Dec. ¶ 5; Willis Dec. ¶ 19; Beach Dec. ¶ 11; Sachara Dec. ¶ 9;  
13 Staton Dep., 21:25-22:1, 27:4-14, Garee Dep., 83:2-87:18; Hernandez Dec. ¶ 7; Ustan  
14 Dec. ¶ 8. see also Bennett Dec. ¶ 16.

15 Moreover, although the Advocacy Team relies on Mr. Polzien to describe the  
16 operation of the burn pit, Mr. Polzien admitted that he never participated in the loading of  
17 Goodrich's burn pit and he only witnessed this process from the control room over 500  
18 feet away. Polzien Dep., 799:18-20, 803:11-23, 823:9-18. If Mr. Polzien never  
19 participated in the loading of the burn pit and only witnessed this process from over 500  
20 feet away, how is any of his testimony credible regarding the loading and use of the burn  
21 pit?

22 The Advocacy Team relies exclusively upon Mr. Polzien's testimony that Goodrich  
23 left propellant waste in the burn pit overnight. But the Advocacy Team neglects to inform  
24 the Hearing Officer that **Mr. Polzien later admitted that propellant waste was never**  
25 **left in the burn pit overnight**. Compare Polzien Dep., 129:15-19 with Polzien Dep.,  
26 827:11-829:2. Indeed, numerous other former Goodrich employees, including Mr.  
27 Wever, Mr. Staton, Mr. Willis, and Mr. Garee confirm that no propellant waste was ever  
28 left in the burn pit overnight or, in fact, for any extended period of time. Wever Dec. ¶

1 55; Willis Dec. ¶ 19; Staton Dep., 57:2-58:8, 63:6-16; Garee Dep., 83:2-87:18;  
2 Hernandez Dec. ¶ 7; Ustan Dec. ¶ 8.

3 The Advocacy Team blindly relies upon Mr. Polzien's contradicted testimony  
4 regarding Goodrich's burn pit, yet never once cites to the testimony of Mr. Lou Staton,  
5 the former **supervisor of Goodrich's burn pit**. If they had, it would be clear that  
6 selected portions of Mr. Polzien's testimony regarding Goodrich's burn pit relied upon by  
7 the Advocacy Team are simply false.

8 Predictably, the Advocacy Team also relies exclusively on Mr. Polzien's testimony  
9 regarding Goodrich's static test firing bay. Ad. Team P&As, 75. Again, a review of all of  
10 Mr. Polzien's deposition demonstrates that his testimony about the test bay was either  
11 erroneous or false, and the Advocacy Team's heavy reliance on it as dubious. For  
12 instance, Mr. Polzien initially testifies that water hoses were used to rinse out the static  
13 test bay. Polzien Dep., 207:7-14. But later on, Mr. Polzien testifies that water was never  
14 used in the static test bay and there was no source of water available at the test bay.  
15 Polzien Dep., 297:15-16. Again, numerous other former Goodrich employees reliably  
16 testify that water was never used at the static test firing bay. Sachara Dec. ¶ 8; Graham  
17 Dec. ¶ 7; Willis Dec. ¶ 18; Wever Dec. ¶ 52; Staton Dep., 26:1-8.

18 In addition, the Advocacy Team relies exclusively on Mr. Polzien for the  
19 proposition that propellant remained in the static test firing bay after a test firing. Ad.  
20 Team P&As, 75. This allegation is contradicted by the testimony of every other former  
21 Goodrich employee, who all consistently testify that after a static test firing was  
22 completed, the propellant was completely burned and no propellant remained inside the  
23 motor casing or on the ground around the static test bay. Sachara Dec. ¶ 8; Graham  
24 Dec. ¶ 7; Wever Dec. ¶ 52; Staton Dep., 36:5-20, 75:5-16; Garee Dep., 25:4-25, 33:5-  
25 20, 47:2-9, 277:6-16, 279:2-17, 285:2-13; Haggard Dep., 122:14-123:14; Morris Dep.,  
26 44:3-46:7.

27 An expert in the industrial practices of solid rocket manufacturing facilities who  
28 has "studied one atmosphere pressure (open air) burns for many polybutadiene binder,

1 ammonium perchlorate solid propellants chemically similar to Goodrich's propellant  
2 formulation" confirms that:

3 All propellants containing ammonium perchlorate concentration of  
4 68 weight percent or greater burned completely so that no residues  
5 remained except for aluminum oxide combustion product for  
6 aluminized solid propellant. This would be true for polysulfide  
7 binder-ammonium perchlorate propellants as well. In my experience  
8 when this type of solid rocket propellant was ignited it did not "self  
9 extinguish." Therefore, ***motors that were test fired in Goodrich's  
10 static test firing bay would burn completely and would not  
11 contain propellant after they were ignited.***

12 Merrill Dec. ¶ 29 (emphasis added).

13 Even the Advocacy Team appears to realize the limitations of Mr. Polzien's  
14 testimony because it does not rely upon Mr. Polzien's testimony regarding the use of  
15 TCE at the Goodrich facility. This is more than likely because Mr. Polzien admits that he  
16 does not know whether Goodrich used trichloroethylene or trichloroethane:

17 Mr. Dintzer: Do you know whether or not the cleaning solvent that  
18 [Goodrich] used in the mixers and the other places  
19 where they had this solvent was trichloroethane or  
20 trichloroethylene?

21 Mr. Polzien: I don't.

22 \* \* \*

23 Mr. Dintzer: Do you know whether the solvent that made part of the  
24 slurry was trichloroethylene or trichloroethane?

25 Mr. Polzien: In light of what you just told me and my ignorance  
26 between the two, I – I don't know.

27 Polzien Dep., 619:13-620:5.

28 Finally, the Advocacy Team relies heavily upon the testimony of Mr. Polzien  
regarding the Sidewinder salvage project undertaken by Goodrich. Ad. Team P&As, 78-  
79. Mr. Polzien testified, under oath, that propellant from these Sidewinders was strewn  
around the walkways and that he raised his concerns over this with Mr. Eugene  
Sachara, a manager at Goodrich. Polzien Dep., 1044:22-1045:13, 1029:13-1030:10.  
He testified further that Mr. Sachara wrote a letter to the production manager (Mr.  
Shields) insisting that the problem be corrected immediately. Polzien Dep., 153:2-



1 154:15. Mr. Sachara, whose credibility is not in doubt, testified that *the events Mr.*  
2 *Polzien described never took place:*

3 At no point during my employment at the Rialto facility did Mr.  
4 Polzien ever tell me that he was concerned about working around  
5 the test-firing area. He also never complained to me about the  
6 manner in which propellant was being removed from rocket casings.  
7 Despite, Mr. Polzien's assertions to the contrary, I never expressed  
8 concerns about the safety of removing propellant from rocket  
9 casings to Jack Shields orally or in writing. Furthermore, I never  
10 communicated to Jack Shields orally or in writing about the  
11 existence of scrap propellant on the ground at the Rialto facility.

12 Sachara Dec. ¶ 13. Moreover, the testimony of the former Goodrich employees actually  
13 involved in this salvaging process confirms that scrap propellant was never left  
14 remaining on the ground and that water was not used to assist in the removal of  
15 propellant from the motor casings. Haggard Dep., 119:4-8, 119:23-120:5, 211:25-  
16 213:11; Wever Dec. ¶¶ 45, 47.

17 The full record demonstrates that the credibility and reliability of Mr. Polzien's  
18 deposition testimony is non-existent, and thus his testimony should not be relied upon in  
19 any manner.

## 20 2. The Advocacy Team Has Provided Incomplete or Misleading 21 Support for its Position

22 The Advocacy Team's submission fails to produce any credible evidence in its  
23 case against Goodrich. Many of the Advocacy Team's citations are simply incorrect or  
24 the cited testimony has little or nothing to do with the stated allegations. Other citations  
25 are taken out of context or fail to take into account later, contradictory testimony by the  
26 witnesses, and in particular the testimony of Ronald Polzien, who repeatedly is shown to  
27 have made false statements under oath. Some seemingly dispositive allegations are  
28 simply unsupported by any citation at all.<sup>1</sup> The Advocacy Team's repeated and heavy

<sup>1</sup> The Advocacy Team's ignorance of the Goodrich's actual former operations is perhaps explained by the admission of the principal draftsman, Mr. Sturdivant, that she did not even read all the available deposition testimony but instead relied upon deposition summaries. See, e.g., Sturdivant Dep., 982:9-986:21. Even more alarming is that these summaries identify contradictory testimony – Mr. Sturdivant has no explanation for ignoring this relevant evidence. Sturdivant Dep., 983:24-990:22; "Q. Well do you think it would have been important to review carefully the testimony of the leadman with respect

1 reliance upon false allegations, unsupported citations, and an utter lack of regard for the  
2 distinction between credible “evidence” and pure conjecture or speculation is disturbing.  
3 The Advocacy Team has failed to substantiate the allegations in the Draft Cleanup and  
4 Abatement Order concerning Goodrich’s alleged conduct at the site. For these reasons,  
5 no order should be issued against Goodrich and the case against Goodrich must be  
6 dismissed.

7                   **3. The Advocacy Team’s Allegations Regarding Goodrich’s**  
8                   **Disposal Practices are Based on Pure Speculation – NOT Facts**

9                   **a. The Facts Establish That Goodrich Had One Burn Pit –**  
10                   **NOT Two Burn Pits**

11                   The overwhelming weight of the evidence confirms that Goodrich had **one burn**  
12 **pit** at the Rialto plant. Ignoring this evidence, the Advocacy Team purports that,  
13 “Goodrich maintained at least two burns [sic] pits that were utilized to dispose of all  
14 production waste.” Ad. Team P&As, 76. In support, the Advocacy Team cites to Mr.  
15 Polzien and Mr. Wever (Ad. Team P&As, 76), but both Mr. Polzien and Mr. Wever  
16 testifies that Goodrich used only one burn pit – not two. Wever Dec. ¶ 53; Polzien Dep.,  
17 289:6-10. Moreover, Ms. Sturdivant, a member of the Advocacy Team and primary  
18 draftswoman of the charges against Goodrich, conceded during her deposition that  
19 testimony cited does not support the assertion that Goodrich used two burn pits.  
20 Sturdivant Dep., 328:5-331:19, 692:18-694:16., 986:23-987:9 (“I mentioned the other  
21 day where I cited Mr. Polzien and had indicated two burn pits from the citation, and that  
22 was incorrect.”) Indeed, after being confronted with the contradictory testimony by the  
23 only two witnesses that the Advocacy Team cites, Ms. Sturdivant admits that the  
24 testimony demonstrates that Goodrich operated only one burn pit, contrary to the

25 to the burn pit at the Goodrich facility? A. Yes, yes. Q. to find out what he had to say  
26 about the burn pit and its operations? A. Yes. Q. Well, but you didn’t do that? A. Not  
27 personally, no. Q. You didn’t include any of his testimony? [objection omitted] A. Yes,  
28 I think that is correct. . . Q. Is there a reason you didn’t tell the State Board Hearing  
Officer that Mr. Staton, the lead man on the burn pit, said that the waste was burned the  
day it was put in the pit? A. No, I don’t have a reason.); see *a/so*, Ex. 20250 (Staton  
Summary); Ex. 20251 (Garee Summary); Ex 20394 (Morris Summary).

1 assertion made by the Advocacy Team. *Id.* 987:19-988:5.

2 Other former Goodrich employees confirm that Goodrich utilized only one burn pit:

- 3 • “Goodrich’s Rialto facility had one burn pit. . . .” Staton Dep., 21:25-22:1.
- 4 • “Goodrich’s Rialto facility had one burn pit that had a fence surrounding the area.” Sachara Dec. ¶ 9.
- 5 • “Goodrich’s Rialto facility had one burn pit that was fenced with a locked gate.” Willis Dec. ¶ 19.
- 6 • “There was only one burn pit located at the B.F. Goodrich Rialto plant.” Graham Dec. ¶ 5.
- 7 • To my knowledge, there was only one burn pit at Goodrich in Rialto, California.” Hernandez Dec. ¶ 7.
- 8 • “Goodrich Rialto facility had one burn pit that was approximately 300 yards from the laboratory.” Ustan Dec. ¶ 8.

9 The testimony further confirms that there was no additional disposal site at Goodrich’s  
10 Rialto facility. Wever Dec. ¶ 61 (“there was no ‘second disposal pit’ on the far  
11 southeastern portion of the property”); Wever Dec. ¶ 53; Graham Dec. ¶ 9 (“While I was  
12 employed at B.F. Goodrich there was only one burn pit at the facility and there was not a  
13 pond, landfill or any other disposal area at the facility.”); see also Willis Dec. ¶ 21 (“there  
14 was not a pond, landfill or any other disposal area at the facility.”); Morris Dep., 53:1-16;  
15 see also Sachara Dec. ¶ 14 (“There was never a trench located anywhere at the  
16 Goodrich plant for the burning or disposal of unused propellant.”); Hernandez Dec. ¶ 7;  
17 Ustan Dec. ¶ 8. The Advocacy Team simply ignores these overwhelming facts, and  
18 alleges with reckless disregard for the truth that Goodrich disposed of waste propellant in  
19 multiple burn pits.  
20  
21  
22

23 **b. There is No Evidence that Goodrich Used “Area D1” as a**  
24 **Second Disposal Pit**

25 The Advocacy Team alleges in both the Draft Cleanup and Abatement Order and  
26 in its Witness Statements that Goodrich used an area commonly referred to as “Area D-  
27 1” as a second disposal pit. Ad. Team Witness Stmt., 5-6; Draft CAO ¶ 33(j). This  
28 allegation is completely unsupported by the testimonial and documentary evidence

1 before the Hearing Officer. **All** available testimony of former Goodrich employees  
2 confirms that only one burn pit was used at the Goodrich facility and that **it was located**  
3 **near the static test firing bay.**

4 Further, the available testimony confirms that Goodrich never used a **trench,**  
5 **pond, pool, ditch, landfill or other disposal pit beyond the single burn pit used at**  
6 **the Rialto plant.** Wever Dec. ¶ 53; Sachara Dec. ¶ 14; Graham Dec. ¶¶ 9, 12; Willis  
7 Dec. ¶ 21; Holtzclaw Dec. ¶ 7; Morris Dep., 53:1-16; see also Bennett Dec. ¶ 16. Every  
8 former Goodrich employee adamantly agrees that **nothing was buried, dumped or**  
9 **disposed in a trench, pond, pool, ditch or other site.** Willis Dec. ¶ 20; Wever Dec.  
10 ¶¶ 61, 64-66; Holtzclaw Dec. ¶¶ 10-12; Graham Dec. ¶¶ 9-12; Beach Dec. ¶¶ 8-9;  
11 Hernandez Dec. ¶ 7; Bland Dec. ¶ 11; Ustan Dec. ¶ 8.

12 Nor is there even one historical document evidencing Goodrich's use of a  
13 disposal area on the Southeastern portion of the property. While the Advocacy Team  
14 claims to cite to photographs in Attachment 31 to its Memorandum of Points and  
15 Authorities – these photographs were **never produced to Goodrich in violation of the**  
16 **Hearing Officer's Notice of Public Hearing** (and all amendments thereto). Further, the  
17 Advocacy Team bases its two burn pit theory on their interpretation of the undisclosed  
18 photographs, despite the fact that not one member of the Advocacy Team has any  
19 formal training in the interpretation of aerial photographs. Holub Dep., 300:20-22;  
20 Sturdivant Dep., 492:17-493:2.

21 Importantly, Mr. Adam Bennett, an expert in the interpretation of aerial  
22 photographs, has reviewed the available aerial photographs and it is his opinion that the  
23 area described by the Advocacy Team as "Area D1" at Revetment O-1 on the southern  
24 portion of the property was not used as a burn pit during Goodrich's operations:

25 [T]he tonal signatures observed are distinctly different than that  
26 observed in Goodrich's burn pit . . . and [are] similar to that of other  
27 shadows portrayed on the photograph. As such, the darkened area  
28 within Revetment O-1 [what the Advocacy Team calls area D-1] is  
due to a shadow from the steep sides of the dug out area and the  
low sun azimuth at the time the photograph was taken.

1 Bennett Dec. ¶ 18. The Advocacy Team's allegation that Goodrich utilized a second  
2 disposal pit on the southern portion of the property is pure speculation without a shred of  
3 support from witness testimony or documentary evidence and based on its own admitted  
4 inexpert interpretation of undisclosed aerial photographs. The allegations are not based  
5 on any credible evidence.

6 c. **The Advocacy Team's Allegation that Water Was Used in**  
7 **Goodrich's Burn Pit is Based Solely Upon Speculation**

8 The Advocacy Team recklessly alleges, without any citation to evidence, that  
9 "water was routed to the [Goodrich] burn pit by way of pipe buried in the ground, with a  
10 nozzle in the pit." Ad. Team P&As, 77. Former Goodrich employees unanimously refute  
11 this fact. Mr. Staton, **the supervisor of Goodrich's burn pit**, testified that water was  
12 never used at the pit, nor was water available for use. Staton Dep., 26:1-8; *see also*  
13 Willis Dec. ¶ 19; Wever Dec. ¶ 57 ("to my knowledge, there was no water source, spigot  
14 or hose located near the burn pit.")

15 In a stunning admission, Ms. Sturdivant, the member of the Advocacy Team who  
16 drafted the portion of the brief against Goodrich, testified that the inclusion of this  
17 allegation was a *mistake*:

18 Mr. Dintzer: Why didn't you put into the Memorandum of Points and  
19 Authorities that Mr. Staton, the lead man on the burn pit, says that  
no water was put in there?

20 Ms. Sturdivant: Because I take responsibility for the writing of the  
21 leaving the sentence in about the pipeline and that I had intended to  
take that out, and had written that by recollection and had not cited  
anything there. And I take responsibility for that error.

22 Mr. Dintzer: So you you're now saying that there shouldn't be a  
23 sentence in the Memorandum of Points and Authorities that water  
was put into the burn pit, is that your testimony?

24 Ms. Sturdivant: The statement regarding the pipeline to the burn pit,  
25 that's correct.

26 Mr. Dintzer: That should just be excised from the Memorandum of  
Points and Authorities and I need not worry about that anymore?

27 Ms. Sturdivant: Yes.  
28

1 Sturdivant Dep., 986:4-21. This admission is even more alarming when one looks at the  
2 vast number of allegations without any support whatsoever contained in the Advocacy  
3 Team's Points and Authorities. If Ms. Sturdivant simply wrote those allegations against  
4 Goodrich based on her "recollection," like she did about water use in the burn pit, how is  
5 there any assurance that the other allegations are not fabricated?

6 Moreover, how can Ms. Sturdivant draft allegations against Goodrich based on  
7 her "recollection?" Ms. Sturdivant has no personal knowledge regarding Goodrich's  
8 operations. Sturdivant Dep., 622:5-8. Indeed, Ms. Sturdivant never worked at the  
9 former Goodrich operations and she admittedly does not recall even reading the  
10 complete deposition of the Advocacy Team's "star witness" Mr. Polzien. Sturdivant  
11 Dep., 291:13-16, 667:23-668:7. Ms. Sturdivant's "recollection," in at least this instance,  
12 simply amount to fiction.

13 **d. The Advocacy Team Has No Reliable Evidence To**  
14 **Support its Allegations That Propellant Remained in the**  
**Burn Pit After a Burn**

15 The Advocacy Team alleges that a "characteristic" of the Goodrich "burn pits" was  
16 that "the bottom [of the burn pit] was typically charred and contained leftover residue  
17 from previous burns." Ad. Team P&As 76. The Advocacy Team relies solely on Mr.  
18 Polzien's testimony as the basis for this allegation, despite the fact that during the same  
19 deposition he later testifies that he ***never saw propellant remaining in the burn pit***  
20 ***after a burn and that it was his impression that all the scrap propellant and oxidizer***  
21 ***was consumed by the burn:***

22 Mr. Dintzer: Did you -- did you ever see any scrap propellant laying  
23 around around the burn pit that was not put into the burn pit when  
you were in charge of that particular operation?

24 Mr. Polzien: No.

25 Mr. Dintzer: Okay. And was it your sense that -- based on your  
26 supervision of this particular disposal activity, that the propellant  
waste that was generated and put into the burn pit was consumed in  
27 the fire?

28 Mr. Polzien: It was my impression, but I don't know for certain.

1 Mr. Dintzer: I understand. You didn't do a test on the soil, but my  
2 question is is that -- was that your impression?

3 Mr. Polzien: That was my impression.

4 Polzien Dep., 826:13-827:2.

5 Further, every other former Goodrich employee, with firsthand knowledge  
6 regarding Goodrich's burn pit, confirms that nothing remained in the burn pit after a burn.

- 7 • Mr. Staton, the supervisor of the burn pit, testified that **nothing**  
8 **remained in the burn pit after a burn**. Staton Dep., 98:4-7 (Q. Okay. Do -- was there any smoldering of material in the burn pit  
9 after the burn? A. No, sir.) (objection omitted), 25:23-25 (Q. Did you ever see chunks or pieces of unburnt propellant laying around  
10 on the burn pit? A. No, no.), 98:4-7, 98:11-25 (Q. Any ash? A. Never saw any --) (objections omitted).
- 11 • Mr. Garee, who worked in production and later quality control,  
12 testified that he viewed the burn pit at least three to four times after  
13 a burn and nothing remained in the burn pit. Garee Dep. 190:2-  
14 193:8; 270:1 1-11.
- 15 • Mr. Wever, who along with Mr. Dennison set the procedures  
16 regarding the burn pit, testified that "[a]fter a burn, nothing remained  
17 in the burn pit -- all material was completely consumed during the  
18 burn." Wever Dec. ¶¶ 58-59
- 19 • Mr. Graham also testified that "[t]here was no propellant or scrap  
20 oxidizer remaining after a burn." Graham Dec. ¶ 6.

21 Moreover, Mr. Polzien's early testimony on this point is inconsistent with experts  
22 who have worked in the manufacturing of solid rocket propellant for over forty years. Dr.  
23 Claude Merrill, who has worked with solid rocket propellant with the United States Air  
24 Force since 1966, concludes that:

25 the burning of propellant and oxidizer waste is a very effective  
26 manner to dispose of this material. **In my experience all**  
27 **propellant and oxidizer is consumed in the burning of this**  
28 **waste**. Based on my review of the testimony and declarations of  
former Goodrich employees, Goodrich's standard procedures for  
loading the burn pit, with the scrap propellant stacked on the bottom  
of the pit, then containerized ammonium perchlorate (or other  
oxidizer) stacked on top, then any used rags, is a very effective  
method for disposing of this waste.

Merrill Dec. ¶ 15 (emphasis added).

Moreover, an expert in chemical engineering, Dr. Jimmie Oxley, has conducted

1 experimental burns of several varieties of Goodrich's propellant formulations (both inside  
2 the laboratory and outside) and concluded that propellant burns extremely efficiently and  
3 virtually all perchlorate is consumed during a burn. Indeed, only approximately 0.002%  
4 of the perchlorate remains in the ash after a burn. Oxley Dec. ¶¶ 12-14. Again, the  
5 Advocacy Team can cite to no reliable evidence to establish that any residue, much less  
6 perchlorate residue, remained in the burn pit after a burn. Without any such evidence,  
7 and given the substantial percipient and expert testimony to the contrary, this allegation  
8 must be disregarded as unsupported.

9 e. **There is No Evidence that Scrap Propellant was Left in**  
10 **the Burn Pit Overnight**

11 The Advocacy Team asserts that another "characteristic" of the "burn pits" was  
12 that "[u]nburned scrap and TCE/propellant slurry were at times left overnight in the pit."  
13 Ad. Team P&As, 76. The Advocacy Team again relies solely upon the testimony of Mr.  
14 Polzien for this allegation. *Id.* Yet, not even Mr. Polzien, the Advocacy Team's star  
15 witness, can confirm that waste was left in the burn pit overnight before burning. The  
16 Advocacy Team fails to mention that Mr. Polzien, himself, later retracts his prior  
17 testimony during cross examination:

18 Mr. Dintzer: Did you ever see any type of barrels or cartons of  
19 materials that were going to be burned left in the burn pit over an  
20 evening such that they were there the next day?

21 Mr. Polzien: I don't recall.

22 Polzien Dep., 828:16-828:20.

23 Moreover, every single former Goodrich employee with knowledge regarding the  
24 burn pit confirms the fact that waste was never left in the burn pit overnight:

- 25 • **"I never let [waste] stand.** I mean, I -- I burnt it when it was  
26 there." Staton Dep., 63:6-16; see *Id.* 57:2-58:8, 63:6-16,  
27 25:23-25, 98:4-7, 98:11-25 (emphasis added).
- 28 • "All material placed in the Goodrich burn pit was burned  
immediately. The material was never placed in the pit and  
left for a lengthy period of time or over night." Wever Dec.  
¶ 55.



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

- "Q. Okay. So was the material then put into the burn pit and then burned immediately thereafter? A. Yes." Garee Dep., 83:19-21.
- "I never saw or heard of propellant waste being left in the burn pit overnight or for prolonged periods of time." Hernandez Dec. ¶ 7.
- "I never saw a build up of waste-like material in the burn pit." Ustan Dec. ¶ 8.

Given that the only testimony relied upon by the Advocacy Team was retracted, this allegation must too be disregarded as unsupported.

**f. The Evidence Cited Does Not Support the Allegation that Goodrich Disposed of TCE in its Burn Pit**

The Advocacy Team alleges that TCE and "TCE slurry" was routinely disposed of in Goodrich's burn pit. Ad. Team P&As, 77. However, nowhere in its Memorandum of Points and Authorities does the Advocacy Team cite any credible evidence that Goodrich actually used TCE in its operations. The Advocacy Team purportedly relies upon Mr. Wever's deposition testimony. But, Mr. Wever's testimony does not support this allegation. Mr. Wever testifies that spent *solvent* containing propellant was disposed of in the burn pit, he does not testify that specifically TCE was disposed of in the burn pit. See Ad. Team P&As, Attachment 66 (Wever Dep., 27:21-29:7) ("if we had any cleanup solvents that had propellant, in it, that went on top of that just before we lit it off.").

Importantly, the Advocacy Team fails to disclose the important fact that Mr. Wever timely corrected certain sections (upon careful reflection and as permitted by the Federal Rules of Civil Procedure) cited by the Advocacy Team in his certified transcript, to indicate that he does not recall whether trichloroethylene (TCE) or trichloroethane (TCA) was used at Goodrich, consistent with his later testimony. Ex. 20279 (Wever Corrections); see also Wever Dec. ¶ 32. The testimony of every other former Goodrich employee indicates that the Advocacy Team's allegations of TCE use are unsupported. See Haggard Dep., 54:10-23; Garee Dep., 122:6-123:18; Morris Dep., 39:3-25; Shook

1 Dep., 29:2-19; Holtzclaw Dec. ¶ 9; Willis Dec. ¶ 13.

2 Of course, TCE was not the only available solvent during Goodrich's years of  
3 operation. Both acetone and cyclohexanone were commonly used solvents and  
4 according to Dr. Merrill, "it is reasonable that Goodrich would have used these solvents  
5 in the production and research and development of solid rocket propellant." Merrill Dec.  
6 ¶ 18.

7 **4. The Advocacy Team's Allegations Regarding Goodrich's Static**  
8 **Test Firing Bay Lack Any Foundation in Fact**

9 **a. No Scrap Propellant Remained in the Static Test Firing**  
10 **Bay After a Test Firing**

11 Citing solely Mr. Polzien, yet again, the Advocacy Team asserts that "propellant  
12 from defective rockets and leftover propellant from tested rocket motors" were disposed  
13 of in the Goodrich burn pit. Ad. Team P&As, 77. Again, the overwhelming percipient  
14 and expert testimony confirms that propellant burned extremely efficiently and that no  
15 propellant remained in the static test firing bay or the motor casing after a test firing  
16 (even if there was a defect or "misfire"):

- 17 • "I have examined [misfired motors], yes. The one or two, I  
18 did – I think there was two. I did examine them. And I don't  
19 recall seeing any – any propellant in them. They didn't –  
20 they didn't explode. What they did was: The burnt out on  
21 the head end, and then, of course, that would drop the  
22 pressure by half at least, and then they just slowly and  
23 consumed themselves. By 'slowly,' I'd say in a matter of  
24 seconds." Staton Dep., 75:5-16.
- 25 • "After a test firing no propellant or oxidizer remained in the  
26 test bay area or in the motor itself." Graham Dec. ¶ 7.
- 27 • "When rockets were tested in the static test-firing area, all  
28 the propellant burned in the rocket, and there was no  
propellant that remained in the casing. . . . Even after a  
rocket malfunctioned, there was no scrap propellant lying on  
the ground on and around the test-firing area." Sachara  
Dec. ¶ 8.
- Mr. Garee never saw an instance where a solid rocket motor  
was ignited and it did not burn all of the propellant in the  
casing. Garee Dep., 277:17-24; *see also* Garee Dep., 24:4-  
25, 33:5-20, 47:2-9, 277:6-16, 279:2-17, 285:2-13.

- 1 • Mr. Haggard testified that all of the propellant in the motor  
2 casing was consumed after ignition. Haggard Dep., 122:14-  
123:12.
- 3 • “When rockets were tested, all the propellant burned out.  
4 There was no unburned scrap propellant on the floor of the  
test bay or on the ground nearby.” Ustan Dec. ¶ 10.
- 5 • Dr. Claude Merrill, who has decades of experience in the  
6 field of rocket science and has witnessed hundreds of test  
firings, confirms that “[a]ll propellants containing ammonium  
7 perchlorate concentration of 68 weight percent or greater  
**burned completely so that no residues remained. . . .**”  
8 Merrill Dec. ¶ 29 (emphasis added).

9 Mr. Polzien’s testimony is the only thing the Advocacy Team cites to support its  
10 allegations. And once again, the testimony of witness after witness, both former  
11 Goodrich employees and experts, contradicts Mr. Polzien’s statements. Ms. Sturdivant’s  
12 obstinate refusal to recognize that Mr. Polzien’s testimony is at best inaccurate, and at  
13 worst, an outright falsehood, and her willingness to ignore all of the other witness  
14 testimony in the case speaks volumes about her judgment and objectivity. The vast  
15 overwhelming weight of the evidence contradicts the Advocacy Team’s contention that  
16 any propellant remained in the static test firing bay after a test firing; the Advocacy  
17 Team’s allegation should be disregarded.

18 **b. The Number of Motors Test Fired Each Week Is Far Less  
19 Than That Asserted by the Advocacy Team**

20 In yet another unsupported allegation, the Advocacy Team asserts that “[r]ecords  
21 and testimony indicate that as many as ten rocket motors were tested on a daily basis at  
22 the Goodrich facility.” Ad. Team P&As, 75. Yet, Mr. Staton, the former supervisor of the  
23 static test firing bay, plainly refutes this assertion. Mr. Staton testified that test firing did  
24 not occur every day, but rather, the static test firing bay was used on average, four days  
25 a week, with about six firings per day. Staton Dep., 38:20-24; *see also* Garee Dep.,  
26 157:5-23. Even Mr. Polzien, who the Advocacy Team relies so heavily upon, testified  
27 that “there were some days when there were absolutely no tests.” Polzien Dep., 206:21-  
28 25.



1 evidence supporting this assertion, it cannot be relied upon in any finding against  
2 Goodrich.

3 **e. There is No Credible Evidence that Water Was Used in**  
4 **the Static Test Firing Bay**

5 The Advocacy Team alleges that “[o]n some occasions, residue and unburned  
6 propellant was rinsed from the concrete test bay onto the bare ground using a water  
7 hose.” Ad. Team P&As, 75-76. The only basis for this allegation is – once again – the  
8 testimony of Mr. Ronald Polzien. *Id.* But, the Advocacy Team fails to tell the Hearing  
9 Officer that Mr. Polzien later testifies during direct examination that he has “no  
10 recollection of water being used” in the test bay area. Polzien Dep., 297:15-16.  
11 Moreover, Mr. Polzien is unable to credibly explain how a hose was used in the static  
12 test firing bay because there is no water source at the test bay itself. Polzien Dep.,  
13 537:25-540:16 (Mr. Polzien testifies that the closest water spigot was over 500 feet away  
14 and he has no recollection of a 500 foot hose). Not surprisingly, Mr. Polzien’s testimony  
15 about water used to rinse the test bay is contradicted by several other former  
16 employees:

- 17 • According to Mr. Staton, who was in charge of the static test bay,  
18 there was no water source nearby the static test bay and water was  
19 not used to clean the area. Staton Dep., 36:15-20.
- 20 • Mr. Sachara testified that “[he] never used and [he] never saw  
21 another employee use water or a hose to clean the test-firing area.”  
22 Sachara Dec. ¶ 8.
- 23 • “I have no recollection of any water lines, spigot or hose near the  
24 static test stand.” Wever Dec. ¶ 52.
- 25 • “I never saw the test bay cleaned in any manner with water or  
26 otherwise and I do not recall there being any water source, hose or  
27 spigot located near the test bay.” Graham Dec. ¶ 7.
- 28 • Garee Dep., 24:4-25; see also Garee Dep., 33:5-20, 47:2-9, 277:6-  
16, 279:2-17, 285:7-9 (“Q. Did you ever see anyone mop out the  
test bay? A. No.”).

1                   5.     **The Advocacy Team Cannot Cite to Any Evidence That**  
2                                   **Goodrich Used TCE**

3                   Without any citation to fact, the Advocacy Team contends throughout its  
4 Memorandum of Points and Authorities that Goodrich used and disposed of TCE as part  
5 of its operations in Rialto. See, e.g., Ad. Team P&As, 64 (“[a]s part of the development,  
6 testing and production of solid rocket propellant and rocket motors, Goodrich used  
7 various chemicals at the property, including TCE. . . .”). This blanket assertion regarding  
8 TCE use also is unsupported **by any citation to evidence**. To the contrary, former  
9 Goodrich employees do not recall the use of TCE at the plant:

- 10                   •     “I recall that acetone was used at the Rialto facility to clean the  
11                                   carriages where propellant was cured. I do not recall any other  
12                                   solvent being used at the facility. I do not recall ever seeing  
13                                   Trichloroethylene or hearing of any employees using  
14                                   Trichloroethylene at the facility.” Holtzclaw Dec. ¶ 9.
- 15                   •     “During the entire length of my employment at Goodrich, I never used  
16                                   and I did not see any other employee use trichloroethylene at  
17                                   Goodrich’s Rialto facility.” Willis Dec. ¶ 13.
- 18                   •     Mr. Morris never saw or personally used trichloroethylene at the  
19                                   Goodrich facility. Morris Dep., 39:6-11.
- 20                   •     Mr. Shook never saw trichloroethylene at the Goodrich facility.  
21                                   Shook Dep., 29:11-19.
- 22                   •     Mr. Staton testified that he does not recall any disposal of TCE in  
23                                   Goodrich’s burn pit. Staton Dep., 80:17-21.
- 24                   •     Mr. Hernandez does not recall trichloroethylene being stored at  
25                                   Goodrich. Hernandez Dec. ¶ 3.

26                   The Advocacy Team simply ignores this extensive testimony of the former Goodrich  
27 employees that TCE was not used at the Rialto plant.

28                   While the Advocacy Team purports to rely upon Mr. Wever’s testimony with  
respect to Goodrich’s use of TCE, it again fails to consider the corrections made to Mr.  
Wever’s certified transcript. A review of the corrections to Mr. Wever’s certified

1 deposition transcript reveals, consistent with his later testimony at the deposition, that he  
2 does not recall whether TCE or TCA was used at Goodrich's facility, and each place the  
3 word "TCE" is used, Mr. Wever corrected his response to state "TCE or TCA." Ex.  
4 20279 (Mr. Wever's Corrections). Mr. Wever's testimony simply provides no support for  
5 the Advocacy Team's conclusion that Goodrich used TCE at its Rialto facility. Moreover,  
6 Mr. Wever confirmed in his declaration under penalty of perjury that he has "no  
7 recollection of the specific solvent used" in the cleaning processes at Goodrich. Wever  
8 Dec. ¶ 32.

9 Without any testimonial or documentary evidence, the Advocacy Team cannot  
10 support its allegations that Goodrich used and disposed of TCE at its Rialto facility.

11 **6. The Advocacy Team Inflates the Size and Extent of Goodrich's**  
12 **Rialto Operations Without Any Factual Support**

13 **a. Goodrich Operated at Full Production for Less Than Five**  
14 **Years**

15 The Advocacy Team asserts that "from 1957 to 1964, Goodrich manufactured  
16 rockets. . . ." Ad. Team P&As, 63. This statement is misleading because it was not until  
17 the Fall of 1957 that Goodrich began setting up its operations. Wever Dec. ¶ 8 ("After  
18 arriving at the Rialto plant in September 1957, it took several months to get operations  
19 underway . . . I would estimate that the research and development of propellant did not  
20 begin until early 1958."). For most, if not all of the remainder of 1957, Goodrich did not  
21 produce any propellant, as the focus was on setting up the operations in Rialto. *Id.* It  
22 was not until 1959 that Goodrich obtained a contract to produce the Loki motor. See Ex.  
23 22 (KWKA00452123-29) (Nord 18853 Contract for Loki II stating that "THIS CONTRACT  
24 is entered into as of 2 April, 1959. . . ." (emphasis added); Ex. 51 (KWKA00452202-03)  
25 (**May 27, 1959** Nord 18966 Contract for Loki I). Furthermore, full production of  
26 propellant at Goodrich ceased upon the discovery of cracks in the propellant grain of the  
27 Sidewinder motor in November of 1962 and the only propellant produced was in  
28 connection with the re-qualification of the Sidewinder motor. Wever Dec. ¶ 46, Ex. 90  
(KWKA00452707); Ex. 13 (KWKA00452702-06); Ex. 12 (KWKA00452713-14). Thus,

1 Goodrich only “manufactured rockets” from sometime in 1958 until 1962.

2 **b. The Advocacy Team Exaggerates the Number of Loki I**  
3 **Motors Loaded at Goodrich**

4 Basing its calculations on documents “suggesting” that “at least 330 Loki I rocket  
5 motors were manufactured by Goodrich, the Advocacy Team concludes that [i]t is  
6 therefore reasonable to conclude that Goodrich utilized at least 4,290 pounds of  
7 ammonium perchlorate in the manufacturing of Loki I rocket motors.” Ad. Team P&As,  
8 68-69. This is simply a miscalculation and exaggeration that has no evidentiary support.

9 The Advocacy Team exaggerates the number of Loki I rocket motors  
10 manufactured by Goodrich; although the Advocacy Team asserts that Goodrich  
11 manufactured “at least” 370 Loki I rocket motors, the only contract for the Loki I required  
12 only 270 motors. Ex. 2 (KWKA0045202-03); Ex. 8 (KWKA00452314); Ex. 9.  
13 (KWKA00452557-59). At approximately 20 motors per batch, this translates into  
14 approximately 14 batches of propellant mixed for the Loki I. Merrill Dec. ¶ 20, Ex. A.

15 **c. The Advocacy Team Also Exaggerates the Number of**  
16 **Loki IIA Motors Loaded by Goodrich**

17 The Advocacy Team relies upon a technical paper dated December 5, 1961,  
18 presented by Goodrich staff at a technical conference, when discussing the production  
19 of Loki IIA motors at Goodrich. Ad. Team P&As, 69. However, this technical paper has  
20 several internal inconsistencies, making it difficult to rely upon any given fact in the  
21 document. For instance, the document says that, “[l]ate in 1958, The B.F. Goodrich  
22 Company began the manufacturing and development of the LOKI IIA motor. . . .,” but  
23 then states in “early 1959, production of the LOKI IIA motors was begun for Cooper  
24 Development Corporation. . . .” Ad. Team P&As (Attachment 16 RIALTO024653). It is  
25 likely that the Advocacy Team is mistakenly relying upon a historical summary of a  
26 Cooper Development project and not the actual contracts obtained by Goodrich. This  
27 assumption is further supported by the actual government contracts, which indicate that  
28 Goodrich began loading the Loki II in 1959. Ex. 22 (KWKA00452123-29); Ex. 51



1 (KWKA00452202-03).

2 As another example of the inconsistencies in the 1961 technical paper relied upon  
3 by the Advocacy Team, the document states that “500 [Loki IIA rocket motors]  
4 manufactured” by Goodrich, but then states that “the quantity produced now totals about  
5 1,000 units.” Ad. Team P&As, 69 (Attachment 16, RIALTO024653-6). Of course, the  
6 Advocacy Team relies upon the cite for 1,000 units produced to date, despite the fact  
7 that it is unclear whether these motors were produced by Goodrich and the document  
8 appears to be referring to Cooper Development. Ad. Team P&As, 69 (Attachment 16)  
9 (“In early 1959, production of LOKI IIA motors was begun for **Cooper Development**  
10 **Corporation**, using motors cases of their manufacture. Additional development and  
11 loading of these motors has continued since, for the Signal Corps and others, under  
12 subcontract to Cooper and its successors, the Marquardt Corporation. The quantity  
13 produced now totals about 1,000 units.”).

14 The overwhelming documentary and testimonial evidence supports the fact that  
15 far less than 1,000 Loki IIA rockets motors were loaded at Goodrich. But, the available  
16 government contracts establish that far less than 1,000 were loaded at Goodrich – the  
17 contracts were for a total of only 515 **Loki I and Loki II** motors. Ex. 22  
18 (KWKA00452123-29); Ex. 2 (KWKA00452202-3); Ex. 72 (KWKA00452502-3); Ex. 8  
19 (KWKA00452314); Ex. 9 (KWKA00452557-59); Ex. 6 (KWKA00453329); *see also* Merrill  
20 Dec. ¶¶ 20, 25; Haggard Dep., 17:19-18:1 (Mr. Haggard estimates approximately “a  
21 couple hundred” Lokis were produced); Willis Dec. ¶ 14 (“[w]hile I was employed at the  
22 Rialto facility, it is my belief that Goodrich manufactured less than 200 Loki I and Loki II  
23 rockets combined.”).

24 Even Ms. Sturdivant concedes that the document relied upon by the Advocacy  
25 Team does not confirm that Goodrich (as opposed to a different government contractor)  
26 loaded the 1,000 Loki IIA motors:

27 Mr. Dintzer: Well, do you know whether or not the -- of the 1,000  
28 units, some subset of that was loaded by Cooper

1 Development or the Marquardt Corporation or JPL at  
2 locations other than the 160-acre parcel?

3 Ms. Sturdivant: I don't know for certain.

4 Sturdivant Dep., 736:16-737:6.

5 The simple fact is that Goodrich manufactured the Loki I and IIA motors under  
6 government contracts, and the contracts call for production of 515, not 1,000 as asserted  
7 by the Advocacy Team. Of course, because the Advocacy Team exaggerates the  
8 number of Loki motors loaded, the "calculation" made regarding the amount of  
9 ammonium perchlorate needed is correspondingly exaggerated.

10 d. **Just as the Advocacy Team Exaggerates the Number of**  
11 **Loki IIA Motors Loaded, It Exaggerates the Number of**  
12 **Loki IIA Motors Test Fired**

13 Without citing to any evidence, the Advocacy Team states that "[s]ixty-three of the  
14 Loki IIA motors were static tested at the Rialto site between 1958 and 1961." Ad. Team  
15 P&As, 70. Actually, nowhere near sixty-three Loki IIA motors were static tested at the  
16 Rialto facility. Mr. Wever testifies that "one production motor from each batch was static  
17 test fired in the test bay." Wever Dec. ¶ 50. Mr. Wever further testified that  
18 "approximately twenty-six to twenty-seven production batches of the Goodrich  
19 formulation propellant containing ammonium perchlorate produced during the entire time  
20 the plant was operating from 1958 to 1963." Wever Dec. ¶ 42. Thus, the testimonial  
21 evidence that only approximately 26-27 production batches (included within this estimate  
22 is the Loki IIA motor which contained a Goodrich propellant formulation) establishes that  
23 far less than 63 Loki II motors were tested at the Goodrich facility.

24 In addition, "[a]n additional 12 Loki IIA test motors were fired . . . with a single test  
25 motor failure in the test bay." Ad. Team P&As, 70.<sup>2</sup> However, the testimony of Mr.  
26 Staton, a former Goodrich employee and former supervisor of the static test bay at the  
27 Goodrich Rialto plant, confirms that, at most, only **two or three** failures or malfunctions

28 <sup>2</sup> Because no citations are provided to evidence, it is unclear what documents or  
testimony the Advocacy Team is basing these statements on.

1 occurred in total and that all propellant was consumed in a failure. Staton Dep., 37:14-  
2 25, 75:5-16; see also Garee Dep., 130:1-20, 276:13-23 (only one malfunction involving a  
3 Loki rocket and two malfunctions total). There is no available evidence that more than  
4 two "malfunctions" occurred in the firing of the Loki motor in Goodrich's static test firing  
5 bay.

6 e. **The Cited Evidence Does Not Support The Advocacy**  
7 **Team's Estimate of the Number of Sidewinder Rocket**  
8 **Motors Manufactured at the Rialto Plant**

9 The Advocacy Team asserts that "at least 347 Sidewinder motors were  
10 manufactured before Goodrich was forced to abandon the project (see below). Although  
11 500 Sidewinders were ordered for production, at least 347 motors were cast, and as  
12 many as 650 motors may have been cast." Ad. Team P&As, 70 (citations omitted). To  
13 support these estimations, the Advocacy Team again relies largely on the testimony of  
14 Mr. Polzien, while ignoring the testimony of Dwight Wever, the program manager of the  
15 Sidewinder project, and the available government contracts stating the number of  
16 Sidewinders Goodrich was under contract to produce. Ex. 11 (KWKA00452643-44)  
17 (Letter indicating that 311 Sidewinders scheduled to be loaded); Ex. 12  
18 (KWKA00452713-14) (November 21, 1962 letter regarding cracking of Sidewinder  
19 propellant in Lot 3); Ex. 13 (KWKA00452702-06) (cancel qualification of Lot 3); Ex. 14  
20 (KWKA00452719-23) (further Sidewinder loading suspended); Ex. 15 (KWKA00452767-  
21 78) (contract cancelled); see also Wever Dec. ¶ 45 ("As the program manager for the  
22 Sidewinder rocket, I estimate that a little over twenty batches of the Goodrich formula  
23 propellant, which contained ammonium perchlorate, was made and loaded into the  
24 Sidewinders. For each batch created through the process of mixing up the propellant,  
25 approximately twelve sidewinder rocket motors were cast."). This is despite the fact that  
26 Mr. Polzien later testifies that he does not know how many Sidewinders were made:

26 Mr. Dintzer: And so my question to you is, you don't know how many  
27 Sidewinders were actually loaded at the Goodrich facility,  
28 isn't that true, sir?

28 Mr. Polzien: Total number?

1 Mr. Dintzer: Yes, sir.

2 Mr. Polzien: No.

3 Polzien Dep., 1300:19-24. Importantly, Mr. Polzien recognizes that Mr. Wever, the  
4 project manager on the Sidewinder, has more credible knowledge regarding the  
5 production of the Sidewinder. It is unexplainable that Ms. Sturdivant insists upon citing  
6 Mr. Polzien for the number of Sidewinders produced when (1) he concedes that he does  
7 not know how many were made and (2) substantial credible evidence belies his earlier  
8 testimony.

9 **f. The Advocacy Team Mischaracterizes Goodrich's**  
10 **Production of the Jet Assisted Take Off Rocket (JATO)**

11 Predictably, the Advocacy Team relies exclusively on the testimony of Mr. Polzien  
12 for information on the JATO rocket, which allegedly contained “[s]ixty to 90 pounds of  
13 solid rocket propellant. . . .” Ad. Team P&As, at 71. But as demonstrated above, Mr.  
14 Polzien never observed the loading of a rocket at Rialto, never witnessed any part of the  
15 oxidizer processing procedure, never witnessed the mixing process, and has no  
16 knowledge regarding the formulations of motors loaded by Goodrich. Polzien Dep.,  
17 587:25-588:11 & 592:3-11 & 594:6-11. Despite these facts, the Advocacy Team relies  
18 exclusively on Mr. Polzien’s non-existent knowledge to support its allegations regarding  
19 the JATO motor and the ingredients of the propellant formulation for the JATO motor.

20 **g. The Advocacy Team Mischaracterizes Goodrich's**  
21 **Production of both the ASP 1 and ASP 4 Motors**

22 According to the Advocacy Team, the ASP 1 contained “several hundred pounds  
23 of propellant” and the “[p]ropellant used in the ASP 1 was 70% by weight ammonium  
24 perchlorate.” Again, the Advocacy Team relies on Mr. Polzien, who admittedly has no  
25 first hand knowledge of the production of propellant at Goodrich and does not know the  
26 formulation of the rockets loaded at Rialto. Polzien Dep., 587:25-588:8 & 592:3-11 and  
27 594:6-11. Mr. Polzien’s testimony is contradicted by Mr. Wever who testifies that “*the*  
28 *oxidizer used in the propellant for the ASP was ammonium nitrate and not*

1 **ammonium perchlorate.**” Wever Dec. ¶ 12 (emphasis added).

2 The Advocacy Team also notes that “one extremely large (2,000 pounds total  
3 weight) ASP rocket was tested. . . .” Ad. Team P&As, 72. Although there is no citation  
4 to evidence for this proposition, former Goodrich employees contradict this unsupported  
5 “fact.” One such employee states that “Goodrich manufactured one or two ASP rockets.  
6 Each ASP rocket contained **80 to 90 pounds of propellant.**” Willis Dec. ¶ 16  
7 (emphasis added). This is significantly different than the unsupported allegation of a  
8 2,000 pound rocket motor.

9 **h. The Cited Evidence Does Not Support the Allegations**  
10 **Regarding Goodrich’s Production of Test Motors**

11 The Advocacy Team contends that the “test motors contained approximately 15 to  
12 20 pounds of propellant.” Ad. Team P&As, at 73. No citation to evidence is provided.  
13 The Advocacy Team also asserts that “10.5 to 14 pounds of ammonium perchlorate  
14 were used in each TM-2 and TM-5 motor.” *Id.* Similarly, there is no citation to evidence  
15 for the purported “fact” that ammonium perchlorate was used in all test motors.  
16 According to the head engineer in Research & Development at the Rialto plant,  
17 “[ammonium perchlorate] was not the only oxidizer used” at Rialto. Sachara Dec. ¶ 4.  
18 Moreover, additional employees who worked exclusively in the laboratory at Goodrich  
19 establish that the test motors were actually much smaller. Morris Dep., 42:2-18 (“One of  
20 them was probably six inches in diameter, about six to eight inches in diameter. . . Once  
21 would be probably about eight inches long; yeah, eight inches long, maybe up to a foot  
22 long. . . They were small motors, yes.”).

23 **7. The Advocacy Team Mischaracterizes the Evidence Concerning**  
24 **Goodrich’s Use of Ammonium Perchlorate**

25 The Advocacy Team makes the finding that “ammonium perchlorate was the  
26 exclusive oxidizer used for all rocket propellant manufactured by Goodrich at the  
27 property, with only minor exceptions.” Ad. Team P&As, at 64. This allegation is simply  
28 untrue and is made **without reference to a single citation to evidence.** While some of

1 the motors loaded at the Goodrich facility contained ammonium perchlorate –  
2 ammonium perchlorate was not the only oxidizer utilized by Goodrich. According to Mr.  
3 Wever, the oxidizer used in both the RTV and ASP was ammonium nitrate – not  
4 ammonium perchlorate. Wever Dec. ¶¶ 11-12; see also Sachara Dec., at ¶ 4  
5 (“[ammonium perchlorate] was not the only oxidizer used.”). It is unclear why these  
6 witnesses, who have testified to such facts during their respective depositions, are  
7 ignored by the Advocacy Team.

8 The Advocacy Team further alleges that “Goodrich’s research and development  
9 facility mixed its own rocket propellant on the Property for test purposes. This test  
10 propellant likely contained perchlorate . . .” Ad. Team P&As, 67. To support this  
11 assertion, the Advocacy Team relies on the testimony of Mr. Wever, but as stated above,  
12 Mr. Wever specifically testified that not all propellant, including propellant used for  
13 research and development purposes, contained ammonium perchlorate. Wever Dec.  
14 44. Further troubling is the fact that the testimony cited to by the Advocacy Team does  
15 not discuss Goodrich’s research and development processes, nor does it discuss mixing  
16 of propellant for test purposes. See Ad. Team P&As, 67 (Attachment B, Wever Dep.,  
17 57:22-58:15). The Advocacy Team’s unsubstantiated statement again should be  
18 disregarded.

19 **8. The Advocacy Team’s Unsupported “Story” Regarding**  
20 **Goodrich’s Production Process is Materially Misleading.**

21 **a. The Advocacy Team Recklessly Coins the Term “Water-**  
22 **Perchlorate Slurry”**

23 The Advocacy Team purports that as a result of the cleanup associated with the  
24 “grinding” process, “[t]he water-perchlorate slurry was then poured directly onto the  
25 ground outside the grinding room.” Ad. Team P&As, at 65. No citation to any  
26 documentary or testimonial evidence is cited for this statement. Moreover, the  
27 characterization of a “water-perchlorate slurry” is highly misleading. As testified by Mr.  
28 Wever, the grinding operation was conducted in a highly controlled environment to  
minimize any fugitive emissions:

1 A smaller part of the oxidizer, approximately 25%, was ground to  
2 produce a smaller particle size to get a specific burn rate. To grind  
3 this small portion of the oxidizer, Goodrich utilized a laboratory-sized  
4 hammermill. . . . During the grinding, a screen in the grinder  
5 prevented particles that were too large from passing into a large  
6 metal collection drum, which was equipped with a dust bag.

7 The entire grinding process was done in the large room in the  
8 oxidizer processing building. There was no ventilation in this  
9 building, and the door was always kept closed.

10 Wever Dec. ¶¶ 22-23. Moreover, Mr. Wever testified that virtually all of the small amount of  
11 fugitive material was swept into a dustpan and placed into a combustible container for  
12 later transport to Goodrich's burn pit. Wever Dec. ¶¶ 25-26. There is no evidence that  
13 anything but a de minimis amount of perchlorate was disposed of directly onto the bare  
14 ground.

15 **b. The Advocacy Team's Characterization of the Mixing  
16 Process is Not Supported by the Evidence**

17 The Advocacy Team asserts that "[t]wo 100-gallon mixers and a third 150-gallon  
18 mixer were used for preparing propellant containing ammonium perchlorate." Ad. Team  
19 P&As, at 66. The testimony of Mr. Wever is used to support this fact. However, the  
20 Advocacy Team omits subsequent testimony of Mr. Wever, in which he corrects his  
21 earlier testimony:

22 My testimony before has been that the two mixer sizes have been --  
23 what were they? 100- and 150-gallon mixers for production. [¶] This  
24 Exhibit 92 has corrected my memory, if you will. **The two mixers in  
25 production was a hundred and a 25. A 100-gallon mixer and a  
26 25-gallon mixer.** [¶] The reason for the confusion is that since  
27 leaving B.F. Goodrich, I worked for TRW for a number of years, still  
28 in the propellant industry, if you will, and those -- the motors that we  
were concerned about during that time were much larger motors  
than they used the 250-gallon type mixers, so that I wanted to clarify  
that before we got going.

29 Wever Dep., 273:12-24 (emphasis added). See also Wever Dec. ¶ 28 ("There were two  
30 production mixers at the Goodrich plant: a 25-gallon mixer and a 100-gallon mixer.");  
31 Sachara Dec. ¶ 5 ("Goodrich's Rialto facility had two production mixers, a 25-gallon  
32 mixer and 100-gallon mixer, to produce solid rocket fuel."). Although Goodrich installed  
33 a third mixer, which was larger in size, shortly before closing the Rialto plant, that mixer

1 was only used on one occasion. Sachara Dec. ¶ 5 (“Shortly before closing the plant,  
2 Goodrich installed a larger mixer, but it was used on only one occasion.”).

3 Again, citing Mr. Polzien, the Advocacy Team asserts that “[t]he mixing equipment  
4 at Goodrich, including the transfer pot, was cleaned after each use, sometimes several  
5 times a day.” Ad. Team P&As, at 66. Notably, the cited testimony reveals that Mr.  
6 Polzien’s purported knowledge is entirely made-up and that in fact Mr. Polzien has no  
7 personal knowledge regarding the mixing process. Polzien Dep., 272:9-11. The  
8 credible testimony of former Goodrich employees who actually participated in the mixing  
9 of propellant contradict Mr. Polzien’s false statement. Mr. Wever estimates that, in 1959,  
10 “on average propellant was mixed for production purposes approximately once a  
11 week[.]” Wever Dec. ¶ 30 (emphasis added). Moreover, former Goodrich production  
12 employees testified that there were periods of time when no production propellant was  
13 mixed at all. See Haggard Dep., 151:5-20; see also Haggard Dep., 156:17-157:23  
14 (“During the period of time that you were on the day shift, do you recall a shutdown of  
15 production operations in order to perform maintenance at the facility? A. Yes. I don’t  
16 remember the dates.”); see also Haggard Dep., at 199:2-22; Beach Dec., at ¶ 6 (“When I  
17 worked in the production department, I recall that there were instances in which rocket  
18 motors were not being produced at the Goodrich facility.”). Thus, it is clear that mixing  
19 could not have occurred every day.

20 The Advocacy Team further asserts that “[t]he mixing room floor was swept and  
21 mopped, if necessary,” but the evidence reflects that mopping was not a routine event.  
22 Wever Dec. ¶ 32. Rather, mopping “would have been unnecessary due to the design of  
23 the tooling used with the mixer, which prevented any spills.” *Id.* at ¶ 32. Further, the  
24 transfer process following the mixing of propellant did not result in any spills: “[t]o my  
25 knowledge, no fugitive emissions of any kind occurred during this transport.” *Id.* at ¶ 34;  
26 see also Willis Dec. ¶ 8 (“I never saw a transfer vessel leak propellant onto the ground,  
27 and I never saw a vessel fall over.”).

28





1 explosion-proof container that was sent to the burn pit.”); Bland Dec. ¶ 8 (“It is my best  
2 estimate that less than half a pound of cured propellant was trimmed from each Loki  
3 Motor.”); Ustan Dec. ¶ 12. Besides the fact that very little trimming was necessary, the  
4 employees were very careful during the trimming process. Willis Dec. ¶ 10 (“I never saw  
5 anyone throw trimmed material to the ground, and I never saw trimmed material lying on  
6 the ground anywhere inside the building.”).

7                   **9. The Evidence Does Not Support the Allegation that the**  
8                   **Sidewinder Salvage Project Resulted in Discharges of**  
9                   **Propellant**

10           The Advocacy Team alleges that “[t]he Sidewinder rocket motors that developed  
11 cracks in their propellant grain were salvaged by removing the propellant with high-  
12 pressure water and solvent, so that the casing could be reused.” Ad. Team P&As, at 78.  
13 Notably no citation is provided for this “fact.” Testimony from former employees who  
14 actually conducted the salvage project establishes that high powered water was **not**  
15 used in connection with this project. See Garee Dep., 73:9-21; Haggard Dep., 113:2-  
16 121:25, 210:5-213:22; see also Wever Dec. ¶ 47 (“**[n]o water was used to remove**  
17 **propellant for the casing or in any other way during the auguring process.**”).

18           According to the Advocacy Team, “[s]ome of the residual propellant washed out  
19 on the concrete walkway and onto the bare ground at the Property.” The Advocacy  
20 Team cites several different former Goodrich employees for this allegation. But all but  
21 one of the employees whose testimony was cited by the Advocacy Team, testified that  
22 scrap propellant was **never** left laying strewn across the bare ground during the  
23 salvaging process. Haggard Dep., 119:4-13; see also Haggard Dep., 116:8-15  
24 (emphasis added); Garee Dep., 73:2-75:21; Wever Dec. ¶ 47 (“I did not observe any of  
25 the propellant removed from the casings or solvent used spilled on the ground.”).

26           The only witness who testified to this “allegation,” of course, is Mr. Polzien.  
27 According to Mr. Polzien, he was “so concerned” about propellant being “washed away”  
28 during the propellant removal that he went to Mr. Sachara to discuss the issue. Polzien

1 Dep., 153:21-154:2.<sup>3</sup> According to Mr. Polzien, after learning of Mr. Polzien's "concern,"  
2 Mr. Sachara wrote a letter to the production manager insisting that "it be cleaned  
3 immediately because there was a safety hazard, words to that effect." Polzien Dep.,  
4 154:3-15. Mr. Sachara flatly refutes Mr. Polzien's testimony:

5 At no point during my employment at the Rialto facility did Mr.  
6 Polzien ever tell me that he was concerned about working around  
7 the test-firing area. He also never complained to me about the  
8 manner in which propellant was being removed from rocket casings.  
9 Despite Mr. Polzien's assertions to the contrary, I never expressed  
10 concerns about the safety of removing propellant from rocket  
11 casings to Jack Shields orally or in writing. Furthermore, I never  
12 communicated to Jack Shields orally or in writing about the  
13 existence of scrap propellant on the ground at the Rialto facility.

14 Sachara Dec., ¶ 13 (emphasis added). Once again, the overwhelming weight of the  
15 testimony demonstrates that Mr. Polzien's recollection of events is either faulty or  
16 fabricated, and cannot be relied upon by the Advocacy Team.

17 The Advocacy Team contends that "[e]stimates from former Goodrich employees  
18 regarding the number of Sidewinders that were salvaged range from 24 to 100 rocket  
19 motors. The balance of the testimony indicates that the actual number of Sidewinder  
20 rocket motors salvaged is in the range of 24 to 36." Ad. Team P&As, at 78. In the cited  
21 testimony to Mr. Polzien's deposition, Mr. Polzien speculates that "it had to be at least  
22 one batch of 25; and I would think from what I saw there was two batches." Polzien  
23 Dep., at 147:5-6; see also Polzien Dep., 1049:6-22. Then, Mr. Polzien testified that  
24 approximately 100 defective Sidewinders were subject to the salvage process. Polzien  
25 Dep., at 199:6-201:11. Mr. Polzien's "guess" regarding the number of Sidewinders  
26 involved in the salvage process is clearly contradicted by other statements he made with  
27 respect to this issue. Polzien Dep., 1158:18-1160:7 ("I was guessing about a  
28 hundred. . ."), see also *Id.* 1049:1-24; 1161:6-17. Polzien Dep., 1049:1-24; 1158:18-

<sup>3</sup> Of course, we have learned that Mr. Polzien's testimony about his "concerns" is as reliable as Ms. Sturdivant's personal, first hand accounts of the Goodrich operations in Rialto. Compare Polzien Dep., 156:1-158:15, 388:11-389:9 with Sturdivant Dep., 985:10-986:21.

1 11607; 1161:6-17. Moreover, the testimony of other former Goodrich employees  
2 confirms that only approximately 20-30 Sidewinders were involved in this salvage  
3 project: "I estimate that there were twenty to thirty Sidewinder rocket motors with cracked  
4 propellant." Wever Dec. ¶ 47; Garee Dep., 74:20-25 (one batch of Sidewinders was  
5 involved). Once again, the Advocacy Team blindly relies upon Mr. Polzien and  
6 disregards the credible testimony of former Goodrich employees who actually  
7 participated in or supervised the operation.

#### 8 **IV. PYROTRONICS CORPORATION**

##### 9 **A. Overview of Pyrotronics' Operations**

10 Pyrotronics Corporation ("Pyrotronics")<sup>4</sup> and/or its predecessors operated a major  
11 fireworks manufacturing, storage, disposal, and distribution facility at the 160-acre parcel  
12 for at least 20 years from 1968 until 1988. During that time, Pyrotronics spilled and  
13 released huge quantities of perchlorate and perchlorate laced water directly onto the  
14 ground in multiple locations, including disposal pits, burn pits, a "swimming pool" (i.e.,  
15 the "McLaughlin Pit") that overflowed and leaked, and many other releases.

16 In or around 1968, Clipper Fireworks Company,<sup>5</sup> which had already been  
17 operating in Rialto, apparently at 5200 N. Locust Avenue, became Pyrotronics  
18 Corporation through a name change. Hescox Dep., 28:16-24; 65:18-22. Pyrotronics  
19 operated the Red Devil Fireworks ("Red Devil") and Apollo Manufacturing Company  
20 ("Apollo") divisions, with Apollo manufacturing fireworks<sup>6</sup> that were distributed by Red  
21 Devil (the references to "Pyrotronics" herein will include Apollo and Red Devil). Hescox  
22 Dep., 57:16-58:13; Apel Dep., 81:21-24; Moriarty Dep., 306:12-25; 307:15-25; 309:10-  
23 15; Ex. 10002; Ex. 10004.

24 <sup>4</sup> Pyrotronics is a completely separate and distinct company from the respondent in  
25 these proceedings called Pyro Spectaculars.

26 <sup>5</sup> Patrick Moriarty and others bought Clipper Fireworks Company in 1958. Moriarty Dep.,  
23:13-25; Ex. 11175 (Clipper Articles of Incorporation).

27 <sup>6</sup> United Fireworks Manufacturing Company, Inc. also manufactured fireworks in Rialto  
28 as part of the Pyrotronics family of companies. Moriarty Dep., 294:20-295:22; 297:11-  
25; 298:13-23.

1 A predecessor to Pyrotechnics, Atlas Fireworks Company, Inc. ("Atlas")  
2 manufactured aerial displays and other fireworks<sup>7</sup> in the early 1960s at a location off  
3 Stonehurst Avenue in Rialto, just south of the 160-acre parcel. Moriarty Dep., 27:23-  
4 28:14; Pierzina Dep., 27:9-13. Atlas' manufacturing took place in between the "A" and  
5 "B" rows of old military bunkers located on the property.<sup>8</sup> Hescoc Dep., 63:12-20; 63:24-  
6 25; 64:22-25; 65:1-15; 292:19-293:25; 533:12-534:21. Atlas was eventually purchased  
7 by Pyrotechnics, likely in 1965 or 1966, and its manufacturing operations were moved up  
8 to the 160-acre parcel. Hescoc Dep., 167:10-21; 292:7-25; 339:11-25; Bybee Dep.,  
9 36:12-17; 37:8-19; 72:13-73:6. In 1968, after it had been acquired by Pyrotechnics, Atlas'  
10 name was changed to California Fireworks Display Company. Hescoc Dep., 459:15-  
11 460:1; Bybee Dep., 81:8-18; Moriarty Dep., 44:21-45:7. California Fireworks Display  
12 Company operated as a division of Pyrotechnics until 1979, and is discussed below.

13 By 1968, Pyrotechnics' employed approximately 80-100 individuals at its Rialto  
14 facility. Hescoc Dep., 68:6-8; 70:3-8; 332:7-10. The number of employees remained  
15 constant until at least 1981, when the pace of production slowed; yet by 1986 roughly  
16 80-100 employees were still needed during peak season but not year round. Hescoc  
17 Dep., 70:10-21; see also Hescoc Dep., 99:7-25; Ex. 10460 (80 employees operating  
18 three to four months a year by 1984).

19 Pyrotechnics acquired the 160-acre parcel from Century Investment Company (a  
20 Moriarty-controlled entity) on May 1, 1968<sup>9</sup>, (Hescoc Dep., 47:3-8; Ex. 10759), and  
21 owned the property during the course of its Rialto operations, which lasted until  
22 September 1988, when, following Pyrotechnics' bankruptcy filing in 1986, its fireworks

23 <sup>7</sup> Atlas also manufactured "seal control" devices, which included potassium perchlorate.  
24 Bybee Dep., 38:10-39:19.

25 <sup>8</sup> Atlas' operations entailed the purchase and storage of raw materials, including  
26 potassium perchlorate, and its facility included mixing and pressing rooms where  
27 potassium perchlorate was handled. Bybee Dep., 46:18-20; 50:4-24; 51:8-19; 55:22-  
28 56:2; 59:11-60:-6; Moriarty Dep., 44:3-12. Atlas also tested consumer and display  
fireworks at its original facility. Bybee Dep., 63:3-22.

<sup>9</sup> Century Investment Company had acquired the property from B.F. Goodrich on May  
25, 1966. Hescoc Dep., 39:15-24; Ex. 10758.

1 division was sold to RDF Holding Company.<sup>10</sup> See *infra* Section VI. In May 1987, two  
2 parcels on the southern portion of the 160-acre parcel were sold by Pyrotechnics to Ken  
3 Thompson for use as a concrete pipe manufacturing business. Ex. 11116. The northern  
4 portion of the 160-acre parcel was sold to RDF Holding Company/Wong Chung Ming on  
5 December 7, 1988. Ex. 10163. Wong Chung Ming continues to own the northern  
6 portion of the former 160-acre parcel today.

## 7 **B. Pyrotechnics' Fireworks Manufacturing**

8 Pyrotechnics initially manufactured both consumer and display fireworks<sup>11</sup> on the  
9 160-acre parcel. See, e.g., Hescoc Dep., 36:20-37:2; 542:3-544:13; Exs. 10010,  
10 10028-29, 10034, 10048. It is unclear if Pyrotechnics continued to manufacture display  
11 fireworks after the sale of its display fireworks division, California Fireworks Display  
12 Company, in 1979. Regardless, Pyrotechnics manufactured fireworks for almost twenty  
13 years on the 160-acre parcel, until the mid-1980s when it ceased manufacturing and  
14 became an importer and distributor of foreign-manufactured consumer fireworks.  
15 Hescoc Dep., 548:4-549:11 (Pyrotechnics decided to begin to limit production in 1981 but  
16 continued manufacturing certain consumer fireworks even after it declared bankruptcy in  
17 1986); Exs. 10069, 10377.

### 18 **1. Pyrotechnics Purchased, Stored and Handled Substantial** 19 **Quantities of Raw Perchlorate**

20 Pyrotechnics routinely purchased, stored and handled raw chemicals, including  
21 perchlorate,<sup>12</sup> at the Rialto facility. See, e.g., Apel Dep., 64:19-21; 126:17-20; Hescoc  
22

---

23 <sup>10</sup> Through a series of transactions the fireworks division of Pyrotechnics, including its  
24 goodwill and the trade name Red Devil, were ultimately acquired by American  
25 Promotional Events, Inc.-West ("APE"). APE continues to operate a fireworks  
importation, storage, testing and distribution facility on the Property today, and is  
discussed below.

26 <sup>11</sup> Potassium perchlorate-containing "seal control" devices were also made on the  
property by or for Atlas Fireworks. Hescoc Dep., 149:2-150:10; 151:3-19; 269:14-24,  
529:25-530:23.

27 <sup>12</sup> Pyrotechnics also used solvents in the regular course of business to clean parts in the  
28 machine shop on site. Apel Dep., 275:4-276:10; Shilling Dep., 59:13-60:8.

1 Dep., 156:25-157:5, 241:20-24; Cartagena Dep., 560:25-561:25, 563:2-564:1; Ex. 11133  
2 (Autote's handwritten notes to himself in the mid-1970s reminding him to "pick up  
3 perchlorate at Apollo"); Bybee Dep., 103:5-20 (Pyrotronics generally received potassium  
4 perchlorate in 500 pound barrels, but sometimes it was delivered in 150-200 pound  
5 barrels); Bybee Dep., 111:13-16; 296:4-22; Moriarty Dep., 102:3-23; 116:17-117:8  
6 (potassium perchlorate received in 300 pound cardboard drums); Exs. 10434, 10102,  
7 20390.

8 Perchlorate was used as a key ingredient of the fireworks manufactured by  
9 Pyrotronics on the 160-acre parcel from the beginning, as reflected in an October 23,  
10 1968 letter from Richard Doerr of Pyrotronics to Lorne Eastwood of the City of Rialto Fire  
11 Department, which notes that potassium perchlorate was stored in a number of buildings  
12 at the facility, and also identifies certain buildings containing presses used to  
13 manufacture fireworks and other buildings used for machining and maintenance. Ex.  
14 10014.<sup>13</sup> A letter written by Mr. Doerr about ten years later confirms that potassium  
15 perchlorate (and other chemicals) were still being stored on-site, and describes other  
16 buildings used for the storage and/or manufacture of fireworks by Pyrotronics. Ex.  
17 10053. The record is replete with further evidence of Pyrotronics' use and storage of  
18 perchlorate throughout its operations. See, e.g., Moriarty Dep., 146:5-14; Ex. 10096;  
19 Apel Dep., 82:1-7; Hescocx Dep., 262:24-264:12, 308:10-22; Mergil Dep., 152:21-  
20 153:10; Ex. 10102 (reviewing August 1986 inventory for Apollo indicating 300 pounds of  
21 perchlorate on hand on that date in Building 20 alone).

22 Furthermore, both documents and witness testimony confirm that the volume of  
23 perchlorate used by Pyrotronics was substantial. Indeed, a large percentage of both the  
24 consumer and display fireworks made by Pyrotronics used either potassium perchlorate  
25 or ammonium perchlorate as the primary oxidizer ingredient, with potassium perchlorate  
26 more commonly used than ammonium perchlorate. See Ex. 10064; Apel Dep., 88:7-7;

27 \_\_\_\_\_  
28 <sup>13</sup> A building permit was issued on September 30, 1969 for the construction of a  
fireworks storage facility at 3196 North Locust Avenue. Ex. 110020.

1 257:20-258:2; Apel Dep., 257:12-25 (potassium perchlorate used in "green comp" and is  
2 the oxidizer); Hescoc Dep., 241:20-242:13; 544:24-545:13; Moriarty Dep., 105:18-21  
3 ("Base items and California Candles" contained potassium perchlorate); Moriarty Dep.,  
4 135:21-25 ("gerbs" used potassium perchlorate); Exs. 10062-63 ("Red Fire" contains  
5 perchlorate); Cartagena Dep., 158:5-15; Moriarty Dep., 142:22-143:21 (testifying to his  
6 "personal knowledge that [Pyrotronics] used ammonium perchlorate."); Moriarty Dep.,  
7 156:25-157:10 (ammonium perchlorate usage would not be unusual for Atlas or  
8 Pyrotronics). Standard fireworks' compositions included oxidizers, such as perchlorate,  
9 and oxidizers often comprised approximately fifty percent of the fireworks composition by  
10 weight. See, e.g., Ex. 10100 (Describing the content of the "Silver Sunrise" firework and  
11 indicating that it contains 58.53% potassium perchlorate); Ex. 11134.

12 According to receipts and deposition testimony, Apollo Manufacturing Company  
13 received **21,000 pounds** of potassium perchlorate on September 21, 1979 in one  
14 shipment. Ex. 10434 (Apollo Manufacturing Shipping Report indicating receipt from  
15 Kerr-McGee of some "70 drums at 300 #" net weight of potassium perchlorate); Ex.  
16 11237 (October 11, 1978 Order received by Kerr-McGee Corporation to ship 21,000  
17 pounds of potassium perchlorate to consignee, Service Chemical, Inc.); Mergil Dep.,  
18 29:17-30:18. Patrick Moriarty, the owner of Pyrotronics, testified that he preferred to buy  
19 one month's worth of raw chemicals at a time and that it would not have been unusual to  
20 receive a 21,000 pound shipment of perchlorate). Moriarty Dep., 115:17-116:16.

21 Another document reflects the purchase of 8,000 pounds of potassium  
22 perchlorate from "JCI" on August 27, 1980. Ex. 20390. Even as late as 1985, when  
23 Pyrotronics' manufacturing operations had scaled down, the company reported to the  
24 City of Rialto Fire Department that it was handling some **25,000 pounds** of potassium  
25 perchlorate *per month*. Apel Dep., 96:4-24; Ex. 10458; Hescoc Dep., 145:19-25, 146:1-  
26 19 (Handling of 25,000 pounds of perchlorate on site not inconsistent with his knowledge  
27 of the facility); Apel Dep., 95:8-21. Given the production schedules of Pyrotronics, it is  
28 likely that it used significantly more than 21,000 pounds of perchlorate (even per month)



1 in years prior to 1979. Thus, in the roughly twenty-year span of Pyrotronics' Rialto  
2 manufacturing operations, it is likely that Pyrotronics used **at least 420,000 pounds** (or  
3 some 200 tons) of potassium perchlorate and some lesser amount of ammonium  
4 perchlorate to manufacture fireworks in Rialto. If the usage rate corresponded to Mr.  
5 Apel's 25,000 pounds per month estimate given in 1985, then the total would be  
6 dramatically higher at some **6 million pounds** (or some 3,000 tons) of perchlorate.

7 And, notably, it appears that Pyrotronics may have significantly under-reported  
8 the amount of perchlorate and other hazardous materials handled and stored at its Rialto  
9 facility over the years. In 1987, Ms. Cartagena, who was then a manager at Pyrotronics,  
10 was ordered by the general manager, Mr. Apel, not to identify potassium perchlorate and  
11 other chemicals on a Hazardous Materials Business Plan she was preparing. When Ms.  
12 Cartagena refused to sign the Business Plan because it had underreported the amounts  
13 of those chemicals, Mr. Apel simply signed the form himself with full knowledge of the  
14 omission. Cartagena Dep., 308:21-309:16, 310:1-7, 311:18-314:2. Trying to explain  
15 why Mr. Apel ordered this omission, Ms. Cartagena testified that: "[a] lot of people were  
16 secretive about the business"; "[a]ll fireworks compan[ies] are secretive, I have found . . .  
17 there are so many government regulations, that if they 100 percent comply, they would  
18 be out of business." Cartagena Dep., 313:18-314:2; 314:16-25.

## 19 2. Pyrotronics' Use and Clean-up of the Press Rooms

20 As part of the fireworks manufacturing process, Pyrotronics utilized large  
21 hydraulic presses with rods designed to insert chemicals including perchlorate and other  
22 material into the fireworks tubes. Hescoc Dep., 116:11-117:9; Exs. 10015, 10014,  
23 10017; 10084 (1984 map showing the location of powder mixing area and presses),  
24 10802, 20175, 20176. At various times these presses were located in Buildings 2, 3, 4,  
25 19, 44, 49 and 50 (the presses were numbered to correspond to the building they were  
26 housed in). Mr. Hescoc testified that there were two presses on the facility when he  
27 began working in Rialto in 1968, and five presses by 1981. Hescoc Dep., 185:12-25;  
28 392:19-24 and Ex. 10809; Hescoc Dep., 310:23-311:24, 312:20-24; see also Cartagena

1 Dep., 433:1-15; 433:22-25; 559:2-25; Shilling Dep., 335:12-336:25 (Ms. Shilling, who  
2 worked for Pyrotechnics from 1979 through 1989, testified that early in her tenure presses  
3 were running and that she hired people to press fireworks with machinery).

4 Mixed powders, including perchlorate, were transported from raw chemical  
5 storage areas to the press rooms in plastic containers; after pressing was completed  
6 boxes of partially finished fireworks were moved to another portion of the facility for  
7 labeling, fuse attachment, and, if necessary, a base. Hescoc Dep., 282:25-283:11;  
8 285:16-25. It is clear that potassium perchlorate (among other chemicals) was used in  
9 the presses when making fireworks. Exs. 10058-61, 10066; 11235; Moriarty Dep.,  
10 106:5-107:9 (press in Building 19 used for potassium perchlorate-containing "base  
11 items" and "California Candles"; press in Building 44 used for potassium perchlorate-  
12 containing "waterfalls" and "cones"); Moriarty Dep., 136:12-137:11 (Press 49 used to  
13 make potassium perchlorate containing "Silver Screamer").

14 During Mr. Apel's tenure, six to eight employees were engaged in pressing  
15 operations during peak times. Apel Dep., 373:24-374:6. Press room employees wore  
16 masks to prevent them from breathing accumulated pyrotechnic powder, goggles to  
17 keep dust out of their eyes, and other protective gear, and also kept the doors to the  
18 press room open to allow for quick escape in the event of a fire. Apel Dep., 120:2-20;  
19 Hescoc Dep., 120:3-15; Shilling Dep., 66:14-22, 70:9-12; Moriarty Dep., 128:3-13; Ex.  
20 10802. The press rooms were "rather dusty", (Hescoc Dep., 300:7-11), and at the end of  
21 the work day the coveralls or smocks worn by the employees would be covered with  
22 powder. Shilling Dep., 190:5-193:10.<sup>14</sup>

23 Written "Operating Instructions" for the "Press Room" specified that press rooms  
24 were to be cleaned every two hours "using dry brush method, and thoroughly washed  
25 down with water at the end of each work shift." Ex. 10633; Mergil Dep., 83:10-25

26  
27 <sup>14</sup> According to Mr. Moriarty, Pyrotechnics maintained washers and dryers on site to clean  
28 the employees' work clothing at the end of the day. The waste water from the washers  
and dryers was discharged to a sewer or septic system. Moriarty Dep., 126:3-127:6.

1 (testifying that press rooms were swept up every couple of hours pursuant to written  
2 instructions). Spilled pyrotechnic composition, which included perchlorate, and brush  
3 and broom sweepings collected from the press rooms were placed into plastic  
4 containers, and, after a sufficient amount had accumulated (50–100 pounds), taken to  
5 their burn pit during the early years of operation. Hescox Dep., 113:17-114:3; Moriarty  
6 Dep., 124:6-21. After air quality regulators limited Pyrotronics' ability to burn this  
7 material, it was taken to the McLaughlin Pit, discussed below, for disposal. Hescox  
8 Dep., 114:4-115:15; Mergil Dep., 82:1-14. However, even after the McLaughlin Pit was  
9 in use, discussed below, waste fireworks were still burned in various locations on the  
10 property. Ex. 10033, 10044, 10046, 10051, 10065, 10077, 10080.

11 The press rooms were also hosed down with water, generally once a day at the  
12 end of the work shift, in order to wash up the waste pyrotechnic material that remained  
13 after pressing operations. Hescox Dep., 115:17–116:5; Apel Dep., 117:8-10. Mr.  
14 Hescox testified that the water would travel “onto the cement floor and out the door and  
15 into the sump at the end of each – at each door, there was a channel where water would  
16 run into the sump. And all the chemicals would settle in the bottom of it [the sump], and  
17 the water would flow out into the ground.” Hescox Dep., 117:11-16. Mr. Mergil similarly  
18 testified that the press room was hosed down with water at the end of each shift, and the  
19 water traveled into an unlined concrete sump (with no bottom) where the powder  
20 accumulated at the bottom. Mergil Dep., 84:12-85:7, 85:19-21.<sup>15</sup> Others have confirmed  
21 the presence of “sumps” or “troughs” located outside each of the press rooms, (Apel  
22 Dep., 118:7-9; Moriarty Dep., 125:3-13; Mergil Dep., 97:11-25), and this testimony is  
23 consistent with the written instructions that required employees to “wash down the  
24 interior of the press building insuring that all residue flows into the sump basin.” Ex.  
25 10633. Mr. Hescox and Mr. Mergil both testified that this procedure was followed.  
26 Hescox Dep., 120:20–121:6; Mergil Dep., 89:14-25, 90:20-24.

27 <sup>15</sup> Mr. Mergil never cleaned the powder out of the bottom of the sumps, and didn't know  
28 if anyone else did. Mergil Dep., 85:1-14.

1 The above-ground sumps were made of concrete and located below the gradient  
2 of the building, so that the water would flow into them as it came out of the building.  
3 Mergil Dep., 99:22-100:16. It appears that at least some of the sumps had a screen on  
4 top, so that material collected in the top of the screen could be collected and sent to the  
5 Fireworks Burn Pit for disposal. Moriarty Dep., 125:14-17. Water was not collected from  
6 the sumps; it was left to evaporate, (Apel Dep., 418:11-13), and the sumps occasionally  
7 overflowed onto the bare ground and the water percolated into the soil. Moriarty Dep.,  
8 125:18-126:1.

9 These sumps were used for the duration of Pyrotronics' operations, and many still  
10 exist outside of the buildings that remain on the 160-acre parcel. At Exhibits 20205,  
11 20206, and 20207, there are photographs taken of the sumps as they exist today.

### 12 3. Pyrotronics' Use and Clean-up of the Mixing Rooms

13 Initially, Pyrotronics' mixing operations were conducted in a below-ground,  
14 automated mixer that was controlled remotely from Building 70. Hescoc Dep., 329:18-  
15 330:20. The automated mixer was located in Fire Zone 8, east of the main parking lot  
16 and southeast of Building 70, and chemicals stored in Buildings 71-74 were transferred  
17 to the mixer by overhead conveyor. Ex. 10809; Hescoc Dep., 330:8-13. Present-day  
18 photographs of some of the controls used to operate the automated mixers are at Exs.  
19 20142, 20152, 20158, and 20153. But the underground mixer was destroyed in 1968 in  
20 a massive, deadly explosion (discussed below) and never rebuilt, and mixing did not  
21 resume at this location. Hescoc Dep., 330:2-20, 380:18-21; Moriarty Dep., 91:6-9.  
22 There is no evidence of any effort to clean up the fireworks composition chemicals,  
23 including perchlorate, that were undoubtedly scattered over a wide area as a result of  
24 this massive explosion.

25 After the 1968 explosion, Pyrotronics began hand mixing in Buildings 95-99,  
26 located south of the main office in Fire Zone 9.<sup>16</sup> Hescoc Dep., 264:14-265:22; Moriarty

27 <sup>16</sup> For safety reasons, no more than fifty pounds of pyrotechnic composition was to be  
28 hand-mixed at a time. Mergil Dep., 93:7-25; see also Moriarty Dep., 130:25-131:6.

1 Dep., 103:16-104:13. Chemicals were weighed, screened and then mixed by hand to  
2 create compositions that would ultimately be pressed or packed into firework items.  
3 Hescoc Dep., 123:11-13, 265:23-266:1; 301:22-303:10; Apel Dep., 91:3-14. During Mr.  
4 Apel's tenure, five or six people were typically engaged in mixing operations. Apel Dep.,  
5 373:12-15.

6 The chemical mixing process was described as "dirty", and "very dusty"<sup>17</sup>, with  
7 chemical powder and dust a constant presence in the mixing area. Hescoc Dep., 301:8-  
8 22; 302:25-303:10. Accordingly, mixing room employees wore respirators, overalls,  
9 hoods, gloves, and other protective gear. Apel Dep., 91:3-20; 101:1-25; Hescoc Dep.,  
10 525:9-526:4; Mergil Dep., 310:4-5 ("mixing is a dirty job. You got coveralls, mask and  
11 everything."); Shilling Dep., 71:18-23 (employees in the mix rooms wore masks and  
12 coveralls); Moriarty Dep., 128:3-8; Apel Dep., 91:3-10.<sup>18</sup>

13 Pyrotronics' procedures for cleaning the mixing rooms and disposing of collected  
14 or washed down pyrotechnic composition were much like those discussed above for the  
15 press rooms, as reflected in the similarity of the written instructions covering each.  
16 Hescoc Dep., 123:11-125:19; Exs. 10633, 10632; Apel Dep., 117:17-25; Hescoc Dep.,  
17 487:9-18; Mergil Dep., 94:12-95:2. Initially, like the press rooms, the mixing rooms were  
18 to be regularly swept. Mr. Mergil testified that one of his duties was to clean up "spilled  
19 powder" – or the powder that was "flying around" in the mixing room – after every two  
20 mixes, pursuant to instructions he was given on day one (and as required by the written  
21 instructions). He explained: "I didn't want to get burned in there, so if there's powder  
22 there, I want to get rid of it." Mergil Dep., 96:11-97:1, see also, Mergil Dep., 242:7-243:2.

23  
24 <sup>17</sup> Written reports reflect that employees sustained injuries when powder or fireworks  
25 composition got into their eyes, and eye irritation was a common complaint. Shilling  
26 Dep., 102:10-23, 104:19-106:3, 108:9-16, 110:19-111:4; 251:17-25; Ex. 10098.  
Because of the frequency of such incidents, a first-aid area in the buildings was  
designed with eye wash to clean the powder out of an employee's eye; but if the irritation  
was severe the injured employee was sent to the clinic. Shilling Dep., 255:17-256:11.

27 <sup>18</sup> It appears that these items and the dirty clothing worn by employees in the mixing  
28 room was cleaned at the facility. Apel Dep., 102:1-10; see also Moriarty Dep., 126:3-  
127:6.

1 The sweepings were then deposited into a plastic container labeled to indicate  
2 that "excess powder" was inside, and set on the ground in front of the building. Such  
3 containers were eventually collected and taken to the Fireworks Burn Pit for disposal.  
4 Mergil Dep., 354:15-357:11; Moriarty Dep., 131:8-22; 132:23-25. Later, however, after  
5 Pyrotronics was no longer permitted to burn its waste material, the sweepings were  
6 dumped into the McLaughlin Pit.<sup>19</sup> Hescocx Dep., 124:17-125:5; 131:20-132:9; 488:2-6;  
7 Apel Dep., 364:5-10.

8 Express written instructions also directed employees to hose down the mixing  
9 rooms to "insur[e] that all residue flows into sump basin." Ex. 10632, Hescocx Dep.,  
10 120:20-121:6, 128:18-20. And witnesses have confirmed in deposition that the floors  
11 were in fact hosed to wash pyrotechnic powders out of the building and prevent the  
12 accumulation of powder. Apel Dep., 109:9-110:3; Moriarty Dep., 133:1-15. The  
13 cleaning procedure in the mixing rooms was to "sweep it up, water it down and  
14 squeegee it out"; and this was "the procedure everybody followed." Mergil Dep., 97:10,  
15 98:23-24; Moriarty Dep., 134:1-6. According to Mr. Apel, "troughs" were located directly  
16 outside of the mixing rooms on the property to collect this runoff. Apel Dep., 110:9-16;  
17 see also Mergil Dep., 102:17-24 (Mr. Mergil recalls hosing down the mixing room so that  
18 the water ran off into a sump outside the mixing room); Moriarty Dep., 134:7-9.

19 The written procedures and former employee testimony discussed above refer to  
20 the mixing rooms that were located in Fire Zone 9 (Buildings 95-99), but it is likely that  
21 similar procedures were followed by Pyrotronics when its mixing took place in Fire Zone  
22 8, as photographs taken at the property in August 2006 show that sumps were also  
23 located directly outside of buildings 71-74. Exs. 20116-20120, 20145, 20146.

24  
25  
26  
27 <sup>19</sup> There is evidence that at one point sweepings from the press and mixing rooms were  
28 collected and stored in an old railroad car on the 160-acre parcel for a period of time,  
before ultimately being taken to the burn pit. Apel Dep., 106:13-22; 365:14-25.

1           **C.     Pyrotechnics' Waste Disposal Practices**

2                   **1.     The Fireworks Burn Pit**

3                           **a.     Pyrotechnics Disposed of Pyrotechnic Waste Material in**  
4                                   **the Fireworks Burn Pit**

5           From the beginning, Pyrotechnics disposed of defective or damaged fireworks and  
6     pyrotechnic and production waste in a large, unlined burn pit located on the south-  
7     southwest portion of the 160-acre parcel (hereinafter referred to as the "Fireworks Burn  
8     Pit."). Apel Dep., 140:24–141:3; 141:8-19; 143:23-144:25; 147:1-4; 148:23–149:10;  
9     364:5-10; Hescox Dep., 159:6-17; Moriarty Dep., 160:8-21, 161:4-162:4; 165:24-166:10;  
10    Hescox Dep., 113:17-114:3; 364:15-367:2; 391:2-22<sup>20</sup>; Mergil Dep., 119:19-25;  
11    Cartagena Dep., 319:22-25; Moriarty Dep., 123:2-15; 165:5-22.<sup>21</sup> The Fireworks Burn  
12    Pit was so large that one former employee testified "you could drive into [the pit] with a  
13    truck and just dump the product on the ground and light it". Hescox Dep., 391:13-22. Its  
14    precise dimensions are unclear, but estimates have ranged from ten to twenty feet wide,  
15    twelve to fifteen feet deep and thirty to several hundred feet long. See, e.g., Carlton  
16    Dep., 332:1-5. There is evidence that Trojan Fireworks (discussed below) also used the  
17    Fireworks Burn Pit to dispose of similar waste material. Carlton Dep., 205:17-206:19,  
18    330:22-331:12; Apel Dep., 424:22–427:25; Autote Dep., 278:5-15; 282:9-283:8; 284:8-  
19    286:12; 290:6-293:13 (describing at least two trips up the Fireworks Burn Pit in the late  
20    1980s with trucks stacked full of waste and off-spec fireworks, discussed more fully  
21    below).

22           Pyrotechnics used the Fireworks Burn Pit at least once a week and perhaps as  
23    many as three to four times per week during peak season, which for production  
24    purposes ran from about February to the end of May, although the frequency of burns

25           <sup>20</sup> Because aerial display shells were a "hazardous item to burn", they were burned  
26    separately from other fireworks. First, the shell was cut open and the "loose powder"  
27    dumped to the ground, to prevent the shell from being projected into the air during a  
28    burn. Hescox Dep., 365:11–367:2.

<sup>21</sup> According to Mr. Moriarty, protective clothing that was made of paper, such as masks,  
          were also disposed in the Fireworks Burn Pit. Moriarty Dep., 127:13-20.

1 often depended on weather conditions.<sup>22</sup> Moriarty Dep., 355:19-356:7; Hescox Dep.,  
2 191:10-192:10; 364:21- 365:4. The frequency, extent and duration of Pyrotronics' use  
3 of the Fireworks Burn Pit is partially reflected in burn permits it received from the City of  
4 Rialto Fire Department/Air Quality Management District and records it kept of the amount  
5 of waste that it burned. Ex. 10350 (5/19/1971 APCD variance hearing minutes re burn  
6 of 2,000 pounds of waste fireworks per week); Exs. 10078-79, 10642, 10090, 10137<sup>23</sup>;  
7 Cartagena Dep., 113:10-115:1; 116:1-12; Exs. 10139, 10148, 10152, 10154-56, 10146;  
8 11236.

9 The Fireworks Burn Pit was used by Pyrotronics from at least 1968 (and perhaps  
10 earlier) up until the south western portion of the 160-acre parcel was sold to Ken  
11 Thompson, a concrete pipe manufacturer, in May 1987. Apel Dep., 140:24-141:18;  
12 Shilling Dep., 75:15-19. However, use of the Fireworks Burn Pit slowed down around  
13 1972, when restrictions on open burning were imposed by air quality officials and the  
14 McLaughlin Pit swimming pool-like structure was built, discussed below. See, e.g.,  
15 Hescox Dep., 114:4-16 (defective fireworks would have been taken to burn pit before  
16 AQMD stopped allowing burns; after that would have thrown into the pond "and let them  
17 turn to mush").<sup>24</sup> Such restrictions on open burning ultimately led Pyrotronics to  
18 construct a waste disposal pond known as the McLaughlin Pit, which is discussed below.  
19  
20  
21

22 <sup>22</sup> Regardless of how often burns were conducted, materials were transported to the  
23 burn pit daily and then left in the pit to await the next burn. Moriarty Dep., 356:8-16;  
24 374:1-9. Witnesses have observed materials deposited in the pit being rained on before  
being burned, and Pyrotronics used water hoses to control burn pit fires. Moriarty Dep.,  
164:6-12.

25 <sup>23</sup> Ms. Cartagena testified that the AQMD granted an exception to its prohibition on  
burning to allow this and other burns to take place in 1987. Cartagena Dep., 116:1-12.

26 <sup>24</sup> In one instance, early in 1985, Pyrotronics' burn permit was voided by the RFD and  
27 Pyrotronics "had no way of . . . getting rid of waste material", so the waste was stored for  
28 a time in an old rail car in Fire Zone 9. These materials were eventually burned in the  
Fireworks Burn Pit after a permit was later issued by the AQMD. Apel Dep., 186:12-  
187:17; 188:17-21; 191:18-192:12.





1 not recall an instance where she received permission from the SCAQMD but was  
2 subsequently denied permission by the City of Rialto Fire Department. To Ms. Shilling,  
3 SCAQMD lack of response "meant that things were fine." Shilling Dep., 410:20-411:12.

4 Contemporaneous written records prepared by the City of Rialto Fire Department  
5 indicate that it responded to numerous unplanned fires and explosions at the Fireworks  
6 Burn Pit during the course of Pyrotronics' operations, which often involved pyrotechnic  
7 powder and other fireworks material that had been placed in the burn pit. Exs. 10033,  
8 10044, 10046, 10051, 10065, 10077, 10080, 10025.

9 **2. Pyrotronics Burned Waste Material At An Additional Location**  
10 **in Fire Zone 2**

11 Pyrotronics also burned waste material on a concrete pad that had been the floor  
12 of a press room destroyed in a 1968 explosion. Apel Dep., 365:25-366:13; Hescocox  
13 Dep., 386:9-25. The cement pad was surrounded by a twelve-foot dirt berm on three  
14 sides, with an entrance on the north side, and also had a cage to retain flying debris.  
15 Apel Dep., 367:1-17; Hescocox Dep., 386:7-16. Scrap and defective cones, chemicals,  
16 substandard and damaged fireworks, and other materials were routinely burned at this  
17 location. Hescocox Dep., 386:9-25, Apel Dep., 367:7-11.

18 Pyrotronics primarily used this burn area to dispose of consumer fireworks that  
19 were manufactured by its Apollo division, and burned material at this location from 1968  
20 until at least the early to mid-1980s, when it began to import most of its fireworks.  
21 Hescocox Dep., 387:1-7; 387:20-25; 388:17-22. However, pyrotechnic material continued  
22 to be burned at this location by other fireworks companies after Pyrotronics ceased  
23 operating, as discussed below.

24 **3. The McLaughlin Pit**

25 **a. No Longer Permitted to Burn its Pyrotechnic Waste**  
26 **Material, Pyrotronics Built the McLaughlin Pit as an**  
27 **Alternate Means of Disposal**

28 Because of air quality regulations adopted in the late 1960s and early 1970s that  
restricted open burning of any refuse material in Southern California, the San Bernardino

1 County Air Pollution Control District ("SBAPCD"), a predecessor to the SCAQMD, began  
2 to refuse Pyrotronics' requests for permission to burn the large quantities of pyrotechnic  
3 waste and off-specification fireworks that accumulated at its facility. Hescox Dep.,  
4 114:4-16; 357:4-18 ("the fire department – or APCD [SBAPDC], I guess it is . . . refused  
5 to give us a burn permit."); see *also* Ex. 10120, 10006 (August 7, 1987 Hazardous  
6 Waste Generator Survey prepared by Pyrotronics and noting that back in the 1970s it  
7 was having difficulty disposing of off-specification fireworks because its "Fire Department  
8 Burn Permit was voided by AQMD."); Cartagena Dep., 693:12-21 (testifying that the  
9 restrictions on open burning were AQMD's decision and the City of Rialto Fire  
10 Department indicated they could do nothing about it). As a result, in late 1971  
11 Pyrotronics commissioned the construction of a concrete-lined, rectangular shaped  
12 "swimming pool", or waste disposal pond, which ultimately came to be known as the  
13 "McLaughlin Pit". Mergil Dep., 283:5-13 ("It was like a swimming pool."); Cartagena  
14 Dep., 104:8-13 (the McLaughlin Pit was "a concrete swimming pool that had waste in  
15 it."); Ex. 10417. Unable to continue burning waste material lawfully,<sup>26</sup> the pond was the  
16 only way Mr. Hescox, "could conceive of . . . deactivating the combinations of chemicals  
17 we had in powder dry form. I didn't know what else to do with them." Hescox Dep.,  
18 198:21–199:18; see *also* *Id.* 105:9-17; 357:4-18 ("When we couldn't burn it, that's when  
19 [the McLaughlin Pit] was built.").

20 Completed in January 1972, the McLaughlin Pit measured approximately twenty  
21 feet wide, twenty feet long and four feet deep,<sup>27</sup> with a 12,000 gallon capacity, and was  
22 located in the south-west portion of the property slightly northeast of the Fireworks Burn  
23 Pit in Fire Zone 5. Ex. 10417; Apel Dep., 136:16–137:11; 170:8-16; McLaughlin Dep.,  
24 53:21-54:19; Mergil Dep., 103:18-104:5 (testifying that the pond was the size of a

25  
26 <sup>26</sup> Mr. Moriarty testified that even after the implementation of such regulations  
27 Pyrotronics still continued to burn pyrotechnic waste, but did so "at night so [the  
28 SCAQMD] didn't see the smoke." Moriarty Dep., 177:20-178:8.

<sup>27</sup> Other evidence indicates that the pond may have been 20' x 25' x 5'. See, e.g., Exs.  
10846, 10108.

1 swimming pool); Ex. 10417.

2 Before the McLaughlin Pit was completed, Pyrotronics was forced to seek several  
3 variances from the San Bernardino County APCD to dispose of the substantial amount  
4 of fireworks waste material generated at its facility by continuing to burn that material.  
5 On May 19, 1971, Richard Doerr, the Pyrotronics safety engineer, appeared at a San  
6 Bernardino County Air Pollution Control District variance hearing, on behalf of Apollo, to  
7 request a one-year variance to allow the continued burning of "unusable powder residue  
8 and damaged fireworks" at the Rialto facility. Mr. Doerr stated that Apollo had been  
9 conducting burns bi-weekly and burning approximately 2,000 pounds of waste firework  
10 manufacturing material per week. According to Mr. Doerr, Apollo's waste material could  
11 not be buried because it "*would contaminate the groundwater system possibly if wet  
12 down.*" Ex. 10350 (emphasis added). At a subsequent hearing on September 1, 1971,  
13 Apollo was granted a variance until November 3, 1971, which was later continued to  
14 January 5, 1972, (*id.*), but by then it was clear that Pyrotronics would no longer be able  
15 to regularly burn in wholesale fashion its perchlorate-laden waste material, and shortly  
16 thereafter it began the process of seeking approval to construct and operate the  
17 McLaughlin Pit for liquid waste disposal.

18 **b. The McLaughlin Pit Was Constructed With the Regional**  
19 **Board's Oversight and Approval**

20 Apollo applied to the Santa Ana Regional Water Quality Control Board ("Regional  
21 Board") for a permit to construct and operate a disposal pit for its manufacturing waste  
22 materials on September 24, 1971. Its initial application estimated that Apollo would  
23 discharge 150 gallons per day of liquid industrial wastes to an "Imperious Evaporated  
24 [sic] Pond". Ex. 10428; Berchtold Dep., 126:21-127:1. In response, Richard  
25 Bueermann, the Executive Officer of the Regional Board, sent Apollo Tentative Order  
26 71-39 on October 5, 1971, which set forth proposed Waste Discharge Requirements  
27  
28

1 (“WDRs”) for Apollo’s use of the contemplated waste disposal pond.<sup>28</sup> According to the  
2 transmittal letter, the Tentative Order “simply require[s] that no wastewater be allowed to  
3 penetrate the ground surface where it will percolate to the underlying groundwater table.  
4 Technical reports are required and are intended to monitor the efficiency of the  
5 impervious lining. Provisions for measuring water depth in the pond is important and  
6 should be incorporated in the construction of the pond.” Ex. 10424.<sup>29</sup>

7 On November 24, 1971, the Regional Board issued Order 71-39, (Ex. 10418),  
8 which authorized the construction and operation of the McLaughlin Pit and provided,  
9 *inter alia*, the following requirements:

- 10 • There shall be no discharge of waste to surface waters, surface water  
11 drainage courses or to areas which would allow percolation of waste.
- 12 • Transfer of wastes for ultimate disposal shall be made to an approved  
13 Class I disposal site or other facility approved by the Executive Officer.

14 Order 71-39 also included Monitoring and Reporting Program 71-39, which required  
15 Apollo to provide, under penalty of perjury, the following “technical reports”: (1) quarterly  
16 summaries of each month’s activities submitted on the tenth day of each reporting period  
17 (identified as April 10, July 10, October 10, and January 10), (2) the daily average flow  
18 for each month, (3) the depth of waste in the pond reported on the first day of each  
19 month, and (4) a report of each ultimate disposal of waste material transferred to a Class  
20 I site, for approval by the Executive Officer *prior to* such transfer.<sup>30</sup> As detailed below,

21 <sup>28</sup> Mr. Bueermann also sent Tentative Order 71-39 to various state and local agencies on  
22 October 5, 1971. The cover letter noted that “[e]xisting disposal operations, which  
23 consist of burning waste powder, are to be replaced with a liquid method to satisfy  
24 burning prohibitions administered by the San Bernardino Air Pollution Control District.  
The liquid method will consist of an evaporation pond in which the waste powder will be  
deposited . . . the inert ingredients will settle to the bottom of the pond.” Ex. 10423.

25 <sup>29</sup> Along with certain other public agencies, the California Department of Public Health  
26 approved Tentative Order 71-39, but advised the Regional Board that “*your staff should  
thoroughly review plans of the proposed pond to determine that it is truly impervious and  
will effectively prevent percolation of these liquid wastes.*” Ex. 10421 (emphasis added).

27 <sup>30</sup> Mr. Berchtold, the current Assistant Executive Officer of the Regional Board and a  
28 member of the Advocacy Team, testified to being unaware if the Regional Board has  
ever examined whether the Executive Officer had approved even a single transfer of  
materials from the McLaughlin Pit to a Class I site, as required under Regional Board

1 Apollo routinely failed to comply with these reporting requirements, and there is no  
2 written confirmation that it ever transported any waste from the McLaughlin Pit to a Class  
3 I site until 1983.

4 On December 9, 1971, Apollo sent the Regional Board a proposal for the  
5 construction of a 20' x 20' x 4' surface impoundment, which had been prepared by  
6 Dwight H. Williams Swimming Pools in Rialto. Ex. 10417. Although Order 71-39  
7 required the pond to have an impervious lining, the pond installed was simply a  
8 plastered gunite swimming pool without any liner. *Id.*; Exs. 10410, 10418. English Dec.,  
9 ¶¶ 6, 7, 8, 9. Thus, the pond was not made of concrete. According to minutes of a  
10 variance hearing held before the SBAPCD on January 5, 1972, construction of the  
11 McLaughlin Pit was completed on that day.<sup>31</sup>

12 **c. Pyrotronics Disposed of Perchlorate-Laden Waste**  
13 **Powder and Off-Specification Fireworks in the**  
14 **McLaughlin Pit for Nearly Sixteen Years**

15 Pyrotronics' use of the McLaughlin Pit began in 1972 and continued until its  
16 closure in December 1987. The McLaughlin Pit was created for "the waste disposal of  
17 the sweepings and powder that's contaminated, to dissolve it and deactivate it." Hescox  
18 Dep., 359:20-24; Mergil Dep., 103:20-21 ("it was just a pond, and they had water in it,  
19 and they had powder in it."). As mentioned above, material that previously had been  
20 burned in the Fireworks Burn Pit – pyrotechnic composition and other material swept off  
21 the floor of the mixing and press rooms, as well as off-specification fireworks – was now  
22 dumped in the liquid containing McLaughlin Pit because of air quality restrictions on  
23 open burning. Hescox Dep., 159:9–160:2 (defective fireworks were thrown in the pond

24 Order 71-39; though he acknowledged that transporting waste from the pond without  
25 such approval would have been a violation of Order 71-39. Berchtold Dep., 134:22-  
26 135:10. No written evidence of any waste transfers approved by the Executive Officer  
27 has been found thus far in the Regional Board's files.

28 <sup>31</sup> At this hearing, Mr. Doerr withdrew a written request for an extension of a previously  
granted variance from burning restrictions– which had been sought due to delays in  
completing the McLaughlin Pit – because the McLaughlin Pit was scheduled to be  
completed that day. Mr. Doerr did seek permission to burn accumulated waste that had  
not been burned under the variance due to inclement weather. His request was granted.  
Ex. 10350.

1 so they would “turn to mush”); Mergil Dep., 82:5-10 (“I know [Pyrotronics] had a pond,  
2 and . . . they would throw the loose powder in there.”); Mergil Dep., 104:22– 105:1 (“I  
3 would see the guy that carries the powder. I would see him go there and throw the –  
4 excess powder . . . [i]nto the pond.”); Mergil Dep., 368:1-10; Adelson Dep., 60:21-25.

5 Witnesses have testified to seeing mixed pyrotechnic powders, fireworks,  
6 production waste, skyrockets, hand grenades, aerial shells, cardboard tubes, military  
7 flares, and other military ordnance, including grenades, in the surface impoundment.  
8 Apel Dep., 137:13-21; 149:12–150:11; 272:3-13, 272:20-273:12; 381:16–382:13;  
9 382:24-383:2; McLaughlin Dep., 99:6-102:22; Ex. 10092. A photograph of the interior  
10 contents of the pond taken in 1987 confirms that firework shells and casings were in the  
11 pond and Mr. McLaughlin identified specific military grenades that he saw in the pond  
12 and confirmed what he saw in a photograph at his deposition as the precise type of  
13 grenades in the pond. Ex. 11226.

14 Because waste material in the McLaughlin Pit would tend to ignite automatically if  
15 left dry, Pyrotronics intentionally and continuously flooded the McLaughlin Pit so that the  
16 water level was kept “very close” to the top of the pond. Apel Dep., 152:20-153:12;  
17 153:1-12 (water level in the pond was kept to within two to three feet of the top of the  
18 pond); Mergil Dep., 106:21-22 (“it was a pond with water in it.”); Mergil Dep., 305:18-20  
19 (the pond “had water and powder”)<sup>32</sup>; Berchtold Dep., 101:18-102:2 (water was kept on  
20 top to avoid it catching fire); Ex. 10410 (letter from Berchtold confirming the pond  
21 overflowed). Regional Board inspection records similarly reveal that the water level  
22 frequently was observed to be dangerously close to the top of the McLaughlin Pit,  
23 presenting an obvious overflow hazard and ultimately leading to the adoption of a twelve  
24 inch freeboard requirement for the pond in Order 78-96, which amended Order 71-39 (as  
25 discussed below).

26  
27 <sup>32</sup> Mr. Mergil remembers seeing powder at the bottom of the pond, underneath the water.  
28 Mergil Dep., 351:25-352:6. Ms. Cartagena testified that the contents in the McLaughlin  
Pit resembled “black sludge”, and that “a lot of rainwater had gotten into” the Pit.  
Cartagena Dep., 105:23-106:6; 199:6-19.

1 The fear of ignition was not unfounded, as certain chemicals placed in the  
2 McLaughlin Pit, including perchlorate, are known to ignite after being wet and then  
3 drying. Hescoc Dep., 211:19-212:16; Ex. 10109 ("When dry, the material tends to auto-  
4 ignite"). And the McLaughlin Pit did spontaneously ignite on at least three occasions.  
5 Apel Dep., 152:21-153:12 and Ex. 963; McLaughlin Dep., 282:16-283:1; Ex. 10381. In  
6 June 1985, the City of Rialto Fire Department responded to one such incident; and  
7 reported using 1,000 gallons of water to extinguish a fire in the McLaughlin Pit that  
8 "contained mostly fireworks related debris" and "spread to near-by grass, burning an  
9 area 100' x 100'". Ex. 10442; Apel Dep., 391:22-393:25; Hescoc Dep., 211:14-25.

10 The McLaughlin Pit was uncovered for a substantial period of its operations and  
11 perhaps up until 1986, shortly before its closure. Mr. Mergil, who was working for  
12 Pyrotronics when the McLaughlin Pit was built and witnessed its ultimate closure in  
13 1987, testified that the pond was never covered with a roof. Mergil Dep., 240:8-12. Ms.  
14 Cartagena started working on the 160-acre parcel in 1980 and was also present when  
15 the McLaughlin Pit was closed; she too does not recall the pond ever being covered.  
16 Cartagena Dep., 107:12-14; see also Adelson Dep., 118:5-8. Ground level photographic  
17 evidence produced by the Regional Board demonstrates that the McLaughlin Pit was  
18 uncovered as of September, 1977. Ex. 10410. Aerial photographic reviews confirm that  
19 the McLaughlin Pit was not covered from its construction until around 1986 or 1987.  
20 Bennett Dec., ¶ 29. A Regional Board inspection report dated July 10, 1986 observed  
21 that the McLaughlin Pit "*has been* loosely covered with metal sheeting to prevent direct  
22 sunlight from striking dried material, which could auto-ignite", (Ex. 10377) (emphasis  
23 added), suggesting that this cover was only recently added and was not intended to  
24 prevent overflow from rainwater. Further, it is clear that the McLaughlin Pit did in fact  
25 overflow - multiple witnesses have testified that it overflowed during rain storms, (Hescoc  
26 Dep., 199:25-200:9; Apel Dep., 151:11-13;), including Mr. Berchtold of the Regional  
27 Board, who recorded that the McLaughlin Pit had overflowed in a March 3, 1983  
28 inspection report (suggesting that the pond was uncovered at that time). Ex. 10389-90;



1 Berchtold Dep., 176:15-179:18, 180:4-20; see *also* Saremi Dep., 561:22-562:3.

2 **d. Pyrotronics'/Apollo's Operation of The McLaughlin Pit**  
3 **Continued Without Pause Even as Regional Board**  
4 **Inspectors Routinely Identified Violations of WDRs and**  
5 **Regulations**

6 The McLaughlin Pit was regularly inspected by the Regional Board staff during its  
7 16 years of operation from its opening in January 1972 through its closure in December  
8 1987. The few inspection reports that have been produced by the Regional Board  
9 reveal that Pyrotronics' operation of the McLaughlin Pit involved repeated and persistent  
10 violations of its WDRs and various regulations, but that the Regional Board took no  
11 action to resolve the violations and prevent waste material in the McLaughlin Pit  
12 discharging, from leaching and percolating into the subsurface below.

13 T.J. Homan of the Regional Board inspected the McLaughlin Pit on January 10,  
14 1972, less than a week after the Pit was completed. A letter from Mr. Homan to Mr.  
15 Doerr dated January 12, 1972 indicated that the pond appeared to be structurally sound  
16 and watertight, but that a measuring device to determine water depth needed to be  
17 added, and the decant pipes needed to be removed, because, if used, they would  
18 constitute a violation of Order 71-39.<sup>33</sup> Ex. 10416. The letter also stated that "an  
19 accurate record should be kept showing the quantity of waste discharged to the pond  
20 and the amount of make-up water added when necessary."

21 On December 27, 1973 the Regional Board sent correspondence to Apollo  
22 indicating that Apollo's quarterly monitoring report, which was due in July 1973 pursuant  
23 to Order 71-39, had still not been received. Ex. 10415. Regional Board correspondence  
24 dated October 27, 1976 indicates that Apollo had not submitted technical reports due on  
25 July 10 and October 10, 1976. Ex. 10413. As of this writing, the Regional Board has not  
26 produced a single quarterly technical report submitted by Apollo pursuant to Order 71-

27  
28 <sup>33</sup> There is no record to substantiate whether these instructions were followed.

1 39.<sup>34</sup>

2 On September 29, 1977, John Silva of the Regional Board inspected the  
3 McLaughlin Pit. Ex. 10410. His report describes the Pit's dimensions to be 20' x 20' x  
4 4', and calculates its capacity to be 12,000 gallons. According to Mr. Silva's report, Mr.  
5 Doerr told him that "explosive powder is added to the pond"; and that "water is added to  
6 keep powder submerged such that it will not burn or explode." At the time of inspection,  
7 the McLaughlin Pit had a freeboard<sup>35</sup> of 25 inches; but it had only 1 inch and seven  
8 inches of freeboard, respectively, in April and August 1977, according to separate  
9 reports prepared at those times and referenced by Mr. Silva in his September 1977  
10 inspection report. The report also recommended that Order 71-39 be revised to include  
11 a 12 inch freeboard limit and mandate submission of liquid waste hauler reports to the  
12 Regional Board.<sup>36</sup>

13 On November 16, 1977, the Regional Board wrote to Apollo to advise that its  
14 WDRs for the McLaughlin Pit would need to be revised in light of the adoption of a Water  
15 Quality Control Plan on April 11, 1975. The letter requested a report of waste  
16 discharges and other information to support the new requirements. Ex. 10408. On  
17 December 30, 1977, Apollo submitted an application for the new WDRs. The application  
18 represented that Apollo now discharged 3,000 gallons per day to the McLaughlin Pit  
19 (which only had a 12,000 gallon capacity). Ex. 10404.

20  
21  
22 <sup>34</sup> Counsel for Goodrich has attempted to obtain such documentation, to the extent that it  
23 exists. The Regional Board's response to Goodrich's request was that it cannot locate  
24 the file in which these documents would be contained. Ex. 20397 (March 13, 2007  
25 Letter from Mr. Spiess to Mr. Dintzer); see also Ex. 11223 (April 9, 2007 Letter from Ms.  
26 Novak to Mr. Dennis).

27 <sup>35</sup> "Freeboard" is the distance between the liquid level in a pond and the top of the pond.  
28 Minimum freeboard levels are commonly included in waste discharge requirements to  
prevent overflow. Berchtold Dep., 104:22-105:4.

<sup>36</sup> The Regional Board's Assistant Executive Officer recently testified that he is still  
unaware of where Pyrotronics sent liquid waste from the McLaughlin Pit. Berchtold  
Dep., 103:3-104:3, 104:21-108:17; 112:11-16.

1 On May 12, 1978, the Regional Board adopted Order 78-96<sup>37</sup>, which established  
2 new WDRs for the McLaughlin Pit, including, *inter alia*, provisions that "the discharge of  
3 wastes to impervious evaporation ponds when the freeboard is less than one foot is  
4 prohibited", and that "[a]ll industrial wastes removed from the facility shall be hauled by a  
5 State registered liquid waste hauler and disposed of at an appropriate site." Ex. 10365.  
6 Order 78-96 also included a Monitoring and Reporting Program requiring Pyrotronics to  
7 report, on a quarterly basis, waste volumes and freeboard levels to the Regional Board.  
8 *Id.* There is no evidence that these reporting requirements were ever complied with.<sup>38</sup>  
9 See Berchtold Dep., 155:13-16, 155:23-157:24.

10 On February 28, 1979, almost eight years after the McLaughlin Pit had been  
11 operating under WDRs mandating its waste be sent to a Class I site for ultimate disposal  
12 of hazardous wastes, the Regional Board wrote to Apollo with a list of Class I sites that  
13 could "be contacted to see if acceptance of your type of waste will be possible." The  
14 letter continued: "The waste should be hauled by a certified liquid waste hauler and the  
15 final disposal site should be stated on your next monitoring report." Ex. 10393. The  
16 ultimate disposal site for Apollo's liquid waste during the nearly eight year time period  
17 before this letter was sent is unknown. However, it would have been a violation of the  
18 WDR to have sent wastes offsite for disposal without advance notification of the  
19 Executive Officer. Berchtold Dep., 135:6-10. Further, the fact that Mr. Doerr of  
20 Pyrotronics was for the first time seeking the names of Class I sites certainly suggests  
21 that he had not been sending the wastes in the Pit to such a site in the past.

22 A May 6, 1980 investigation report prepared by Gary Stewart of the Regional  
23 Board notes that the McLaughlin Pit had only about nine inches of freeboard, and that  
24 "the pond is full of solids" so "Mr. Doerr is going to arrange to have the pond emptied

25 \_\_\_\_\_  
26 <sup>37</sup> Order 78-96 indicated that Apollo was discharging 3,000 gallons per day of industrial  
27 waste into the McLaughlin Pit. A Regional Board memorandum recommending the  
28 adoption of Order 78-96 made the same representation. Ex. 10365.

<sup>38</sup> There is written evidence of non-compliance. See, e.g., Ex. 10412 (Apollo failed to  
submit a quarterly report due on July 18, 1978).

1 immediately." Ex. 10392. The report also notes that Apollo had failed to submit the last  
2 three monitoring reports, which were due in October, January and April, of 1979 and  
3 1980, respectively. *Id.* Thus, based on the information reflected in Mr. Stewart's report  
4 alone, Pyrotronics had committed four separate violations of Order 78-96. Berchtold  
5 Dep., 165:21-166:21 (conceding failure to submit these three reports constitutes three  
6 violations of Order 78-96); Berchtold Dep., 168:7-14 (conceding a freeboard of only nine  
7 inches constituted a violation of Order 78-96). Yet the only "Action to be Taken" that was  
8 recorded in Mr. Stewart's inspection report was to "[w]rite letter if monitoring report not  
9 received by May 28, 1980." Ex. 10392. And after Mr. Stewart's inspection, Pyrotronics  
10 continued to violate its WDRs while the Regional Board continued to record these  
11 violations without taking any meaningful corrective action. A November 4, 1981  
12 inspection report, also prepared by Mr. Stewart, indicates that Apollo failed to submit its  
13 July and October monitoring reports; two more violations of its waste discharge  
14 requirements. Ex. 10391; Berchtold Dep., 171:14-25; Stewart Dep., 70:1-71:10. But  
15 again there is no record of any action taken by the Regional Board.

16 On March 3, 1983, Kurt Berchtold of the Regional Board conducted a "routine  
17 compliance" inspection of the McLaughlin Pit, and reported that Apollo had yet again  
18 failed to submit at least two of the requisite monitoring reports. Ex. 10390; Berchtold  
19 Dep., 177:16-178:6. The report further indicated that the "pond had **no freeboard**" –  
20 meaning the water was right at the edge of the surface impoundment- and had  
21 **overflowed** or overtopped because of rainfall. Ex. 10390. The contemporaneous  
22 rainfall data in Rialto on that day and the series of days leading up to the date of Mr.  
23 Berchtold's inspection make his estimate of only 5 gallons of overflow highly dubious.  
24 Berchtold Dep., 179:4-17, 180:4-8, 184:22-187:13; Ex. 20395, 20396. The absence of  
25 any freeboard and the overflow of Class I hazardous waste to the ground constituted two  
26 more violations of Order 78-96, and presented an obvious threat to the environment.<sup>39</sup>

27 <sup>39</sup> Mr. Berchtold recently acknowledged in deposition that the overflow was a very  
28 serious violation; but he could not recall why he didn't take any action to prevent future  
occurrences. Berchtold Dep., 180:9-23; 183:4-6.

1 And despite these serious violations, the only "recommendation" in the  
2 contemporaneously prepared report was to "send letter confirming inspection."<sup>40</sup>

3 The day after Mr. Berchtold's inspection, the Apollo plant pumped out **20,000**  
4 **gallons** of liquid waste, described as "fireworks comp", under four separate Hazardous  
5 Waste Manifests (5,000 gallons each) which indicated that the waste was shipped by  
6 Chancellor & Ogden to the BKK Landfill as hazardous wastes. Ex. 10076; Berchtold  
7 Dep., 190:12-17. To date, this, and one shipment under hazardous waste manifest in  
8 September 1984 of 4,000 gallons, are the *only* written evidence located of *any* transport  
9 of waste from the McLaughlin Pit to a Class I facility for disposal. Of course, the 20,000  
10 gallon figure itself is troubling and makes clear that the 12,000 gallon capacity  
11 McLaughlin Pit must have been very full indeed to have yielded some 20,000 gallons of  
12 hazardous waste the day after Mr. Berchtold saw it.

13 During a routine inspection of the surface impoundment on January 24, 1985 by  
14 Bruce Paine of the Regional Board, Mr. Paine noted that the surface impoundment  
15 hadn't been used in eighteen months because "all extra and inferior gun powder is  
16 burned." Ex. 10388; Paine Dep., 86:15-88:22; 90:19-91:6, 91:13-92:25, 93:15-94:12.  
17 According to the report, Apollo wanted to remove all "water, sludge & debris" from the  
18 surface impoundment so that it could be closed and the property could be sold, and  
19 Apollo was waiting for direction from the County regarding the proper means of disposal.  
20 The report stated that the WDRs should be rescinded after proper closure of the "pond."

21 A March 4, 1985 letter from Mr. Apel, of Apollo, to the San Bernardino County  
22 Department of Environmental Health Services, stated that some 3.9 tons of "sludge" had  
23 been removed from the "pond" and that Apollo was trying to dispose of the balance so  
24 that the McLaughlin Pit could be removed. According to the letter, Pyrotronics could not

25 <sup>40</sup> A March 7, 1983 letter from Mr. Berchtold to Apollo, following up on the report,  
26 advised that overflows from the pond were prohibited by Apollo's waste discharge  
27 requirements (Order 78-96) and that discharging into the pond when freeboard was less  
28 than one foot was also prohibited. The letter requested that Apollo make arrangements  
in the future to have the McLaughlin Pit pumped in a timely manner, and noted that  
recent monitoring reports had again not been submitted. Ex. 10389.

1 locate a TDS (no doubt referring to a treatment, storage or disposal ("TSD") facility for  
2 handling hazardous wastes) to accept the solid waste that remained. Apel Dep., 164:7-  
3 24; Ex. 10638; Hescocx Dep., 203:12-205:12, 205:8-12. A letter sent from Mr. Apel to  
4 the San Bernardino County Environmental Health Services Department on March 26,  
5 1985 indicated that the pond had been pumped out and that a majority of the "sludge"  
6 had been transported to a "TSD"; the letter sought permission to close the "pond."  
7 Ex. 10094.

8 **e. California Adopts Subchapter 15 Regulations**

9 In November 1984, a comprehensive set of regulations which governed the  
10 discharge of waste to land and specifically applied to "existing" surface impoundments  
11 (like the McLaughlin Pit) and their closure became effective. Subchapter 15, Title 23,  
12 Chapter 3 of the California Administrative Code; hereinafter "Subchapter 15"  
13 (Ex. 20085). The adoption of this new regulatory package was explained in an April 2,  
14 1985 letter from James Anderson, the Executive Officer of the Regional Board, to Pedro  
15 Mergil at Apollo. Ex. 10385. The letter advised Mr. Mergil that because Apollo was the  
16 operator of an "existing" surface impoundment, it was required to submit a technical  
17 report describing the groundwater monitoring program Apollo intended to implement in  
18 order to comply with the new requirements set forth in Article 5 of Subchapter 15, and  
19 that the technical report was due no later than May 28, 1985 under the regulations.<sup>41</sup>  
20 Ex. 10385. This report was never prepared and submitted to the Regional Board as  
21 required by law.

22 The next day, April 3, 1985, Mr. Anderson sent another letter to Mr. Mergil, which  
23 stated that plans for the closure of the McLaughlin Pit should be included with the  
24 submittal of Apollo's next regular quarterly monitoring report due in April. The letter  
25 advised that "[y]our impervious pond *must be closed in accordance with*" the Subchapter  
26

27 <sup>41</sup> The letter also explained that after submission of the proposed monitoring program,  
28 Apollo's monitoring requirements under Order 78-96 would be revised, along with  
Apollo's waste discharge requirements, so that they were consistent with Subchapter 15.

1 15 regulations, and the regulations were enclosed with the letter. Ex. 10384 (emphasis  
2 added).

3 **f. Application of Subchapter 15 Regulations to "Existing"**  
4 **Waste Management Units**

5 The new Subchapter 15 regulations were meant to provide a comprehensive  
6 waste discharge to land regulatory program to be implemented by each regional board.  
7 Each waste management unit in a regional board's jurisdiction was to be addressed  
8 under the new program, and there were specific requirements for certain types of  
9 "existing" waste management units. Under Section 2510(d), waste management units  
10 that had already received all permits for construction and operation before the effective  
11 date of the regulations (November 1984) were deemed "existing." The McLaughlin Pit  
12 was clearly an "existing" waste management unit under the new program. Paine Dep.,  
13 104:2-5. Further, waste management units were classified according to the types of  
14 waste they contained. The McLaughlin Pit contained liquid explosive material that was  
15 the result of fireworks manufacturing, and was designated by Pyrotronics as a federal  
16 "hazardous waste" with a specific listing code – K044 – under the regulations identifying  
17 hazardous wastes pursuant to the federal Resource Conservation and Recovery Act  
18 ("RCRA") at 40 C.F.R. part 261.32(a) (adopted in 1981). Ex. 10378. In addition, the  
19 numerous references to the Class I disposal sites that had to be used to haul the waste  
20 offsite are all references to hazardous wastes. Holub Dep., 843:19-844:13; Paine Dep.,  
21 39:6-19. Under the regulatory program in place at that time, any waste material that  
22 consisted of or contained a material cited in the List of Chemical Names in Article 9 of 22  
23 CCR Section 60291 were to be considered a "hazardous waste" in California in 1984-  
24 1987, and both potassium nitrate and potassium perchlorate are on that list and were  
25 known to be in the pond.

26 Waste management units were also classified by the type of unit – *i.e.* landfill,  
27 surface impoundment, waste pile, etc. The McLaughlin Pit was a surface impoundment  
28 as identified by both Pyrotronics (Ex. 10378) and by the Regional Board. Ex. 10385.

1 Also, because it contained hazardous waste, the McLaughlin Pit was a Class I surface  
2 impoundment and thereby subject to some of the most stringent provisions of  
3 Subchapter 15.

4 As an existing Class I surface impoundment, the McLaughlin Pit's operator,  
5 Pyrotronics, was required to submit a monitoring program within 6 months of the  
6 effective date of adoption of the Subchapter 15 regulations, or by May 1985, as the  
7 Executive Officer of the Regional Board stated in the April 1985 letter to Pyrotronics.  
8 Ex. 20085 (Title 23 Cal. Admin. Code Section 2510(d)(1) (1985)). That program was to  
9 have included detection monitoring designed to sample the unsaturated zone and the  
10 groundwater beneath the waste management unit and look for evidence of any leaking  
11 from the waste management unit. See, e. g., *id.* at Sections 2550(b) and 2556. The  
12 discharger was to propose, and the Regional Board was to approve, the specific  
13 indicator parameters to be sampled for in the detection monitoring program. Ex. 20085  
14 at Section 2556(a)(2). Such parameters were to be selected after considering the  
15 "concentrations of constituents in wastes managed at the waste management unit" and  
16 the "mobility, stability, and persistence of waste constituents or their reaction products."  
17 If any leak of the waste management unit was identified by the detection monitoring  
18 program, then a verification monitoring program was to have been implemented. See,  
19 e.g., *id.* at Section 2556(b).

20 The verification monitoring program for a Class I waste management unit<sup>42</sup>  
21 required the discharger to analyze samples from all monitoring points (groundwater and  
22 unsaturated zones as well as surface waters) for "all constituents identified in Appendix  
23 III of this subchapter." Appendix III included "potassium perchlorate" in Table B. In other  
24 words, the Subchapter 15 regulations established a program implemented by the  
25 Regional Board in 1985 that would require a specific monitoring program from  
26

27 <sup>42</sup> Robert Holub, the only Regional Board witness to claim that the McLaughlin Pit was  
28 unclassified, did agree that the Subchapter 15 regulatory program nevertheless applied  
to its operation and closure. Holub Dep., 845:23-25, 884:14-885:6, 885:24-886:1.



1 Pyrotronics to determine if the McLaughlin Pit was leaking, and, if so, to sample the soil  
2 and install monitoring wells to assess groundwater for perchlorate and then take  
3 corrective action as needed.<sup>43</sup> That was the program that the Executive Officer, James  
4 Anderson, was referring to in his April 1985 letter to Pedro Mergil. However, as stated,  
5 Pyrotronics never prepared such a program for submittal and the Regional Board never  
6 demanded one, despite their duty to do so under the regulations to conduct site testing  
7 which we now know would have revealed high perchlorate concentrations.

8 **g. Pyrotronics Fails to Submit Mandatory Monitoring**  
9 **Program; Which the Regional Board Fails to Require**

10 On April 26, 1985, Mr. Mergil replied to Mr. Anderson's correspondence, stating  
11 that all sludge had been removed from the pond and transported to an approved waste  
12 management unit, and that Apollo was attempting to obtain permission to burn the  
13 remaining solid waste. The letter indicated that Apollo would submit a closure plan in  
14 accordance with Subchapter 15. Ex. 10383.

15 A June 17, 1985 note to file from Bruce Paine of the Regional Board indicates  
16 that Apollo was working with a contractor who was trying to obtain a permit to burn the  
17 residue remaining in the pit, and that Mr. Apel would provide an update on July 1, 1985.  
18 On August 20, 1985, Mr. Apel wrote to Broco Inc., a waste disposal operator, asking for  
19 help disposing of the remaining "solid waste" in the McLaughlin Pit. The letter stated:  
20 "As I think you know, we have pumped all of the sludge out of the pond and only solid  
21 waste remains . . . I realize your hands are tied because of the A.Q.M.D. requirements  
22 on burning, but as soon as you receive word on your petition for a special burn permit  
23 please contact me." Ex. 10381. By letter dated August 21, 1985, Mr. Apel forwarded to  
24 Mr. Paine his August 20 letter to Broco, and stated that "Broco can not dispose of the  
25

26 <sup>43</sup> The Statement of Reasons produced along with the subchapter 15 regulations made  
27 the reason for this point clear: Monitoring systems at Class I waste management units  
28 must be sampled at least annually for constituents in Appendix III of the regulations  
because Class I units typically receive a wide variety of hazardous waste. Page 5.17;  
Ex. 20085.

1 waste until their petition for a permit is approved by the A.Q.M.D.” Ex. 10380.

2 Mr. Paine responded to Mr. Apel’s August 21, 1985 correspondence by letter  
3 dated October 1, 1985, which advised again that closure of the McLaughlin Pit needed  
4 to comply with Article 8 of Subchapter 15 and demanded that the closure plan specified  
5 in those regulations be submitted by October 31, 1985. The letter continued: “Please  
6 be aware that a registered civil engineer or registered geologist must make the  
7 evaluation specified in Section 2582(b)(1), and certify their findings as to whether  
8 contamination exists.” Ex. 10379.

9 On March 3, 1986, Mr. Apel wrote to the EPA regarding the “Facility Biennial  
10 Hazardous Waste Report for 1983”. His letter stated: “our company has been trying to  
11 dispose of our waste since September 1984. We have disposed of all the waste water  
12 and sludge off site but have not found a facility that will accept the solid material that  
13 remains . . . [o]nce the existing waste has been disposed, we will close the surface  
14 impound in accordance with all state and local regulations.” Ex. 10378. The Report,  
15 which was signed by Mr. Apel, indicated that some 2,000 pounds of “K044” “waste from  
16 the manufacture of explosives” was stored onsite at the Pyrotronics facility in an “S04”  
17 method of storage – which signified a “surface impoundment.”

18 On July 10, 1986, Mark Adelson of the Regional Board performed a routine  
19 inspection of the McLaughlin Pit. His report noted that Apollo had failed to submit its  
20 Subchapter 15 groundwater monitoring report, which was due on May 28, 1985 (the leak  
21 detection report which would have required sampling of the groundwater and lead to  
22 perchlorate detection had it been properly carried out), or its closure plan for the  
23 McLaughlin Pit, which was due on October 31, 1985. Ex. 10377; Berchtold Dep., 224:6-  
24 226:25; Ex. 10385, 103879; Adelson Dep. at 71:10-72:6. The report also observed that  
25 two feet of “dried material impoundment” remained in the McLaughlin Pit, and that Apollo  
26 had been trying to dispose of the waste “for the past year, but with no success”, because  
27 nobody would permit transportation, disposal or on-site destruction of the waste.  
28 According to Mr. Adelson, Apollo had still failed to collect or submit its groundwater

1 monitoring report more than a year after it was due; had still failed to submit a closure  
2 plan almost a year after it was due; and had no plan to dispose of the dried, explosive,  
3 Class I hazardous waste with a propensity to auto-ignite that remained in its McLaughlin  
4 Pit. Ex. 10377; Adelson Dep., 71:10-72:6. Nonetheless, Mr. Adelson concluded his  
5 report with the notation: **"No Action Necessary."** Adelson Dep., 72:8-22. Robert  
6 Holub of the Regional Board signed off on the report by initialing it on July 13, 1986.  
7 Holub Dep., 663:4-666:18; Berchtold Dep., 232:5-25.

8 Pyrotronics filed for Chapter 11 bankruptcy on June 6, 1986. Ex. 10967. The  
9 Regional Board was aware of this bankruptcy at least as early as July 11, 1986,  
10 according to a file memorandum prepared by Mr. Adelson memorializing a conversation  
11 in which Mr. Apel told him that Pyrotronics was in bankruptcy. Ex. 10376; Berchtold  
12 Dep., 233:17-234:22; 234:24-235:2. And Mr. Adelson testified that he likely would have  
13 informed his superior – Mr. Holub at that time – if and when a discharger told him that it  
14 was in bankruptcy, but that the Regional Board didn't have a particular policy or practice  
15 to deal with waste facilities that were in bankruptcy. Adelson Dep., 85:20-86:11; 87:12-  
16 20; 87:22-88:10. According to Mr. Adelson's memorandum, at that time Mr. Apel said  
17 that funds for the closure of the McLaughlin Pit could only be allocated with court  
18 approval. There is no evidence that anybody from the Regional Board or the State  
19 made any claim in bankruptcy against Pyrotronics with regard to closure of the facility.  
20 Adelson Dep., 89:11-18; see also Berchtold Dep., 235:4-237:3; 250:14-19<sup>44</sup>.

21 On August 29, 1986, Mr. Mergil sent a letter to Mr. Paine requesting permission to  
22 stop submitting "septic tanks monitoring system, report and chemical analysis" because  
23 Apollo had shut down its operations. Ex. 10372. Mr. Holub purported to grant this

24 <sup>44</sup> Virtually all of the Regional Board staff who inspected the McLaughlin Pit and who  
25 were deposed, confessed that there was no Regional Board policy for how to deal with  
26 bankrupt dischargers, particularly bankrupt dischargers with Class I surface  
27 impoundments and who were facing the expense of a proper closure under Subchapter  
28 financially by taking the simple step of filing a claim in the bankruptcy of Pyrotronics for  
the cost of a proper closure of the McLaughlin Pit. See, e.g., Berchtold Dep., 234:19-  
237:3, 250:8-250:19.

1 request in a letter to Mr. Apel sent on October 8, 1986, which stated that Apollo no  
2 longer needed to comply with the Monitoring and Reporting Program contained in Order  
3 78-96 as it pertained to the septic tanks, and that Order 78-96 would be rescinded after  
4 the McLaughlin Pit was closed in conformance with Subchapter 15. Ex. 10371. It is  
5 highly unlikely, however, that Mr. Holub had the authority to unilaterally exempt an entity  
6 from complying with its WDRs. Berchtold Dep., 271:11-14.

7 Mr. Holub's October 8, 1986 letter also advised that two proposed closure plans  
8 that had been submitted by Apollo for closure of the McLaughlin Pit<sup>45</sup> were inadequate  
9 because "*neither proposal includes site sampling to determine whether the*  
10 *impoundment has leaked pollutants into the ground.*" The letter stated that soil sampling  
11 and analysis were required before closure of the McLaughlin Pit could be approved,  
12 because such sampling and analysis would provide "information necessary to determine  
13 the need for clean-up or mitigation measures and/or a more extensive monitoring effort."  
14 Ex. 10371. The letter also reminded Apollo, again, that closure of the McLaughlin Pit  
15 needed to comply with Subchapter 15 and be supervised and certified by a registered  
16 engineer or geologist, and demanded submission of a closure plan by October 23, 1986  
17 – the same closure plan that Apollo was supposed to have submitted a year earlier, on  
18 October 31, 1985.

19 On October 20, 1986, Mr. Apel replied to Mr. Holub's October 8, 1986 letter, and  
20 wrote that he was uncertain about his ability to obtain funds for the McLaughlin Pit's  
21 closure because the facility was in bankruptcy. The letter also stated that he would not  
22 be able to provide a closure plan by October 23, 1986 as Mr. Holub had requested.  
23 Ex. 10103. The letter mentioned that Apollo's use of septic tanks continued on a limited  
24 basis, even though manufacturing at the facility had ceased. According to testimony  
25 from Regional Board officials, the Regional Board still did nothing to protect the Regional

26 <sup>45</sup> On July 15, 1986, Mr. Apel forwarded Mr. Adelson two proposals he had received for  
27 closure of the pond. Ex. 10373-75. One of those proposals was from a William  
28 McLaughlin of McLaughlin Enterprises, Inc., an individual who purported to have some  
experience in environmental matters.

1 Board's or the State's interests in the bankruptcy proceeding of Pyrotronics. Adelson  
2 Dep., 89:11-18; Paine Dep., 143:22-144:7; see also Berchtold Dep., 235:4-237:3;  
3 250:14-19.

4 **h. Subchapter 15 Provided Very Specific and Detailed**  
5 **Closure Requirements for Surface Impoundments**

6 In addition to the requirements for existing waste management units, the  
7 Subchapter 15 regulations also included a rigorous set of closure and post-closure  
8 requirements. Ex. 20085, at Sections 2580-2584. They specifically mandated that  
9 closure be under the supervision of a "registered civil engineer or a certified engineering  
10 geologist," as the Regional Board letters to Pyrotronics had indicated in 1985 and 1986.  
11 Ex. 20085, at Section 2580(b). The specific surface impoundment closure requirements  
12 were set forth in Section 2582, which the Regional Board had pointed out to Pyrotronics  
13 on multiple occasions through correspondence would be the applicable provisions to  
14 govern the closure of the surface impoundment. Those requirements mandated  
15 complete removal of all liquids in the surface impoundment, *plus* any remaining "residual  
16 wastes, including sludges, precipitates, settled solid and liner materials contaminated by  
17 wastes." Ex. 20085, at Section 2582(b)(1). If that was not done, then the surface  
18 impoundment had to be closed as a landfill under Section 2582(b)(2). And, of course,  
19 any contaminated soil surrounding the surface impoundment needed to be removed as  
20 well. *Id.* All dischargers, including Pyrotronics, needed to submit a closure and post  
21 closure plan to the Regional Board, although if all of the waste constituents were  
22 removed from a surface impoundment, along with any contaminated liner, the Regional  
23 Board could waive the "post-closure" requirements pursuant to Section 2582(b)(1). This  
24 waiver never occurred.

25 Adherence to Subchapter 15's closure requirements for surface impoundments  
26 should have been critical for the Regional Board, since its staff was well aware of the  
27 potential for surface impoundments to impact groundwater quality if they were not  
28 managed properly. Adelson Dep., 47:16-49:10 (Testifying that the Regional Board kept

1 files for surface impoundments “indefinitely” “because those types of facilities have a  
2 potential to cause water quality concerns . . . long after they’ve been closed . . . the  
3 nature of the waste that’s impounded in these types of facilities, if the facilities were to  
4 fail . . . that waste would infiltrate, percolate into the ground . . .”; this was a “widely  
5 accepted fact.”).

6 In fact, a proper closure under Subchapter 15 would have included sampling to  
7 confirm that there was no remaining contamination under the liner of the McLaughlin Pit,  
8 and if contamination was detected, establish a corrective action program to investigate  
9 and remediate that contamination including groundwater. Ex. 20072 at Section 2558.  
10 The simple fact is that the proper closure under Subchapter 15 would have readily  
11 revealed what the current site investigations have already found – that the McLaughlin  
12 Pit leaked, and leaked substantially, and that it caused groundwater contamination with  
13 perchlorate, as well as with other compounds. Kresic Dec., ¶¶ 28, 35, 55, 56;  
14 Kavanaugh Dec., ¶¶ 60-62, 100-101. That, in turn, would have triggered the corrective  
15 action program of the Subchapter 15 regulations which would have mandated that  
16 Pyrotronics or Ken Thompson (see below) investigate the extent of the contamination  
17 caused by the McLaughlin Pit’s operations and then take the necessary corrective  
18 actions to clean it up. The regulations even mandated a showing of proper financial  
19 assurance<sup>46</sup> by the discharger to complete its closure and post-closure obligations. In  
20 short, by 1984 the Regional Board had all of the tools it needed, coupled with a  
21 mandatory duty to use them, to protect the waters of the state, to investigate the  
22 McLaughlin Pit and to compel the parties responsible to clean up their contaminated  
23 legacy. As we shall see next, the Regional Board failed in that duty.

24 i. **Mr. Thompson Purchases the Southern Portion of the**  
25 **160-Acre Parcel and Retains Mr. McLaughlin to Close the**  
26 **McLaughlin Pit**

27 In January 1987, Mr. Ken Thompson, a businessman who planned to build and

28 <sup>46</sup> Financial assurance would have been one thing to bring to the bankruptcy court’s attention had the Regional Board taken any step to protect the State’s interests.

1 operate a concrete pipe manufacturing business in Rialto, negotiated the terms of a  
2 purchase and sale agreement to acquire some 20 acres of the Rialto property from  
3 Pyrotronics, including the parcels of land (Parcels 10 and 11) where the McLaughlin Pit  
4 was located. Ex. 11116 (Escrow Instructions and purchase and sale agreement dated  
5 January 1987). Mr. Thompson had visited the property and seen the McLaughlin Pit  
6 before he purchased the land, and identified a photograph of the pit as a feature he saw  
7 during his site visit. Thompson Dep., 31:3-32:25; Ex. 20002 (photograph of the  
8 McLaughlin Pit taken by McLaughlin).

9 The terms and conditions of Ken Thompson's proposed acquisition of the property  
10 from Pyrotronics included a provision that for \$29,800 taken out of the amount of money  
11 placed into escrow for the purchase of the property, Mr. Thompson would assume all  
12 responsibility for the proper closure of the McLaughlin Pit, and would release Pyrotronics  
13 from any liability for same. Ex. 11116 at ¶ 7. Under the terms of the proposed  
14 purchase, Mr. Thompson also assumed all of the obligations imposed by law to prepare  
15 the property for his improvements. Finally, Mr. Thompson's proposed purchase  
16 agreement provided a contingency to closing that Mr. Thompson needed to satisfy  
17 himself that he could redevelop the property consistent with his plans. The total  
18 purchase price for the 20+ acres was around \$500,000. Ex. 11116.

19 Because Pyrotronics was in bankruptcy at the time, the sale of the property to Mr.  
20 Thompson needed to be approved by the bankruptcy court before it could move forward.  
21 Therefore, bankruptcy lawyers for Pyrotronics prepared a motion for the bankruptcy  
22 judge to approve the sale. Ex. 11215. In the papers filed with the Court, the President  
23 of Pyrotronics, Ray Arthun, declared under penalty of perjury that Ken Thompson would  
24 take responsibility for the closure of the pond in a manner consistent with all applicable  
25 laws and that Mr. Thompson would assume all responsibility for the costs associated  
26 with the legal requirements necessary for the redevelopment of his property. *Id.*, 12. Mr.  
27 Arthun also made clear that Mr. Thompson would release Pyrotronics from any liability  
28 for those expenses. *Id.* The one key condition to the sale for Mr. Thompson was that he

1 needed to satisfy himself that the property could be redeveloped for his purposes, before  
2 he had to close on the sale. *Id.*

3 In early January 1987, Mr. McLaughlin and Terry O'Brien, an employee of Ken  
4 Thompson, met with Steve Van Stockum, of the County of San Bernardino Department  
5 of Environmental Health, to discuss the County's requirements for closure of the pit.  
6 Ex. 10640. At the meeting, Mr. McLaughlin presented his ideas regarding closure of the  
7 pit, and Mr. Van Stockum advised him that, in addition to approval by the County, such  
8 plans would need to be cleared with the Regional Board, the South Coast Air Quality  
9 Management District, and the California State Department of Health Services, as well as  
10 the City of Rialto Fire Department and the USEPA. *Id.*

11 On January 26, 1987, Mr. McLaughlin sent a letter to Mr. O'Brien regarding a  
12 proposal for the closure of the pond. Ex. 10748. In that letter, Mr. McLaughlin indicated  
13 that he believed that the closure of the pond would require the approvals of the County  
14 of San Bernardino, the California State Department of Health Services, the South Coast  
15 Air Quality Management District, the City of Rialto Fire Department and the United  
16 States Environmental Protection Agency. He said that encapsulation of the remaining  
17 waste materials was one possible solution and/or burning the waste was another. Mr.  
18 McLaughlin advised that it would cost approximately \$29,800 to close the pond, and that  
19 was the figure used by Mr. Thompson in his escrow and purchase and sale agreement  
20 proposal with Pyrotronics.

21 The letter also noted:

22 *It is possible that over the years, there has been significant leeching*  
23 *of material into the ground from the pit. This could lead to*  
24 *restrictions on that portion of the ground in the vicinity of the pit such*  
25 *as placing a concrete pad over the area. Whether or not such a*  
*restriction will be likely issued will have to await the results of the*  
*borings.*

26 Accordingly, the letter proposed taking "only six borings with measurements at five and  
27 ten feet." As acknowledged by Mr. Berchtold in recent deposition testimony, such  
28 samples would need to be taken "generally underneath" the McLaughlin Pit to determine



1 whether or not it had leaked. Berchtold Dep., 257:2-7.

2 **j. Mr. Thompson Files a Proposed Site Plan And**  
3 **Environmental Information Form With the City Indicating**  
4 **that the McLaughlin Pit Must Be Closed Prior to**  
5 **Redevelopment of the Property**

6 On February 25, 1987, Mr. Thompson's agent, Terry O'Brien, filed a proposed  
7 Plot Plan for the redevelopment of Parcels 10 and 11, which included the land where the  
8 McLaughlin Pit was located. He concurrently filed an environmental information form  
9 which was designed to identify the other permits and approvals from environmental  
10 agencies that the applicant believed would be required in order to prepare the property  
11 for redevelopment. Ex. 11158. According to then Director of the Rialto Planning  
12 Department Rod Taylor, that form was then used by the City of Rialto to review the  
13 anticipated impacts that the project would have on the environment under the California  
14 Environmental Quality Act ("CEQA"), so the City could decide whether it needed a full  
15 Environmental Impact Report or some other form of environmental review. Taylor Dep.,  
16 21:17-22:14, 74:7-75:2, 76:1-25; Story Dep., 38:1-40:18, 39:6-10.

17 On March 12, 1987, Lynn "Mac" McQuern, an environmental planner with the City  
18 of Rialto, prepared an initial study under CEQA by filling out a form that was developed  
19 by the City of Rialto and consistent with CEQA guidelines. Ex. 11161. On that form, Mr.  
20 McQuern correctly concluded that closure of the fireworks residual pit would require  
21 approvals from the County of San Bernardino, the California Department of Health  
22 Services, the United States Environmental Protection Agency, the Santa Ana Regional  
23 Board, and the Rialto Fire Department. Mr. McQuern recommended to the City's  
24 Environmental Assessment Committee ("EAC")<sup>47</sup> that the City adopt a "Negative  
25 Declaration" under CEQA, but with certain mitigation measures, one of which, notably,  
26 would require the project applicant (Ken Thompson) to take all necessary steps to close

27 <sup>47</sup> Mr. Rod Taylor, the Planning Director of the City of Rialto in 1987 and Mr. Michael  
28 Story, the current Planning Director and a former associate planner with the City of  
Rialto in 1987, both testified that the Rialto Fire Department had a position on the EAC.

1 the pond and obtain all necessary approvals and permits, including approvals from the  
2 various public agencies identified by Mr. McQuern, *prior to any grading* of the property  
3 for Mr. Thompson's site redevelopment. Shortly thereafter, the City of Rialto's  
4 Environmental Assessment Committee reviewed Mr. McQuern's recommendation, made  
5 some slight changes, and then adopted the recommendation as a formal Negative  
6 Declaration with mitigation measures under CEQA. Ex. 11162. The following mitigation  
7 measure (No. 2) was included as part of the Negative Declaration:

8           Prior to any grading, construction or installation of equipment on  
9           Parcel 11, the applicant shall have completed a satisfactory cleanup  
10          program of the fireworks residual pit on Parcel 11 and shall have  
11          certified the satisfactory completion of that program in a report to the  
            City Engineer. As part of that cleanup program, the applicant shall  
            obtain all necessary permits or approvals from local, state and/or  
            federal agencies as required.

12          The proposed Negative Declaration with mitigation measures was duly published  
13          in the local newspaper (Story Dep., 103:11-21) and, after the close of the comment  
14          period, the Negative Declaration with mitigation measures was ready to be finalized by  
15          the City.

16          On May 28, 1987 Mr. Thompson's agent, Terry O'Brien, filed the final application  
17          for the approval of the Precise Plan of Design ("PPD") with the City of Rialto. Shortly  
18          thereafter, Mr. Thompson acquired the property by grant deed from Pyrotronics  
19          Corporation. Exs. 11165, 11116. There is no doubt that the fireworks residual pit, or  
20          McLaughlin Pit, had not been closed as of the date Mr. Thompson acquired the property;  
21          and, therefore, the steps to close the pit, and the corresponding approvals and permits,  
22          still needed to be completed by Mr. Thompson. But obviously Mr. Thompson had  
23          sufficiently satisfied himself that his development could be done to his satisfaction at that  
24          point, and he had been notified of the condition on the Negative Declaration. Story Dep.,  
25          51:6-17.

26          On either June 4 or 5, 1987 the City of Rialto's Development Review Committee  
27          ("DRC") considered Mr. Thompson's PPD and granted him the right to proceed with his  
28          development proposal subject to certain conditions. Ex. 11168 (June 8, 1987 letter

1 which attaches the conditions of approval). On that same day, the City also finalized the  
2 approval of the Negative Declaration with mitigation measures and issued the formal  
3 Notice of Determination a few days later. Story Dep., 105:22-110:14. The Negative  
4 Declaration contained the aforementioned mitigation measure requiring Mr. Thompson to  
5 cleanup the McLaughlin Pit and obtain all necessary government approvals prior to any  
6 grading.

7 A careful review of the City's files produced to Goodrich did not reveal any  
8 submission by Mr. McLaughlin or anyone else on behalf of Mr. Thompson indicating that  
9 the mandatory certification report regarding closure of the McLaughlin Pit along with sign  
10 offs from the County, State, Regional Board, and the SCAQMD was ever filed with the  
11 City of Rialto on behalf of Mr. Thompson. A subpoena seeking such information did not  
12 result in the production of any such documents. The City's current Planning Director,  
13 Mike Story, testified that he would assume such a report had been made, but no such  
14 report has ever been produced to Goodrich Corporation and Mr. Story did not recall  
15 seeing one in the files. Story Dep., 122:10-132:4. Nor has the City of Rialto ever  
16 produced any other written (or oral) confirmation that it approved a submission from Mr.  
17 McLaughlin regarding the CEQA mitigation measure adopted by the City in the Negative  
18 Declaration.

19 Although there is no record that Mr. Thompson ever submitted the mandatory  
20 certification regarding closure of the McLaughlin Pit before the approval of his grading  
21 plan, he was apparently able to begin grading the site by early July 1987. A significant  
22 event occurred on July 15, 1987, when CHJ, Incorporated, (Ken Thompson's soils  
23 engineers for the project) reported that the grading contractor working on the  
24 "subexcavation of the building pad," had unearthed buried drums:

25 The barrels contained an unknown substance which, along with the  
26 deteriorating barrels, had stained the soil. A distinct smell was also  
27 present from the excavated area. Because of these conditions, the  
28 Rialto Fire Department was notified. Upon their arrival, the Rialto  
Fire Department contacted the San Bernardino County  
Environmental Health Department, and a representative from their  
office visited the site. At this time, no determination has been made

1 as to the content of the unknown substance or the extent of the area  
2 covered. When a determination as to the safety of the material has  
been made, C. H. J., Incorporated will return to the site for testing.

3 Ex. 11121. Apparently no follow-up action was ever taken.

4 Notably, the City of Rialto has not produced any documents that explain what  
5 their Fire Department found in those drums; nor has any witness from the City or the  
6 County shed any light on what was in the buried drums found on the property that Ken  
7 Thompson purchased from Pyrotronics in 1987. But the fact remains that at some point  
8 between June 8 and July 15, 1987, the City of Rialto approved Ken Thompson's plans  
9 for grading the former Pyrotronics' site without requiring Mr. Thompson to complete the  
10 mitigation measure included in his negative declaration – *i.e.*, that a full and complete  
11 closure of the McLaughlin Pit was to be completed and all required public agency  
12 approvals were to be obtained, and a certification of completion of same sent in a report  
13 to the City Engineer. No such report has been produced by the City and so it must be  
14 presumed that such a report simply does not exist and the City let Mr. Thompson grade  
15 his site without enforcing the mandatory environmental mitigation measure in the  
16 Negative Declaration.

17 On July 24, 1987, Mr. McLaughlin on behalf of Mr. Ken Thompson sent a letter to  
18 Mr. Holub<sup>48</sup> advising that he had been retained to close the pond, and proposing "to drill  
19 four boreholes to a depth of 20 feet taking samples at 5, 10, 15 and 20 feet" to "insure  
20 that previous leakage from the pit has not contaminated the groundwater." Ex. 10108.  
21 So the original proposal for six borings that Mr. McLaughlin had presented to Ken  
22 Thompson had now been reduced to four. According to Mr. McLaughlin, prior to sending  
23 this letter he confirmed with representatives of the Regional Board that four boreholes  
24

25 <sup>48</sup> Copied on the letter were J. Hinton of the Department of Health Services, S. Van  
26 Stockum of the County, and R. Thrash from the SCAQMD. Ex. 10108. Mr. McLaughlin  
27 stated in the letter that "we are approaching the U.S. Environmental Protection Agency,  
28 the South Coast Air Quality Management District, the San Bernardino County  
Department of Environmental Health Services, and the California Department of Health  
Services on other aspects of the problem."

1 would be sufficient. McLaughlin Dep., 234:8-14. It was decided that the samples would  
2 be analyzed for heavy metals only, based on the assumption that if such metals didn't  
3 leak the pond was impervious. No effort was made to determine which metals were  
4 used in fireworks or to sample for oxidizers such as the well-known fireworks oxidizer,  
5 perchlorate. McLaughlin Dep., 235:2-237:8. There is also another glaring omission.  
6 Solvents were not considered by the Regional Board to be a substance of concern. This  
7 is surprising considering that this surface impoundment received waste materials for well  
8 over a decade from multiple users beginning in the early 1970's.

9 On July 27, 1987, Mr. McLaughlin wrote to Phil Bobel of the United States  
10 Environmental Protection Agency, seeking approval to burn the material in the pond  
11 upon receipt of the appropriate burn permit from the SCAQMD and with supervision from  
12 the local fire department (City of Rialto); to treat the remainder by "chemical fixation and  
13 solidification to convert the ash into an artificial clay from which ions cannot leach into  
14 the water table"; and to then crush and bury the pond on-site. Ex. 10109. The letter  
15 indicated that after the material was burned, "post-fire soil borings and analysis" would  
16 be conducted "under the direction of the Santa Ana Regional Water Quality Board to  
17 insure that the ground water has not been contaminated."<sup>49</sup> The letter closed by  
18 requesting USEPA's concurrence "subject to the approvals of the South Coast Air  
19 Quality Management District's Hearing Board and California Department of Health  
20 Services." In the letter, Mr. McLaughlin makes clear that the material in the pond is a  
21 listed "hazardous waste" under USEPA regulations and refers to it as a "K044" listed  
22 waste (defined as "wastewater treatment sludges from the manufacturing and  
23 processing of explosives"), which is consistent with Mr. Apel's description of the waste  
24 that was sent to the Regional Board in 1986. Ex. 10109. There is no record of a  
25 response by USEPA.<sup>50</sup> Note that this surface impoundment remains subject to federal

26 <sup>49</sup> Post-fire borings were never taken. McLaughlin Dep., 256:2-12.

27 <sup>50</sup> Attached as Ex. 11232 is a declaration and a subpoena served on USEPA for records  
28 that evidence any approval by USEPA confirming there are no documents from EPA in  
response.

1 regulations including the Resource Conservation and Recovery Act (RCRA) and the  
2 Correction Actions required under the Hazardous and Solid Waste Amendments  
3 (HSWA). Comprehensive guidance documents for accession and closing such facilities  
4 were issued, in 1986, by USEPA's Waste Management Division, Office of Solid Waste in  
5 1986. As revealed by the case facts, these procedures were completely ignored. The  
6 McLaughlin Pit is a surface impoundment with recognized release mechanisms of  
7 "overtopping" and "seepage" as referenced from USEPA guidance manuals.

8 An undated inspection report prepared by Dan Brown, staff engineer, of the  
9 Regional Board (the inspection appears to have been on August 6, 1987) stated:  
10 "Western Precast Products assumed the investigation and cleanup of the [sic] when they  
11 bought property from Apollo. McLaughlin Enterprises has been retained to Western  
12 Precast Products to do the investigation and clean-up." Ex. 10370.

13 On August 11, 1987, Gary Litton, Senior Staff Engineer, of the Regional Board  
14 wrote to Mr. McLaughlin to confirm the Regional Board's "approval of the course of  
15 action to be taken to determine if leakage from the Apollo waste pit has contaminated  
16 the ground water." Exs. 10114, 10117. The letter indicated that pursuant to  
17 conversations between Mr. McLaughlin and Messrs. Holub, Brown, and Litton,  
18 agreement had been reached that now only *two* boreholes would be drilled "to determine  
19 if leakage from the Apollo waste pit has contaminated the groundwater". This was two  
20 boreholes fewer than proposed by Mr. McLaughlin's July 27, 1987 letter, and four fewer  
21 than proposed by his January 26, 1987 letter. Exs. 10114, 10117. The letter also stated  
22 that the boreholes "would be drilled 20 feet deep at an angle towards the pit in order to  
23 collect soil samples directly underneath the pit." *Id.*; see also McLaughlin Dep., 259:6-  
24 22.

25 A letter from Mr. McLaughlin to Pioneer Consultants on August 17, 1987  
26 confirmed that Pioneer, a soil sampling drilling contractor, would drill two soil sampling  
27 holes at an angle of 15 degrees from vertical, and at depths of five, ten, fifteen and  
28 twenty feet under the surface. Ex. 10118. Mr. Brown, of the Regional Board, was

1 copied on the letter, and Mr. McLaughlin testified that he “absolutely” kept Mr. Brown  
2 informed as the project progressed. *Id.*, McLaughlin Dep., 262:23–263:4. Mr. Holub and  
3 Mr. Litton also initialed the letter, indicating that they had reviewed it. Berchtold Dep.,  
4 272:18-273:3.

5 The drilling was conducted on August 26, 1987, with Mr. Brown present<sup>51</sup> on  
6 behalf of the Regional Board. Mr. Brown prepared a memorandum, dated September 1,  
7 1987, summarizing the results of that work. Ex. 10122. According to the memorandum,  
8 the anchor lock on the drill broke while they were drilling the first boring so they were  
9 only able to complete *one* boring, to 11.1 feet, and had to “leav[e] the job incomplete”;  
10 they were unable to drill even the two boreholes to a depth of twenty feet (with multiple  
11 sampling locations) as specified in the most recent plan. *Id.*; see Berchtold Dep.,  
12 277:24-278:5; McLaughlin Dep., 259:3-5. Therefore, according to Brown’s  
13 memorandum, only two samples were taken, from the single bore hole, based on a drill  
14 angle of 19 degrees from vertical; one at a depth of 5 to 5.8 feet below ground surface  
15 (“bgs”), and the second at a depth of 10.6 to 11.1 feet bgs. Mr. Brown’s memorandum  
16 states clearly that only the deeper sample could possibly have been below the footprint  
17 of the pond, and that this was at best only “2 to 4 inches” inside the vertical projection of  
18 the pond, and 5 to 5.5 feet below the pond. Berchtold Dep., 278:7-280:3, 280:8-14. Of  
19 course, Mr. Brown’s evaluation of the distance inside the footprint of the pond for the  
20 solitary sample could be in error if the pond wall thickness was more than four inches or  
21 if the exact angle on the drill was something less than 19 degrees. Standard pool  
22 construction at the time would have included a 7 to 12 inch thick wall. In that case, the  
23 one soil sample taken might not have been under the McLaughlin Pit at all. Holub Dep.,  
24 728:9-729:20.

25 Neither Mr. Brown nor anyone else from the Regional Board required Mr.  
26 McLaughlin to take any additional samples from below the pond pursuant to the original

27 <sup>51</sup> At Exhibit 11226 is a photograph produced from the San Bernardino County files that  
28 appears to show the drilling of the single boring.

1 plan. McLaughlin Dep., 269:6–270:3; 278:16-20. After reviewing contemporaneous  
2 documentation of the samples taken by Mr. McLaughlin from a single boring, the best  
3 description Mr. Berchtold could give to the work was that “it was *limited*”. Berchtold  
4 Dep., 285:17-287:15. A number of Regional Board witnesses have confirmed that they  
5 had not heard of using a single soil sample to determine if a surface impoundment of the  
6 dimensions of the McLaughlin Pit had leaked. Adelson Dep., 102:18-103:4; 101:16-25;  
7 Stewart Dep., 129:6-11. Mr. Adelson testified that “at an **absolute minimum**, four soil  
8 samples would be necessary” to determine if a plastered swimming pool the size of the  
9 McLaughlin Pit had leaked. Adelson Dep., 103:6-104:7; *see also* Adelson Dep., 108:24-  
10 109:12 (“... I would have encouraged the use of more than one sample.”). In any event,  
11 the assessment work required by the Regional Board was inadequate and contradictory  
12 to existing Federal guidance at that time. And Gary Litton, Dan Brown’s supervisor at  
13 the time had no explanation for why they had agreed that one sample was sufficient.  
14 Litton Dep., 142:11-14, 144:19-145:16.

15 Moreover, Subchapter 15’s requirement that each discharger implement a  
16 monitoring plan to assess for the presence of waste constituents in and around a surface  
17 impoundment was never enforced by the Regional Board, on Pyrotronics, with respect to  
18 the McLaughlin Pit. The monitoring program that the Regional Board should have  
19 required, and was under a duty to require, would have specifically included monitoring  
20 for potassium perchlorate among other chemicals if a leak had been detected. When  
21 asked about this glaring omission, Gerry Thibeault, the Executive Officer of the Regional  
22 Board, testified as follows:

23 Q. [W]ith regard to potential for perchlorate spilling out of this pit  
24 either by overflow or by – or through leaking, are the two  
25 samples in the locations taken sufficient to characterize  
whether or not it leaked or spilled perchlorate?

26 A. Well, perchlorate wouldn’t have been sampled for back then.

27 \* \* \*



1 Q. You testified a moment ago that in your judgment, in 1987  
2 when this [the pit was closed], that there was no need to test  
3 for perchlorate in the soil or groundwater . . . why not?

4 A. Because it was not know to be an issue.

5 Q. All right. And not known to be a water quality issue?

6 A. Not known to be a water quality issue.

7 Thibeault Dep., 170:5-15, 172:2-17. The Executive Officer's assertions are plainly  
8 contradicted by the Subchapter 15 regulations, which were adopted three years before  
9 closure of the McLaughlin Pit, and, as noted, expressly required monitoring of the  
10 constituents in the McLaughlin Pit, including perchlorate in the event a leak had been  
11 detected.<sup>52</sup>

12 A September 8, 1987 letter from Mr. McLaughlin to Mr. Brown<sup>53</sup> confirmed that  
13 only one boring was completed, but asserted that the single sample taken beneath the  
14 pond was sufficient to conclude that there had been no soil contamination from any  
15 waste that potentially leaked or spilled from the pond during its sixteen year existence.  
16 Ex. 11151. The letter also enclosed test data from the soil samples "taken jointly by D.  
17 Brown of the S.A.R.W.Q.C.B. and W.J. McLaughlin . . ." Notably, Mr. McLaughlin did not  
18 sample for aluminum, barium, strontium, potassium or nitrates, among other chemicals  
19 that are well known ingredients of all fireworks. *Id.*; see Berchtold Dep., 282:12-23.  
20 Further, and inexplicably, McLaughlin's sampling did not include such obvious  
21 constituents of fireworks wastes as nitrates, a major concern even then of the Regional  
22 Board and a well-known ingredient of fireworks in the form of potassium nitrate. Of  
23 course, the proposal by McLaughlin did not mention perchlorate, despite its obvious

24 <sup>52</sup> Mr. Thibeault later testified that, "[i]n hindsight I think yeah if we had known about  
25 perchlorate we would have we should have checked for it." Thibeault Dep., 484:12-14.  
26 But this "hindsight" admission simply ignores the fact that in 1987 Mr. Thibeault and his  
27 staff knew, or should have known, that Apollo was using thousands of pounds of  
perchlorate every month and discharging 3,000 gallons per day of perchlorate-laden  
industrial waste into the McLaughlin Pit. Ex. 10023.

28 <sup>53</sup> Copied on the letter were J. Hinton (DHS), M. Monsees (EPA), R. Thrash (SCAQMD),  
and S. Van Stockum (S.B. Co.).

1 presence in the waste stream and its listing on Appendix III in the Subchapter 15  
2 Regulations. The letter requested the Regional Board's concurrence that there had  
3 been no soil contamination from the McLaughlin Pit.

4 Also on September 8, 1987, Mr. McLaughlin, on behalf of Ken Thompson sent a  
5 letter to Mathew Monsees of USEPA, following up on his July 27, 1987 letter and  
6 formally requesting permission to burn the materials that remained in the pond in  
7 potential violation of numerous State and Federal regulations. Ex. 10848. The letter  
8 reiterated Mr. McLaughlin's conclusion that no soil contamination had occurred based on  
9 the previously discussed samples he had "mutually taken" with Mr. Brown of the  
10 Regional Board. Mr. Brown, among others,<sup>54</sup> was copied on the letter; however, there is  
11 no indication that Mr. Brown or anyone else from the Regional Board advised the EPA  
12 that the letter's conclusion was suspect given that Mr. McLaughlin's sampling, at best,  
13 obtained only one sample 2 to 4 inches below the pond. See Berchtold Dep., 284:1-7.

14 According to Mr. McLaughlin's letter, "the pit and its contents are under the review  
15 of several agencies: The California Department of Health Services, the San Bernardino  
16 County Department of Environmental Health, the Santa Ana Regional Water Quality  
17 Control Board, the South Coast Air Quality Management Control District, and the Rialto  
18 Fire Department, as well as the U.S. Environmental Protection Agency. All have their  
19 legitimate interests and all insist that their approval of a specific course of action be  
20 conditioned upon the mutual approval of all other involved agencies. This is accepted by  
21 both the owner, Western Precast Products, Inc., and ourselves." Ex. 10848.

22 On September 21, 1987, Mr. McLaughlin, again on behalf of Ken Thompson, and  
23 Mr. O'Brien (of Western Precast) sent a letter to John Hinton, of DHS,<sup>55</sup> seeking  
24 approval to "encapsulate" the material remaining in the pond. Ex. 10126. The letter  
25 indicated that Mr. McLaughlin and Mr. Brown took samples next to and under the pond  
26 in August 1987, and that the Regional Board "concurred" with McLaughlin's conclusion

27 <sup>54</sup> Messrs. Hinton, Thrash and Van Stockum were also copied on the letter.

28 <sup>55</sup> Copied on the letter were Messrs. Brown, Monsees, Thrash, and Van Stockum.

1 that neither the soil nor groundwater had been contaminated. Mr. McLaughlin further  
2 wrote that analysis indicated that the residual in the pit would not sustain combustion, so  
3 he was recommending encapsulation "since there has been no leakage of the material  
4 from the pit into the ground in at least 11 (and possibly 37) years . . ."

5 On September 22, 1987, Mr. Litton, of the Regional Board, wrote in a draft letter  
6 to Mr. McLaughlin advising that "we concur that no soil contamination from the pit has  
7 taken place." Ex. 10127. "We believe that the lack of contamination was due to the  
8 impermeable type of construction of the pit. Therefore, no future soil tests are  
9 necessary."<sup>56</sup> Ex. 10127. The Regional Board's position is contrary to previous  
10 observations of overtopping of the surface impoundment but consistent with their  
11 lackadaisical monitoring requirements as applied to this site. The letter also explained  
12 that Mr. McLaughlin's proposal to encapsulate the waste – which was contemplated  
13 because tests indicated the material in the pond would not burn – was "unacceptable" to  
14 the Regional Board because the material in the pit was considered hazardous and  
15 therefore "would have to be removed and disposed of in a Class I landfill."<sup>57</sup> *Id.* and  
16 McLaughlin Dep., 290:14-19. Encapsulation, as contemplated by Mr. McLaughlin, would  
17 have required the approval of the Regional Board and permits from other agencies.  
18 Berchtold Dep., 290:5-16.

19 On November 10, 1987, Mr. McLaughlin wrote to Ronald Ripley of the Hazardous  
20 Waste and Toxics Control Division of the County Department of Environmental Health  
21 Services, seeking permission to encapsulate the waste remaining in the pond. The letter  
22 stated that application for such permission had previously been made to John Hinton of

23 <sup>56</sup> Based on this letter, Mr. McLaughlin testified that he understood that the Regional  
24 Board was satisfied that the sampling taken from the single boring was sufficient to  
25 determine that the pond had not leaked and that there was no contamination.  
26 McLaughlin Dep., 286:8-287:13; see also McLaughlin Dep., 290:2-13.

27 <sup>57</sup> A file memorandum prepared by Dan Brown and dated September 23, 1987 indicates  
28 that he and Gary Litton met with Mr. McLaughlin on September 22, 1987, and told Mr.  
McLaughlin that encapsulation was unacceptable to the Regional Board. Ex. 10128.  
Because they did not wish to set a precedent, Mr. Brown and Mr. Litton advised Mr.  
McLaughlin that they would need to discuss the issue with Jim Bennett, the Executive  
Officer, and Gerry Thibeault, then a senior engineer, with the Regional Board. *Id.*

1 the Department of Health Services but that, without a decision, the responsibility for the  
2 site was passed to Mr. Ripley's office. Calculations included with the letter reflect that  
3 there were *54,000 pounds* (over 25 tons) of constituents remaining in the McLaughlin Pit  
4 at that time. There is no evidence that Mr. Ripley responded to this letter.

5 On November 23, 1987, Mr. McLaughlin on behalf of Ken Thompson wrote to Mr.  
6 Van Stockum at San Bernardino County, requesting approval to encapsulate the  
7 remaining material in the pond. Ex. 10140. The letter indicated that the possibility of  
8 treating the waste by encapsulation had been discussed with USEPA, California  
9 Department of Health Services and the SCAQMD, and that none of these agencies had  
10 objected. So as of November 23, 1987, Mr. McLaughlin still planned to treat the waste  
11 by encapsulation; not by burning. McLaughlin Dep., 307:6-9. One copy of the letter  
12 includes a "received" stamp from the Rialto Fire Department, dated November 24, 1987,  
13 and handwriting (most likely from a City of Rialto Fire Department official) indicating:  
14 "Waste Products in Pit were Burned 12-4-87. A Second Burn is Scheduled later in  
15 Month – after which the Pit will be removed. Previous requests to State Environmental  
16 Health were denied. So burning the waste was decided upon." Ex. 11157.

17 On December 3, 1987, Mr. Van Stockum of San Bernardino County wrote to  
18 Angelo Bellomo of the State of California, Department of Toxic Substances Control  
19 ("DTSC"), and requested that DTSC "respond in writing to McLaughlin Enterprises  
20 proposal to encapsulate the waste in this pit and leave it on-site."<sup>58</sup> Ex. 10141.  
21 According to the letter, the County had advised Mr. McLaughlin that he needed to  
22 contact DTSC and apply for a TSDF (treatment, storage or disposal facility) or variance  
23 to encapsulate the pond as he proposed - but DTSC had not responded to Mr.  
24 McLaughlin. From this response, the County recognizes the applicability of  
25 Subchapter 15 and USEPA's RCRA regulations. As such, the letter requested "a written

26 <sup>58</sup> This letter was in response to October 27, 1987 correspondence from Mel Knight of  
27 the California Department of Health Services to Mr. Van Stockum, which was sent to "re-  
28 confirm" that the County would remain the lead agency with respect to cleanup of the  
pond. Ex. 10131.

1 reply to their proposal to treat this waste material on-site, *since our Department is not*  
2 *authorized to approve treatment or on-site disposal methods under state law and the*  
3 *memorandum of understanding with your Department.”*

4 So while the County was the “lead agency”<sup>59</sup> with respect to the closure of the  
5 McLaughlin Pit, it had correctly determined that it simply did not have the legal authority  
6 to approve a burn or encapsulation of any ash in the surface impoundment.<sup>60</sup> Van  
7 Stockum Dep., 103:8-105:8. There is no evidence that Mr. Bellomo ever responded to  
8 this letter to either grant or deny Mr. McLaughlin permission to close the surface  
9 impoundment.<sup>61</sup> According to Mr. McLaughlin, Mr. Van Stockum never advised him that  
10 State approval was still needed, and Mr. McLaughlin was not copied on the December 3,  
11 1987 letter. McLaughlin Dep., 322:10–323:10. The hazardous waste in the McLaughlin  
12 Pit was burned the day after the letter was sent, without the requisite State approval.

13 **k. Without Authorization, Pyrotronics and Western Precast**  
14 **Products, Inc. Burned Approximately 54,000 pounds of**  
15 **Class I Hazardous Waste in the McLaughlin Pit; Buried**  
16 **the Pit and Paved Over It - While the Regional Board and**  
17 **the City Watched and Approved**

18 In November 1987, the City of Rialto Fire Department issued Red Devil Fireworks  
19 a permit to burn 5.5 tons of “hazardous waste – pyrotechnic materials” between  
20 November 17 and December 17, 1987 at the 3196 North Locust Avenue property.<sup>62</sup>  
21 Ex. 10138. The permit, intended to allow for disposal of the waste that remained in the

22 <sup>59</sup> Mr. Van Stockum testified that the concept of a “lead agency”, in this sense, merely  
23 meant that the County would act as a clearinghouse; not that it had authority to sign off  
24 on the closure plan. Van Stockum Dep., 92:3-93:13.

25 <sup>60</sup> According to Mr. Berchtold, the Regional Board also lacked authority to authorize the  
26 burn of Class I hazardous waste, and could not approve closure before approval was  
27 given by DHS or DTSC. Berchtold Dep., 298:4-8; 299:1-24.

28 <sup>61</sup> Attached hereto as Exhibit 11233 respectively, are a subpoena for certain records  
from DTSC and their response with some documents, but nothing indicating an approval  
to either burn the material or encapsulate it.

<sup>62</sup> Although the permit was issued for the disposal of 5.5 tons of waste, Mr. McLaughlin  
estimated that, as of November 1987, there were actually **25 tons** of material remaining  
in the pit and specifically recalled that the estimate of 5.5 tons was too low. McLaughlin  
Dep., 303:15–304:5. Other evidence indicates that over 54,000 pounds of Class I  
hazardous waste were burned. Ex. 10138 (12/17/87 Letter); Ex. 11154.

1 McLaughlin Pit, was signed by Pedro Mergil on behalf of Red Devil, (Mergil Dep.,  
2 111:10-112:6), and Thomas McVeitty on behalf of the RFD. Mr. McLaughlin clearly  
3 testified that SCAQMD authorization was required for the burn, (McLaughlin Dep., 56:9-  
4 57:6; 75:12-21; 166:21-25; 182:1-11), and there is no doubt that SCAQMD approval was  
5 in fact necessary, but the permit was *not* approved by the AQMD, and there are no  
6 records from the AQMD indicating that they ever approved the burn. Thrash Dep.,  
7 48:10-50:10; Exs. 10132, 11154.<sup>63</sup> A number of deponents from the Rialto Fire  
8 Department and others indicated that it was the Fire Department's responsibility to  
9 secure the AQMD's approval, but apparently they never did so. Wells Dep., 46:4-13,  
10 61:3-10; Schroeder Dep., 180:14-23; Ex. 10357 (9/28/87 letter from T. McVeitty to R.  
11 Apel indicating that in order for a fireworks company to obtain a permit to burn waste  
12 fireworks, it would need to apply for and obtain an AQMD permit that would then be  
13 countersigned by the RFD); *see also* Ex. 11229. At Exhibit 11229 is a copy of the then  
14 applicable versions of SCAQMD Rules 208 and 444, which make absolutely clear that  
15 the South Coast Air Quality Management District must issue a permit for any open  
16 burning. In short, the City of Rialto, Red Devil, and Western Precast Concrete (Mr.  
17 Thompson's company and Mr. McLaughlin's employer) failed to obtain the necessary  
18 SCAQMD permit to burn the waste in the McLaughlin Pit.

19 Red Devil was assigned the responsibility for conducting the burn by virtue of a  
20 casual arrangement among Red Devil, Mr. McLaughlin and Western Precast. Red Devil  
21 was apparently chosen because it had experience burning fireworks waste material.  
22 McLaughlin Dep., 297:10-20. According to Mr. McLaughlin, personnel from his firm were  
23 simply at the burn as "observers." McLaughlin Dep., 296:8-297:9. The decision to have  
24 Red Devil perform the burn was communicated to members of the Regional Board, the  
25

26 <sup>63</sup> Attached as Exhibit 11231 are the subpoena and response from the South Coast Air  
27 Quality Management District regarding the request from Goodrich Corporation for  
28 records regarding any burning of the McLaughlin Pit contents in December 1987 and  
confirming that the South Coast Air Quality Management District has no records  
indicating they approved the burn.

1 San Bernardino County Department of Health, and the California Department of Health  
2 Services. McLaughlin Dep., 298:22-300:6, 301:7-11, 302:10-18.

3 The burn took place on December 4, 1987, with the ignition starting at  
4 approximately 11:00 a.m. McLaughlin Dep., 311:6-8. Preparation for the burn began  
5 around 8:00 a.m., as follows: the chain-link fence around the pond was taken down, four  
6 55-gallon drums of diesel fuel (over 200 gallons total) were poured into the pit, and then  
7 a "very significant" amount of black powder, approximately one half-inch thick, was  
8 placed on top so that it covered the entire surface area of the pond. Next, six to eight  
9 pairs of magnesium flares, each approximately six to eight inches long, were placed at  
10 various locations around the pond, on top of the black powder, and tied together. The  
11 chain-link fence was laid across the pit to prevent debris from leaving the pond in the  
12 event of fires or explosions. McLaughlin Dep., 173:7-22. At Exhibit 11226, there are  
13 photographs obtained from the County of San Bernardino files showing the preparation  
14 of the McLaughlin Pit just before the burn and then after the burn. One photograph  
15 shows the black powder being sprinkled on the pit contents and another shows a  
16 spectacular explosion and cloud of smoke. The contents of the pit are clearly visible in  
17 another photograph and the cracked and chipped sides of the pit are also visible. They  
18 offer dramatic proof of the substantial quantity of waste pyrotechnic material that had  
19 accumulated in the pit and the illegal and dangerous method of closure that the City of  
20 Rialto, Red Devil and Western Precast Concrete all collaborated in orchestrating (without  
21 the approval of the County, State of California, EPA or the SCAQMD.)

22 The burn lasted for approximately eight hours, burning "bright white" for about four  
23 hours, and Mr. McLaughlin testified that he remained at the site for the duration of the  
24 burn. McLaughlin Dep., 318:14-319:6. There were several explosions during the burn.  
25 McLaughlin Dep., 174:19-21; Ex. 10143, 10849 (12/12/1987 letter from Terry O'Brien to  
26 Steve Van Stockum noting that "[n]o one was injured by the exploding hand grenades or  
27 fireworks."); Cartagena Dep., 201:1-12. Ex. 11226 (photos).

28 Mr. Brown from the Regional Board was present for the site preparation before

1 the burn, and remained on-site for the entire duration of the burn. McLaughlin Dep.,  
2 172:16-18; 174:3-10; 311:6-312:8. He did not express any dissatisfaction with the burn  
3 or the decision to dump gasoline, black powder and other material on the pond to  
4 prepare it for burning. McLaughlin Dep., 319:14-21, 173:7-22. Nor did he ever  
5 apparently express dissatisfaction or concern with the fact that 54,000 pounds of Class I  
6 hazardous waste was burned on his watch without the requisite legal authorization  
7 needed from Federal, State and/or local agencies. See Berchtold Dep., 312:25-313:9.

8 Multiple witnesses confirm that City of Rialto Fire Department personnel were also  
9 present for the burn. McLaughlin Dep., 174:3-8; 302:1-8 (There was a "big red truck with  
10 people attached"); Cartagena Dep., 104:10-19; 202:14-16. Mr. Van Stockum with the  
11 County and his department were invited by Mr. McLaughlin to attend the burn, but they  
12 did not do so. McLaughlin Dep., 317:6-25. Notably, when Mr. McLaughlin invited Mr.  
13 Van Stockum from the County of San Bernardino to the burn, Mr. Van Stockum never  
14 mentioned that State approval was required before the burn could go forward, as he had  
15 written in a letter sent to DTSC on December 3, 1987, the day before the burn.  
16 McLaughlin Dep., 330:3-15.

17 On December 9, 1987, Mr. McLaughlin personally delivered a letter to Mr. Van  
18 Stockum, which was intended to summarize the key events concerning the closure of the  
19 pond. Ex. 10143. The letter stated that the burn occurred on December 4, 1987; that on  
20 December 7 the pit was raked to insure there was no unstable ordnance under the  
21 surface; and that on December 8 residual samples were taken from four random points  
22 in the middle of the pit, consolidated, and sent to Brown and Caldwell Laboratory in  
23 Pasadena for analysis. According to the letter, the analysis demonstrated that "all  
24 metals of concern were apparently vaporized." Ex. 10143.

25 Mr. McLaughlin's letter concluded that "the site is now considered non  
26 hazardous"; requested Mr. Van Stockum's concurrence; and included a block for the  
27 County's signature. Notably, Mr. McLaughlin did not copy the Regional Board, the  
28 SCAQMD, USEPA or the State DTSC on this letter – all agencies which would have



1 needed to approve the treatment of hazardous waste within a surface impoundment and  
2 the closure. Instead, the letter was sent only to the County, after the burn, and even  
3 though the County could not and would not have approved the burn in any event. See  
4 Van Stockum Dep., 103:8-105:8.

5 The County did not sign Mr. McLaughlin's letter, but Mr. Van Stockum did respond  
6 by letter dated December 15, 1987. His letter stated that "[a]fter reviewing the lab  
7 analysis of the residual left in the Western Precast Products 'pit' after the December 7,  
8 1987 burn, it is this Department's opinion that this residual is no longer classified as a  
9 hazardous waste." According to Mr. McLaughlin, this letter "was just as good" as a  
10 signature to his letter, and it effectively ended his involvement with the hazardous waste  
11 surface impoundment. McLaughlin Dep., 327:8-13. But Mr. Van Stockum's deposition  
12 testimony makes clear that his letter should not have been interpreted as the County's  
13 sign off on the burn or approval to simply bury the surface impoundment and pave over  
14 it:

15 Q: That's the December 15, 1987 letter; right? I'll wait for a  
16 minute, let you get that in front of you.

17 A: Yes, that is.

18 Q: Now, that first sentence, we've talked about that a little bit.  
19 She just asked you a question about it and I want to make  
20 sure I understand. If the City of Rialto says, "We saw that  
21 first sentence and we read that as a sign-off by the County of  
22 San Bernardino that it's now okay to fill in the pit, put dirt right  
23 on top of the ashes that are there and pave over it and make  
24 that a concrete pipe manufacturing site", they'd be wrong  
25 about that, wouldn't they?

26 A. I believe so, because it doesn't – that isn't what it says.

27 Van Stockum Dep., 152:14-153:3 (emphasis added). Mr. Van Stockum also testified  
28 that the County did not have authority to authorize closure of a hazardous waste facility,  
including the McLaughlin Pit, by encapsulation or otherwise. Van Stockum Dep., 46:3-7;  
85:13-86:15; 90:5-20. Mr. Van Stockum's superior, Richard Roberts, the Director of the  
San Bernardino County Health Department in 1987, confirmed that same conclusion.  
Roberts Dep., 48:18-23, 50:19-25, 51:1-5.

1 Mr. Van Stockum's December 15, 1987 letter also requested that "Western  
2 Precast Products provide this Department with a letter from the Rialto Fire Department  
3 which explains why this burn was ordered, *since no approval to "treat" the then*  
4 *hazardous waste was granted by the State Department of Health Services.*" According  
5 to Mr. McLaughlin's testimony, this letter was "the first time there was any indication from  
6 the County that such an approval would have been required." McLaughlin Dep., 329:2-  
7 330:2; *see also* McLaughlin Dep., 328:7-10. Mr. Van Stockum never received such a  
8 letter from the City of Rialto Fire Department. Van Stockum Dep., 117:12-22.

9 On December 17, 1987, Terry O'Brien of Western Precast replied to Mr. Van  
10 Stockum's December 15 letter, and stated that the burn was conducted by Red Devil  
11 Fireworks, on material deposited into the surface impoundment by Red Devil, and on  
12 Red Devil's property. The letter asserted that the City of Rialto Fire Department  
13 permitted the burn because it was clear that the material was hazardous. Mr.  
14 McLaughlin didn't recall any discussions regarding the closure after December 1987;  
15 and never heard any dissatisfaction expressed by Mr. Van Stockum, Mr. Brown, or  
16 anyone else from the County, Regional Board or State Department of Health Services.  
17 McLaughlin Dep., 332:6-335:12.

18 On July 12, 1988, Mr. Brown inspected the former location of the McLaughlin Pit  
19 pursuant to Order 78-96. A written report of the inspection prepared that date was  
20 approved by Gary Litton on July 13, 1988. Ex. 10368. The report recommended the  
21 rescission of Order 78-96, on the purported basis that the McLaughlin Pit had been  
22 "appropriately closed." The report stated that the property on which the McLaughlin Pit  
23 was located had been sold to Western Precast Products, Inc., "pursuant to the  
24 stipulation that [Western Precast] would close the pit." Apparently relying on the single  
25 sample that may have been collected two to four inches below the pond, Mr. Brown's  
26 report made the unqualified conclusion that "[n]o evidence of leakage from pit was  
27 found." The report continues:

28

1 Therefore, permits were obtained and contents of the pit burned.  
2 Ashes were appropriately disposed and pit covered over. Red Devil  
3 Fireworks, who are adjacent to Western Precast, contracted to burn  
4 the material along with some of their own.

5 But as will be discussed below, the process by which the remaining material was burned  
6 and then covered was plainly inappropriate under Subchapter 15; indeed, it is clear that  
7 the Regional Board simply ignored these regulations – the very regulations that it was  
8 required to enforce and that were designed, in part, to protect the quality of the waters of  
9 the State of California. On February 8, 1991, the Regional Board rescinded Order 78-96  
10 without ever testing for perchlorate or any other chemicals in the soil or groundwater,  
11 other than the two shallow soil samples for four heavy metals, and without making any  
12 required actions to comply with Subchapter 15. Ex. 10366.

13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

**I. Data Indicates McLaughlin Pit Is a Major Source of  
Perchlorate Contamination**

The McLaughlin Pit is undoubtedly a major source of perchlorate contamination in  
the Rialto/Colton Groundwater Basin as tens of thousands of gallons of unregulated  
wastes were dumped into the surface impoundment for over a decade. This is  
confirmed by the site findings. In fact, it is the only confirmed source of groundwater  
containment on the 160 acre parcel. Cavanaugh Dec., ¶ 62. In March 2006, with the  
approval of the Regional Board staff and USEPA, Emhart and Pyro Spectaculars drilled  
two soil borings near the McLaughlin Pit. Ex. 11221 (Environ 2007). These samples  
revealed the highest soil concentrations of perchlorate throughout the vadose zone ever  
found in the Rialto/Colton Groundwater Basin, ranging from 205,000 u/kg at 20 feet to  
1,800 u/kg at 400-440 feet. *Id.* at App. A, Table A 2. And in April 2006, sampling taken  
from a monitoring well immediately downgradient of the McLaughlin Pit, which was  
installed by Goodrich, contained 10,000 ppb of perchlorate, the highest concentration  
ever recorded in any groundwater sample in the Rialto/Colton Groundwater Basin. *Id.* at  
App. A, Table A 6.

In a confirming statement, Mr. Berchtold, Advocacy Team member and Assistant

1 Executive Officer of the Regional Board, testified in deposition that "the highest  
2 concentration of perchlorate found adjacent to a source were the samples taken from the  
3 McLaughlin Pit." Berchtold Dep., 149:23-150:3; see also Berchtold Dep., 97:23-98:2  
4 (acknowledging data from surveys shows "releases of perchlorate in the vicinity of the  
5 McLaughlin Pit."); see also Saremi Dep., 591:19-23 (McLaughlin Pit past and present  
6 source of perchlorate contamination in Rialto/Colton aquifer).

7 And it should come as no surprise that the construction of the McLaughlin Pit as a  
8 simple residential swimming pool, and nothing more, was wholly unsuitable for use as a  
9 hazardous waste liquid surface impoundment. English Dec., ¶¶ 7, 48-55. It is  
10 disappointing that no staff personnel of the Regional Board ever questioned the  
11 suitability of a gunite and plaster swimming pool for this purpose. As Mr. English's  
12 Declaration makes clear, there is no doubt that the sides and bottom of the McLaughlin  
13 Pit leaked into the surrounding soils and down to groundwater because the gunite  
14 material is not impermeable and unless the thin plaster coating is carefully maintained it  
15 can readily chip and delaminate (as the photographic evidence readily confirms was the  
16 case here). English Dec., 7-25, 48-55. Residential swimming pools are not made to  
17 hold explosive material that auto-ignites – it seems like common sense but this simple  
18 fact escaped all of the members of the Advocacy Team. In fact, the McLaughlin Pit  
19 routinely leaked after the first few years of operation at best (English Dec., ¶¶ 51-54),  
20 and of course it also overflowed as the evidence clearly shows. But the dramatic proof is  
21 in the current soil data taken from beneath the McLaughlin Pit today that shows the  
22 highest levels of perchlorate contamination in the Rialto Colton area and pinpoints the  
23 McLaughlin Pit as the key source of the groundwater contamination in the Basin.

24 **D. Multiple Fires and Explosions at the Pyrotronics' Facility Caused**  
25 **Spills and Releases of Perchlorate**

26 Pyrotronics' Rialto operations were characterized by explosions, fires, and other  
27 incidents involving the spilling of firework composition material. Two major explosions  
28 occurred in 1968, shortly after Pyrotronics began operating. The first explosion took

1 place on February 15, 1968 in one of the press rooms, and caused two or three  
2 fatalities, injured nine others, and destroyed as many as twenty buildings. Ex. 10010;  
3 Hescox Dep., 328:3-12 and Ex. 10805. The press room involved in the explosion was  
4 located west of the main parking lot, in Fire Zone 2, and was used to press potassium  
5 perchlorate-containing "gerbs". Hescox Dep., 381:16-382:18; 383:6-384:23, 545:9-11;  
6 Moriarty Dep., 89:11-19. The City of Rialto Fire Department put the fire out, although fire  
7 hoses that were maintained by Pyrotronics "all over the plant" were probably used as  
8 well and witnesses recall seeing water on the ground after the incident. Hescox Dep.,  
9 327:21-328:2, 328:18-329:5. This press room was never reconstructed; instead it was  
10 dismantled and later used as a burn area to dispose of waste material. Hescox Dep.,  
11 386:9-25.

12 The second explosion, in May 1968, occurred in a remote mixing room and  
13 seriously injured two individuals. The City of Rialto Fire Department incident report  
14 noted there was an "[e]xplosion of powder in a metal building with total destruction of the  
15 building and critically injuring two employees . . ." Exs. 10005, 10679; Moriarty Dep.,  
16 76:12-16. The mixing room where the explosion occurred was known as Building 71.  
17 Ex. 10970. Mergil Dep., 189:20-190:3; Moriarty Dep., 76:12-77:2. Apparently, the  
18 accident was the result of an attempt by certain employees to increase their break time  
19 by manually pushing gondolas carrying powder into the mixing room. Moriarty Dep.,  
20 77:3-21. After this incident, Pyrotronics reverted to the old system of hand mixing  
21 chemicals in smaller quantities; the automated system was never replaced. Moriarty  
22 Dep., 78:11-18; 130:1-19.

23 Mr. Hescox, who was sent to work at the Rialto facility in 1968 as a result of these  
24 two explosions, testified that they were caused by "an accumulation of too many  
25 chemicals." Hescox Dep., 74:12-18. He also testified that the explosions required  
26 "almost every building" to be rebuilt. Hescox Dep., 72:1-2.

27 Many other explosions and fires at Pyrotronics' facility are documented through  
28 1989. These include a 1971 fire in the Fireworks Burn Pit, which consisted of "some

1 type of powder” among other materials. Ex. 10025. RFD records also indicate that  
2 additional fires and explosions in or around the burn pit occurred in 1973, 1976 (twice),  
3 1977, 1979, 1983 (twice) and 1985. 10033, 10044, 10046, 10065, 10636, 10077,  
4 10080. And on December 24, 1980, an explosion “totally destroyed” a storage building  
5 used to house consumer fireworks. Ex. 10645; Apel Dep., 232:17-233:8; Exs. 10072,  
6 10645. Apparently because of the frequency and severity of fires and explosions at the  
7 facility, Pyrotronics even maintained its own fire department and two fire trucks in Rialto.  
8 Moriarty Dep., 170:1-13; 171:6-9; 172:4-9.

9 The frequency of these fires and explosions is indicative of careless practices,  
10 and resulted in the spreading of fireworks debris, containing perchlorate, across large  
11 areas of the 160-acre parcel. Notably, many of these incidents occurred in the vicinity of  
12 raw perchlorate and/or fireworks containing perchlorate.

13 **E. California Fireworks Display Company and the Testing of Aerial**  
14 **Display Fireworks**

15 California Fireworks Display Company was Pyrotronics’ aerial display fireworks  
16 division, and it manufactured, assembled, imported, stored, and tested fireworks on the  
17 160-acre parcel from approximately 1968 until 1979, when the division was sold to  
18 another fireworks operator. Hescoc Dep., 77:15-21; Exs. 10029, 10031, 10034; Bybee  
19 Dep., 100:1-101:9 (California Fireworks Display manufactured Class B aerial shells,  
20 some of which contained potassium perchlorate).

21 California Fireworks Display Company tested display fireworks in the south-  
22 southwest portion of the property, near the Fireworks Burn Pit (in Fire Zone 13), and the  
23 record includes multiple permits for testing of display fireworks which were issued to the  
24 company by the RFD. Exs. 10034, 10037, 10038, 10039, 10042, 10043, 10045, 10047,  
25 10050, 10797; *see also* Hescoc Dep., 172:1-20; 173:21-174:2; 177:19-22. Mr. Hescoc  
26 testified that California Fireworks Display Company tested two to three times per month  
27 in the spring and summer. Hescoc Dep., 174:9-20.

28 Witnesses have testified and documents confirm that a certain percentage of

1 aerial display fireworks fail to completely combust in the air and fall to the ground either  
2 unburned or partially burned.<sup>64</sup> Hescoc Dep., 291:3-12, 367:15-370:3; Shilling Dep.,  
3 269:8-23 (“Always there’s duds.”); Ex. 10362 at pages 3, 13, and 39. Evidence further  
4 indicates that “stars”, a component of aerial fireworks which are often made of  
5 perchlorate, fell to the ground in the location where aerial display fireworks were tested.  
6 Pyrotronics employees were trained to recognize whether the aerial shells being shot  
7 actually detonated or not; and would patrol or clean up the area where duds fell. Hescoc  
8 Dep., 367:24–368:17. These “misfires” just happened on occasion, and it was well  
9 known that a small percentage of shells would be defective Hescoc Dep., 368:9-13;  
10 369:14-370:3. Mr. Moriarty testified that the company sought the RFD’s “standby” during  
11 display fireworks testing in case anything “went wrong”; and noted that “the fallout could  
12 easily set fire to the brush, and in the high wind, it was a disaster . . .” Moriarty Dep.,  
13 372:1-10; 372:17-25.

#### 14 F. Pyrotronics’ Testing of Consumer Fireworks

15 Pyrotronics also tested consumer fireworks on the 160-acre parcel, frequently at a  
16 location that Mr. Apel described as a “dirt mound with a round hole”. Apel Dep., 351:6-  
17 21. Testifying about what appears to be the same location, Mr. Mergil described it as a  
18 “test tunnel”<sup>65</sup> located near the Fireworks Burn Pit; although he indicated that testing was  
19 later moved to a location near the Burn Pipe in Fire Zone 2 because it was closer to their  
20 operations.<sup>66</sup> Mergil Dep., 335:15-337:10; Ex. 10958. Consumer fireworks were also  
21 tested in the parking lot next to the office; originally this location was dirt but it was later  
22 paved with asphalt. *Id.*; see also Moriarty Dep., 108:14-21; 167:2-5; 370:2-5; 371:1-20.

23  
24 <sup>64</sup> A Draft Report issued by the Massachusetts Department of Environmental Protection  
25 in August 2005 confirms that repeated aerial fireworks displays can cause perchlorate  
contamination in soil and groundwater. Ex. 11176.

26 <sup>65</sup> Apparently, material was also burned at the “test tunnel” location in the earlier years of  
Pyrotronics’ operations. Mergil Dep., 338:12-17.

27 <sup>66</sup> Ms. Shilling, who worked for Pyrotronics from 1979 through 1989, testified that  
28 Pyrotronics tested consumer fireworks in the Fireworks Burn Pit, or at least “in the  
general area where I thought the pit was.” Shilling Dep., 64:9-16; 268:1-15; 270:18-25.

1 Pyrotechnics tested consumer fireworks that were manufactured by its Apollo  
2 division, with Richard Doerr and Fred Cairo primarily responsible for these tests. Mergil  
3 Dep., 173:3-19; Shilling Dep., 35:4-11, 16-25. Pyrotechnics also tested fireworks imported  
4 by its Red Devil division. Apel Dep., 353:12-15. During her tenure, Ms. Shilling called  
5 the AQMD to ensure that Pyrotechnics had clearance in advance of consumer fireworks  
6 tests. Shilling Dep., 35:16-18.

7 Mr. Apel testified that Pyrotechnics followed the requirements established by the  
8 Consumer Product Safety Commission, and that samples were tested from each  
9 shipment received by Pyrotechnics. Apel Dep., 352:5. According to Mr. Apel, Pyrotechnics  
10 tested consumer fireworks about once per week, with testing lasting anywhere from one  
11 hour to a full day, although during peak season samples needed to be pulled for testing  
12 on almost a daily basis. Apel Dep., 351:25-352:11; 352:17-25; 378:4-15.

## 13 **V. TROJAN FIREWORKS/ASTRO PYROTECHNICS**

14 In approximately 1971, Trojan Fireworks began manufacturing consumer and  
15 display fireworks at 2298 West Stonehurst in Rialto and in and around the nearby former  
16 military bunkers. See Hescoc Dep., 49:17- 50:18. Trojan operated in Rialto until 1988,  
17 when its display fireworks division, Astro Pyrotechnics and its consumer fireworks  
18 division, Freedom Fireworks, were separately acquired by other fireworks companies  
19 (hereinafter the pre-April 4, 1988 activities of these entities will be collectively referred to  
20 where appropriate as "Trojan").

### 21 **A. Trojan's Manufacturing Operations**

22 Similar to Pyrotechnics' manufacturing operations, many of the consumer and  
23 display fireworks manufactured at Trojan's Stonehurst facility contained the oxidizer  
24 potassium perchlorate, and potassium perchlorate constituted a substantial percentage  
25 of the pyrotechnic composition material at Trojan by weight. Cunard Dep., 467:21-468:7  
26 (perchlorate, including potassium perchlorate specifically, was an ingredient in many  
27 fireworks manufactured by Trojan); Carlton Dep., 110:15-19, 111:23-112:2 (potassium  
28 perchlorate was the second most commonly used oxidizer by Trojan), 160:12-21



1 (potassium perchlorate used as the oxidizer in the "Nite Howler"), 171:11-24 (potassium  
2 perchlorate used as the oxidizer in "Whistle Pete"), 301:25-302:2 (mines manufactured  
3 at plant contained potassium perchlorate), 362:6-17 ("Comets" and "Stars" contained  
4 potassium perchlorate), 364:24-365:13 (beginning in approximately 1980, stars included  
5 within the "Meteoric Shower" contained potassium perchlorate), 390:13-16; 392:15-393:1  
6 (certain "specialty" fireworks items contained potassium perchlorate), 464:19-23, 465:3-  
7 5; 465:13-23 (Trojan used potassium perchlorate in the manufacture of Nite Howlers,  
8 Whistling Petes, and Niagara Falls); 543:20-544:5 (potassium perchlorate was the only  
9 oxidizer used in Nite Howlers and Whistling Petes); Veline Dep., 87:8-21, 88:16-19  
10 (Trojan used potassium perchlorate in the production of stars, whistles, and possibly  
11 fountains.), 222:19-223:8 (Colored stars, whistles, and one or two safe and sane press  
12 items contained potassium perchlorate), 228:6-229:13 (Trojan made "Niagara Falls"  
13 fireworks, which contained potassium perchlorate), 242:19-244:3 (The "prime" which  
14 coated the outside of "stars" contained potassium perchlorate), 281:16-23 (50% to 60%  
15 of the composition used in whistles was perchlorate); Cunard Dep., 467:21-468:7; Autote  
16 Dep., 79:2-7 (both flash powder and whistle powder contained perchlorate), 143:10-  
17 144:5 ("we used potassium perchlorate to make pyrotechnics"), 173:14-19, 198:17-20.  
18 According to a computer printout produced by Leo Autote, a third of the approximately  
19 150 firework formulas used by Trojan included potassium perchlorate, and on average,  
20 potassium perchlorate accounts for 50% of the composition of products that contain  
21 potassium perchlorate. Ex. 11134; Autote Dep., 453:20-455:10 (identifying formulas in  
22 Ex. 11134 as being those used at Trojan before 1988); see also Ex. 11135 (selected  
23 documents from Stuart Carlton's notes indicating wide spread use of perchlorate); Autote  
24 Dep., 456:24-458:16 (identifying exhibit 11135 as "notes of fireworks compositions and  
25 effect studies by Stuart Carlton" made "during the Trojan years"); Ex. 11138, 11136,  
26 11140, 11141 (formulas containing potassium perchlorate).

27 In addition to potassium perchlorate, Trojan also used ammonium perchlorate in  
28 the manufacture of several fireworks products. Carlton Dep., 542:18-543:5 (ammonium

1 perchlorate used periodically in the production of stars), 577:17-24 ("Little Flasher"  
2 contained ammonium perchlorate); Veline Dep., 208:19-209:12 (ammonium perchlorate  
3 was used in some stars and a strobe device), 317:16-21 (60% of the composition used  
4 in a strobe was ammonium perchlorate); Autote Dep., 252:20-253:8 (the "Flasher"  
5 contains ammonium perchlorate), 487:3-14 (the formula for the blue-tip stage gerb was  
6 45% ammonium perchlorate); Exs. 11139, 11137, 11140, 11141 (firework formulas  
7 containing ammonium perchlorate from 1987). Ammonium perchlorate was an  
8 ingredient in seventeen products identified on the print out of Trojan's fireworks formulas,  
9 and ammonium perchlorate makes up, on average, 37% of these seventeen products  
10 compositions. Ex. 11134.

11 **1. Purchase and Storage of Raw Chemicals Including Perchlorate**

12 According to Trojan's former plant manager, Mr. Carlton, Trojan typically ordered  
13 a few thousand pounds of perchlorate at a time, and because chemicals were generally  
14 ordered in quantities sufficient for six months, approximately twice a year thousands of  
15 pounds of potassium perchlorate would be delivered to the Trojan facility on Stonehurst.  
16 Carlton Dep., 381:8-23; 382:11-15; 382:23-25. Indeed, Mr. Carlton could not recall a  
17 year during his eleven-year tenure at Trojan that he did not place an order for potassium  
18 perchlorate. Carlton Dep., 384:12-15.

19 At Trojan, potassium perchlorate and other oxidizers were received in "large  
20 quantities", which were then stored on-site and used as needed. Carlton Dep., 112:14-  
21 23, 473:1-9, 474:6-12 (between 1981 and 1988, Trojan would keep between 500 and  
22 5,000 pounds of perchlorate on the property). Oxidizers, including perchlorate, were  
23 received in metal drums and in paper sacks, typically weighing fifty to one-hundred  
24 pounds. Carlton Dep., 113:14-114:18; Cunard Dep., 205:4-13 (potassium perchlorate  
25 was stored in drums). The metal drums of oxidizers were stored in approximately two to  
26 three trailers at the north end of the Stonehurst property. Carlton Dep., 426:20-427:13;  
27 Veline Dep., 23:16-21 (oxidizers were stored in a shipping container by the weighing and  
28 mixing area upon receipt); Autote Dep., 137:20-138:16, 142:7-144:5 (30 gallon metal

1 drums containing perchlorate were stored in the trailers). Oxidizers were also stored in a  
2 “truck box”, which had been removed from a truck chasis, located near the mixing  
3 rooms. Autote Dep., 440:14-441:20. Moreover, at some point, Trojan purchased a large  
4 amount of chemicals from Pyrotronics and leased an additional building to store those  
5 chemicals at the 3196 N. Locust facility. Autote Dep., 521:15-522:10, Ex. 11133.

## 6                   2.       **Weighing and Mixing of Pyrotechnic Composition**

7               Like the process at Pyrotronics, Trojan’s manufacturing process began with the  
8 weighing and mixing of certain chemicals to create pyrotechnic compositions for use in  
9 Trojan’s fireworks products. During peak season, Trojan made about three to four  
10 batches of mix per day for most fireworks items and about thirty to sixty batches of mix  
11 per day for “cones”. Carlton Dep., 139:11-140:5.

12              Before beginning the weighing and mixing process, the necessary chemicals had  
13 to be procured from the storage areas described above. Drums of oxidizers, including  
14 perchlorate, were taken from storage to a weighing room (described as a portable  
15 building or shed near or connected to a mixing room) where the chemicals needed for a  
16 certain fireworks compositions would be weighed out. Veline Dep., 235:2-10; Autote  
17 Dep., 159:15-161:9 (drums of perchlorate were taken to mixing room, perchlorate was  
18 scooped out of the drums with a metal scoop and weighed before mixing); Veline Dep.,  
19 89:6-91:23 (describing the mixing and weighing rooms), Autote Dep., 163:2-5 (describing  
20 the mixing and weighing rooms). Mr. Veline testified that oxidizer was stored in the  
21 weighing room in approximately 30 gallon metal drums, and that at times multiple drums  
22 of oxidizer were stored in the weighing room. Veline Dep., 96:2-7, 98:6-99:1, 109:7-15;  
23 Carlton Dep., 126:14-127:16; Cunard Dep., 202:17-203:7 (Main chemical storage area in  
24 trailers but some chemicals always kept on hand in the mixing room). And as needed,  
25 the supply of chemicals was replenished from storage. Carlton Dep., 428:12-24.<sup>67</sup>

26 \_\_\_\_\_  
27 <sup>67</sup> When the drums were nearly empty they would simply be “turned over and shaken  
28 into a receiving container, . . . a cardboard keg,” and Mr. Carlton recalled that empty  
perchlorate drums were probably washed out and used as trash containers. Carlton  
Dep. 428:12-24.

1 In the weighing room, oxidizer would be removed from the metal drum with an  
2 aluminum scoop and placed on a scale with a 25 pound capacity. Veline Dep., 89:6-  
3 91:23, 110:1-16. After weighing the oxidizer and the other chemicals to be used in the  
4 composition, all the chemicals were placed into the same container and carried by hand  
5 to the mixing room. Veline Dep., 114:20-115:13; 122:8-13 (chemicals were placed into a  
6 3 to 5 gallon container), 89:6-91:23, 113:2-5; Autote Dep., 204:16-206:1 (chemicals were  
7 placed into a 25 gallon cardboard keg), 206:2-4.

8 The actual mixing at Trojan was done entirely by hand<sup>68</sup> in an aluminum bowl  
9 (described as an ordinary "soup kettle") that had a capacity of approximately 10 to 20  
10 gallons. Carlton Dep., 124:16-17; 124:19-125:20; Veline Dep., 99:11-15 (mixed in a 10  
11 gallon aluminum pot). The composition was mixed in one bowl, and then screened into  
12 another bowl and mixed by hand, and then screened back into the first bowl and mixed  
13 by hand again. Carlton Dep., 134:8-20; see also Veline Dep., 125:7-128:18 (describing  
14 mixing procedure). All of the mixing at Trojan was done in these "soup kettles", except  
15 the composition used in whistles and the composition used in a "stump remover". Autote  
16 Dep., 198:1-7, 200:15-24. The composition used in whistles, which contained  
17 perchlorate, was mixed in a square wooden box to minimize the friction and impact that  
18 occurred in the mixing process because the whistle composition was a more "sensitive  
19 composition." Autote Dep., 198:10-20. And the composition used in the stump remover  
20 was mixed in a "household-type cement mixer." Autote Dep., 200:15-202:14.

21 After mixing, water, taken from a bucket in the mixing room, was added to the  
22 composition and the composition was mixed again by hand. Veline Dep., 133:7-134:6,  
23 137:2-5. Finally, the mixed composition was poured into 2 ½ gallon cardboard kegs and  
24 taken to the press room. Carlton Dep., 140:11-25; 142:3-143:2; Veline Dep., 139:13-  
25 140:1 (mixed composition was put into the same container that it was brought into the  
26 mixing room in, and then that container was taken to the press room).

27 \_\_\_\_\_  
28 <sup>68</sup> The mixing was done by an employee's gloved hand. Carlton Dep., 135:2-7; Veline  
Dep., 128:11-129:1.

1                   **3. Waste Generated in the Weighing and Mixing Process**

2                   Pyrotechnic "live waste", which Mr. Carlton defined as any material with enough  
3 pyrotechnic composition to sustain combustion and often included perchlorate, was  
4 generated as an unavoidable by-product of the weighing and mixing process. Carlton  
5 Dep., 162:1-12. Pyrotechnic dust created by the weighing and mixing of pyrotechnic  
6 compositions would settle on the walls and floor of the weighing and mixing rooms.  
7 Autote Dep., 165:8-21. In fact, because of the amount of dust generated during  
8 weighing and mixing, employees involved in those processes had to wear "dust masks".  
9 Autote Dep., 162:13-19, 165:2-12. Additional live waste was also created in the  
10 weighing and mixing rooms when employees inevitably spilled chemicals while weighing,  
11 mixing, and transporting them. Veline Dep., 115:23-117:1, 326:3-9 ("I recall times  
12 [chemicals] were spilled on the floor in the weighing room or the mixing room.").

13                   Because of the danger presented by the accumulation of live waste, the weighing  
14 and mixing rooms were swept "many times" a day depending on which chemicals were  
15 being mixed or the amount of composition that had been spilled that day; the waste that  
16 was swept up was then temporarily placed in a container in the room. Autote Dep.,  
17 167:7-14; Carlton Dep., 136:5-9; 147:5-19 (composition that would occasionally fall out  
18 of the mixing bowl would be swept off the ground); Veline Dep., 117:3-118:15; Autote  
19 Dep., 165:8-21 (powder dust from weighing operation would get on walls and floor and  
20 would then be swept up). These sweepings would eventually be added to the collection  
21 of "live waste" at the plant, which also included the excess composition from the press  
22 rooms. See Veline Dep., 140:9-143:1 (spilled material would be swept up and taken to  
23 building number 10); Cunard Dep., 226:10-229:11 (excess powder from mixing operation  
24 would be put in a fiberboard container and taken to Building 10). On a weekly basis, the  
25 weighing and mixing rooms were hosed out with water to further prevent the  
26 accumulation of live waste, and the water from the wash out simply spilled out of the  
27 door onto bare earth or, depending on the configuration of the portable weighing and  
28 mixing rooms, onto the surrounding pavement. Carlton Dep., 492:11-493:15; 493:20-25;

1 Autote Dep., 169:9-172:7, 263:19-264:4; Schroeder Dep., 76:1-6, 76:8-77:24, 80:11-21.

2 Employees at Trojan also had to clean residual pyrotechnic composition off of the  
3 equipment used in the weighing and mixing operations on a regular basis. The mixing  
4 bowls were wiped or dusted out with a brush at the end of the work day, and the screens  
5 used in the mixing operation were similarly cleaned with a hand brush before they were  
6 used to mix new compositions. Veline Dep., 190:5-191:14; Carlton Dep., 143:25-145:19.  
7 In addition, the scale in the weighing room had to be cleaned after weighing a chemical  
8 to ensure that the weight of the next chemical would be accurate. Veline Dep., 113:6-  
9 114:15. The excess powder produced from cleaning the weighing and mixing equipment  
10 was placed into containers in the weighing and mixing rooms and collected with the  
11 other "live waste". See Veline Dep., 140:9-143:1 (spilled material would be swept up  
12 and taken to building number 10); Cunard Dep., 226:10-229:11 (excess powder from  
13 mixing operation would be put in a fiberboard container and taken to Building 10).

14 In addition to the actual weighing and mixing of chemicals at Trojan, the strong  
15 winds, which are common in Rialto, further spread pyrotechnic powder throughout the  
16 facility. Because the doors of the portable buildings used for weighing and mixing were  
17 always kept open, these winds would blow pyrotechnic composition out of the mixing  
18 and weighing rooms, and into the surrounding areas. See Autote Dep., 163:2-13 (doors  
19 always remained open in case a fire or explosion occurred in the building), 181:13-17  
20 (recalling that powder dust was occasionally blown out of the weighing room).

#### 21 4. Fireworks Press Operations

22 Trojan used at least three five to six feet tall hydraulic presses in making certain  
23 fireworks products at its Stonehurst operation. Cunard Dep., 451:21-452:4. After the  
24 mixed pyrotechnic composition was delivered to the press room, a pressman would  
25 scoop the composition onto a plate with approximately 49 holes in it, and use his hands  
26 to load the composition into each of the holes in the plate. Veline Dep., 143:21-144:10;  
27 Veline Dep., 143:25-146:10; Carlton Dep., 149:20-150:4 (Trojan's presses usually  
28 produced 49 items at a time). The pressman would compact the composition into the

1 holes with his fingers so that when he picked the plate up the composition would remain  
2 in the holes and not fall out. Veline Dep., 146:3-16. Any excess composition left on the  
3 plate after the holes were filled was swept on to the table on which the plate was being  
4 loaded, and the pressman would scoop this leftover composition off the table with his  
5 hands and use it in loading the next plate. Veline Dep., 145:8-146:3.

6 The plate, once loaded with pyrotechnic composition, was slid into place on the  
7 press. Veline Dep., 146:18-25; Carlton Dep., 150:1-16; 154:4-155:4. The pressman  
8 would pull a lever and the press would compact the powder composition into a certain  
9 product. Veline Dep., 147:8-148:6, Carlton Dep., 154:4-155:4. The compressed  
10 fireworks products would then be sent to another area of the plant for finishing or drying.  
11 *Id.*

12 Because the pressing process involved the use of loose pyrotechnic composition,  
13 the pressing process, like the mixing and weighing processes, also generated "live  
14 waste". Carlton Dep., 162:1-12; Autote Dep., 248:18-22. After pressing fireworks, live  
15 waste would remain on the table and equipment in the press room, and waste would  
16 also fall to the floor during pressing. Carlton Dep., 164:10-165:14; Veline Dep., 153:3-  
17 154:17. This waste from the press room was swept up and collected at least at the end  
18 of each work day when it would be consolidated with the waste from the weighing and  
19 mixing operations in a 2.5 gallon cardboard keg. Carlton Dep., 164:10-165:14. In  
20 addition, any pyrotechnic composition that was not used in the pressing was collected  
21 and handled in the same manner as other live waste at the Stonehurst facility. Carlton  
22 Dep., 202:21-203:14.

23 Like the mixing rooms, the press rooms were washed out with water on a weekly  
24 basis to ensure that no live waste remained in the rooms, and the runoff from the  
25 washing was allowed to run out the door of the building and onto the ground. Carlton  
26 Dep., 494:1-5. Further, because the use of hydraulic presses is necessarily a "messy"  
27 operation, Trojan regularly used solvents to clean accumulated grease and hydraulic  
28 fluid off the presses. Cunard Dep., 455:23-456:1, 456:6-9; Carlton Dep., 495:7-8

1 (solvents were used at Trojan).

2 **B. Trojan's Storage of Live Waste**

3 Generally, the live waste stored at Trojan consisted of production waste, "off-spec  
4 product" manufactured at Trojan, returned firework items, and damaged or faulty  
5 imported firework material. Ex. 10116; Autote Dep., 529:7-530:2. Most of the live waste  
6 from Trojan's operations was kept in Building 10 (identified as such on exhibit 10841),  
7 which was designated for temporary storage. Carlton Dep., 170:13-19; 171:3-8; 206:11-  
8 19; 479:25-480:11; Veline Dep., 199:10-18 ("leftover compositions" were stored in  
9 Building 10). Once a certain amount of waste had accumulated in Building 10, it would  
10 be transported to the Fireworks Burn Pit on Pyrotronics' property for disposal. Carlton  
11 Dep., 170:13-19; 171:3-8; 206:11-19; 479:25-480:11; 488:14-489:21 (approximately  
12 three times a year a Trojan employee would transport live waste to the Fireworks Burn  
13 Pit by truck for burning); Autote Dep., 255:3-256:14; Cunard Dep., 230:9-15 (earlier  
14 some waste would be burned, and in later years, waste would be accumulated in the  
15 Building 10). During times of intense manufacturing at the Trojan facility, live waste  
16 would be removed from Building 10 and burned on a weekly basis, but if not much  
17 manufacturing was occurring at the facility, live waste could remain in Building 10 for a  
18 month before being taken up to the Fireworks Burn Pit. Carlton Dep., 484:7-16. Indeed,  
19 Mr. Autote testified that before it was destroyed in 1987, some live waste had been  
20 stored in Building 10 for approximately a decade. Autote Dep., 373:1-379:21.

21 After the explosion that destroyed Building 10 in 1987, Trojan stored the live  
22 waste from its operations at Bunker E-1. Carlton Dep., 484:22-487:1, 233:15-25; 234:15-  
23 22. According to the minutes of a November 12, 1987 public meeting between Rialto  
24 officials and fireworks companies, Mr. Carlton represented that Trojan was then storing  
25 20,000 to 30,000 pounds of chemicals at the Stonehurst site. Ex. 11096. Mr. Carlton  
26 later confirmed in deposition that this material included "oxidizers and fuels and other  
27  
28



1 additives<sup>69</sup> and that the 20,000 to 30,000 pounds of such material would have been  
2 stored in Bunker E-1 at the Trojan facility in or around November of 1987. Carlton Dep.,  
3 214:13-215:4; 220:17-24. Further, according to a November 5, 1987 letter from Mr.  
4 Carlton to the RFD, 1,000 pounds of "various plant powders" were then stored in Bunker  
5 E-1. Ex. 10709; Carlton Dep., 236:9-24, 237:5-12.

6 Trojan also stored live waste in Bunkers B-1 and B-2. Autote Dep., 256:20-  
7 257:17; Carlton Dep., 490:20-24; Autote Dep., 555:14-20 (damaged or faulty import  
8 material was stored in the magazine). The waste stored in Bunkers B-1 and B-2  
9 included unusable display and consumer fireworks that had been returned to Trojan.  
10 Autote Dep., 550:3-551:19.

### 11 C. Consumer Fireworks Testing

12 At the Stonehurst facility, Trojan tested consumer fireworks that it manufactured  
13 and consumer fireworks that it purchased from other manufacturers. The frequency of  
14 the testing of consumer items varied from once a day to once per week, depending on  
15 the volume of fireworks being purchased or manufactured by Trojan. Carlton Dep.,  
16 69:12-20. And testing was most frequent during Trojan's peak manufacturing season,  
17 from September through mid-June. Carlton Dep., 70:4-17; Carlton Dep., 69:22-70:2  
18 (Typically two or three pieces of each item would be tested). At his deposition, Mr.  
19 Carlton testified that "[a]s long as were pressing anything" testing would occur on at least  
20 a weekly basis. Carlton Dep., 196:20-22. Similarly, Mr. Carlton testified that Trojan  
21 "thoroughly" tested all of the fireworks items that it purchased from other manufacturers.  
22 Carlton Dep., 64:25-65:15 (confirming that such testing occurred between 1977 and  
23 1987).

24 When fireworks were manufactured, pressmen would typically take two or three of  
25 the fireworks made during the day for testing during the lunch break; the pressmen  
26 would light several of the manufactured fireworks "just to make sure things were going

27 <sup>69</sup> According to Mr. Carlton, oxidizers would have comprised at least ten percent of those  
28 chemicals. Carlton Dep., 223:23-224:5.

1 right." Carlton Dep., 196:23-197:6. These tests were done across the driveway from the  
2 office, near the break room, on "**bare earth**". Carlton Dep., 196:20-197:6; 403:5-7;  
3 403:15-16; Veline Dep., 165:14-18 (fountains and cones were tested near the factory);  
4 Veline Dep., 230:1-2 ("Niagara Falls", which contain potassium perchlorate, were tested  
5 across the driveway from the office); Veline Dep., 343:10-345:8 (leftover pyrotechnic  
6 powder from research and development operations was taken out to the testing area  
7 and burned). Powder left over from the day's fireworks manufacturing operations was  
8 also often tested in this area to ensure that the powder "burned right." Autote Dep., 91:4-  
9 92:12; Autote Dep., 248:8-251:21, 252:8-253:8 (Leftover composition containing  
10 perchlorate would be burned at the southwest corner of the site.).

11 In addition, imported consumer fireworks, some of which contained perchlorate,  
12 were also tested east of the B-1 bunker after Trojan received shipments of imported  
13 fireworks. Carlton Dep., 573:11-574:2. This testing area near the B-1 bunker, like the  
14 testing area near the office, was just an unpaved, unprepared dirt area. Carlton Dep.,  
15 247:17-248:25 (The ground near Bunker B-1 consisted of "a mixture of sand and  
16 rocks.").

17 According to Mr. Carlton, after consumer items were tested at the Stonehurst  
18 property, the "burned-out paper tubes, paper, cardboard" and other left-over material  
19 were placed in trash barrels, and then disposed of at a nearby dump. Carlton Dep.,  
20 65:16-66:1; 66:19-67:14, 201:19- 202:19. One witness, however, testified that burnt  
21 composition that remained on the ground after testing was never swept up or otherwise  
22 disposed of in any way. Veline Dep., 204:4-205:3.

#### 23 **D. Trojan's Testing of Aerial Display Fireworks**

24 Trojan tested display fireworks near Bunker B-1. Autote Dep., 34:17-40:20;  
25 Carlton Dep., 247:17-22, Veline Dep., 164:15-165:12, 225:12-226:11 (Roman Candles  
26 containing perchlorate were tested in the bunker area); Autote Dep., 34:17-35:24 (in  
27 1976 and 1977, Trojan tested Class B and C fireworks east of Bunker B-1), 38:8-19;  
28 Autote Dep., 366:18-367:22. As with consumer fireworks, Trojan always tested a few

1 items from each shipment of display fireworks that it received to make sure the fireworks  
2 functioned properly. Carlton Dep., 298:3-7. For such tests, Trojan applied for and  
3 received fireworks display permits from the City of Rialto; the number of permits given to  
4 Trojan demonstrates the frequency with which Trojan tested aerial display fireworks at its  
5 Stonehurst facility. Exs. 10718, 10726 (pre-1988 public display permits); Carlton Dep.,  
6 520:11-521:25 (Public display permits were issued to Trojan for the testing of fireworks).

7 Witnesses have testified that unexploded "stars" containing pyrotechnic material,  
8 including perchlorate, periodically landed on the bare ground in the B-1 Bunker area  
9 after display fireworks testing. Autote Dep., 44:1-19, 47:19-49:10. And although it was  
10 known that occasionally an unexploded "star" would land on the Stonehurst property, no  
11 employee was ever assigned the duty to pick up these unexploded fireworks from the  
12 bare ground. *Id.* Trojan employees did, however, always keep buckets of water on  
13 hand during testing at the B-1 Bunker area to douse items that either malfunctioned or  
14 continued to burn after the test. Carlton Dep., 402:6-403:3.

15 **E. Trojan's Open Burning of Waste Material**

16 **1. Fireworks Burn Pit/Pyrotronics Site**

17 Trojan regularly utilized the Fireworks Burn Pit, located on Pyrotronics' property,  
18 to dispose of powder, defective fireworks and other live waste. Carlton Dep., 205:4-  
19 206:1; 206:4-19; Autote Dep., 278:5-15, 282:9-283:8, 284:8-286:12, 290:6-293:13  
20 (Trojan would typically take a truckload of pyrotechnic waste and damaged or defective  
21 fireworks to Pyrotronics to be burned). Trojan's use of the Fireworks Burn Pit likely  
22 began in the 1980s; before then, in the late 1970s, Trojan routinely burned its waste  
23 material on the bare ground in the B-1 Bunker area. Carlton Dep., 333:24-334:3;  
24 334:14-19; Autote Dep. 38:8-19; 71:6-20; see Ex. 10985 (aerial photograph on which Mr.  
25 Autote identified the B-1 Bunker area). Mr. Carlton recalled that during his eleven-year  
26 tenure at Trojan, waste from Trojan's Stonehurst property was taken to the Fireworks  
27 Burn Pit every month or two. Carlton Dep., 205:17-206:19. And in one instance, Trojan  
28 sent an entire shipment of "Whistle Petes" from Taiwan for burning at the Fireworks Burn

1 Pit due to a 20 percent failure rate of the products that were tested.<sup>70</sup> Carlton Dep.,  
2 205:4-16; see also Veline Dep., 247:1-248:3.

3 For a time in the mid-1980s, the AQMD prohibited any burning in Rialto, but  
4 shortly after the fatal explosion at Trojan in July 1987, discussed below, the AQMD  
5 allowed Trojan to resume burning its waste at the Fireworks Burn Pit. Carlton Dep.,  
6 263:9-264:12; Cunard Dep., 231:10-23 (AQMD prohibited burning in the mid 1980s).  
7 Leo Autote testified that he specifically recalled taking two full stake bed trucks stacked  
8 to the top with waste and defective fireworks during this time up to Pyrotronics Burn Pit  
9 to be burned. The Pyrotronics Burn Pit was so large, according to his testimony, that he  
10 could drive the truck right down into the pit to unload the fireworks boxes and cases  
11 before burning. Autote Dep., 291:9-292:14, 293:6-13, 295:25-296:13. During the time  
12 that the AQMD prohibited burning, the Rialto Fire Department could have permitted the  
13 burning of waste by Trojan, and the other fireworks companies in Rialto, but the Rialto  
14 Fire Department declined to do so, and as such, Trojan and the other Rialto fireworks  
15 companies were required to stockpile large amounts of live waste which included  
16 perchlorate. Carlton Dep., 556:19-559:4.

## 17 2. Bunker B-1 burns

18 In addition to burning its live waste at the Fireworks Burn Pit, Trojan also routinely  
19 burned waste firework materials in the area around Bunker B-1, where Trojan also tested  
20 display fireworks throughout the duration of its Stonehurst operations. Carlton Dep.,  
21 247:17-22. Mr. Carlton indicated that the Bunker B-1 location was "regularly" utilized for  
22 burns of smaller quantities of waste in the neighborhood of a few hundred pounds.  
23 Carlton Dep., 245:7-13; 245:23-246:9; Carlton Dep., 340:8-23; Veline Dep., 339:19-  
24 340:12 (defective fountains were burned at the "B-1 test site"); Autote Dep., 70:23-72:3;  
25 89:4-11 (stars and other firework material were burned east of the B-1 bunker); Carlton  
26 Dep., 561:7-562:7. And Mr. Veline testified that on more than one occasion "bags of

27 <sup>70</sup> Occasionally, Trojan would also send "off-spec" imported fireworks to a nearby  
28 company called Broco for disposal. Autote Dep., 535:17-539:20.

1 leftover composition would be laid out in a line by the bunkers . . . and ignited and  
2 burned." Veline Dep., 248:12-249:20.

3 At the B-1 area, Trojan regularly stacked waste fireworks material including waste  
4 fireworks composition on the bare ground for burning. Carlton Dep., 247:23-248:10;  
5 Veline Dep., 293:22-294:15. Charred remains usually remained after burns in this  
6 location, but it is unclear if those remains were ever removed from the bare ground.  
7 Carlton Dep., 250:3-16. Trojan always had a fire extinguisher and garden hose present  
8 when conducting burns in the B-1 Bunker area, and employees used the extinguisher  
9 and hose to apply water to the burn area when necessary. Carlton Dep., 340:25-341:13.

#### 10 **F. Fires and Explosions**

11 Trojan's operations were clearly sloppy and there were numerous incidents  
12 involving fires and explosions. On July 28, 1987, in one of the worst incidents, a Trojan  
13 employee, Jose Diaz, was killed by an explosion that occurred while he was believed to  
14 have been unloading wastes, including off-specification fireworks and fireworks  
15 chemicals/powder, into a storage trailer at Stonehurst. Ex. 10111 (newspaper article  
16 regarding explosion); Ex. 10112-3 (fire incident reports); Autote Dep., 368:20-371:24.  
17 Because Trojan had been prohibited by the AQMD from burning live waste, they had  
18 accumulated "quite a lot of it, much against our own will" in Building 10, which was  
19 "overstocked" at the time of the explosion. Carlton Dep., 243:16-23; 254:2-5; 421:8-25;  
20 see also Autote Dep., 373:1-379:21 (containers of pyrotechnic waste, some of which  
21 likely contained perchlorate, were stored in Building 10); Cunard Dep., 258:17-259:1  
22 (Building 10 was filled to capacity with excess powder and defective fireworks).

23 Indeed, before the explosion in 1987, Trojan's manufacturing operations were  
24 producing perchlorate containing products such as "Stars" and "Nite Howlers", among  
25 others, and Trojan was generating a couple of pounds of live waste per day in 1987 as a  
26 result of its manufacturing operations. Carlton Dep., 423:3- 426:17. Because of the  
27 AQMD's prohibition on burning, Trojan had no way to dispose of this newly generated  
28 waste, and it was, therefore, sent to the already full Building 10 for storage. Carlton

1 Dep., 426:11-17 (The live waste in Building 10 at the time of the explosion contained  
2 perchlorate.). Mr. Autote also testified that much of the older waste in Building 10, which  
3 had been stored there for approximately ten years, was never burned because no one  
4 knew what type of pyrotechnic waste it was, and thus, Trojan thought it safest to leave it  
5 undisturbed in Building 10. Autote Dep., 384:1-385:16. As such, in 1987, Building 10  
6 had become a virtual bomb.

7 The 1987 explosion destroyed several buildings and storage trailers, and burning  
8 fireworks debris was scattered for hundreds of feet around the plant and outside the  
9 boundaries of the plant, causing local brush fires as well as setting several nearby  
10 buildings on fire. See Ex. 10111 (newspaper article regarding 1987 explosion); Ex.  
11 10119 (letter from Carlton regarding explosion); Autote Dep., 392:13-396:17. Mr. Autote  
12 testified that, after the explosion, he attempted to extinguish several fires in the vicinity of  
13 Building 10 with a hose, but gave up after the City of Rialto Fire Department arrived at  
14 the scene. Autote Dep., 370:2-371:5. After the explosion, Building 10 was completely  
15 destroyed and all that remained was "a hole." Autote Dep., 397:11-22. Some of the  
16 material in stored in Building 10, however, was "propelled during the explosion", and as  
17 such, not all the material in Building 10 was consumed in the explosion. Autote Dep.,  
18 397:23-399:6.

19 A City of Rialto Fire Department report concluded that overstocked and  
20 improperly stored firework wastes and management negligence in employee training led  
21 to the accident. Exs. 10112-13 (RFD fire reports). Mr. Carlton concurred that Trojan  
22 "certainly [had] careless management", improperly stored hazardous materials, and  
23 stored an inordinate amount of live waste in the building, but he maintained that this was  
24 forced upon Trojan by AQMD's refusal to let it burn accumulated waste. Carlton Dep.,  
25 261:10-262:9; see *also* Carlton Dep., 354:9-18 (acknowledging that OSHA issued  
26 violations to Trojan after 1987 explosion).

27 In another incident, two employees were treated for injuries as a result of the  
28 August 4, 1981 ignition of a metal bowl of fireworks composition in a finishing room at

1 the Stonehurst facility. Ex. 10070 (August 7, 1981 fire report); Autote Dep., 360:9-22  
2 (two employees were injured). Mr. Autote testified that, after he saw the fire, he  
3 immediately grabbed a hose and began to apply water to the fire. Autote Dep., 358:21-  
4 359:25. In an effort to avoid this type of accident in the future, Trojan discontinued the  
5 use of the metal bowl, which was thought to be the cause of the fire. Autote Dep.,  
6 363:10-25. In yet another incident, a Trojan employee had to be treated for burns to his  
7 hands after a pyrotechnic device that he was working on ignited. Carlton Dep., 336:25-  
8 338:7; Ex. 10717.

9 **VI. RDF HOLDING COMPANY**

10 In September 1988, RDF Holding Company ("RDF Holding") acquired all of  
11 Pyrotronics' fireworks assets, including those in Rialto, out of bankruptcy. (Ex. 10069);  
12 Kwan Dep., 36:14-37:12; 358:5-12. RDF Holding also acquired 62-acres on the  
13 northern portion of the 160-acre parcel by Grant Deed dated December 7, 1988, but the  
14 property was subsequently transferred to Mr. Wong Chung Ming, who assisted RDF  
15 Holding with the acquisition by purchasing the property for \$3.7 million. Ex. 10163;  
16 Kwan Dep., 35:2-16, 81:1-82:25; 113-14; 238:12-23. Mr. Wong continues to own the  
17 property to the present day, and it is currently leased to two other fireworks operators,  
18 one of which, APE, ultimately acquired RDF Holding Company's assets (and by  
19 extension the former assets of Pyrotronics). Kwan Dep., 80:6-81:15.

20 RDF Holding was formed by David Seto and Victor Kwan for the purpose of  
21 acquiring Pyrotronics from the bankruptcy court. Kwan Dep., 19:2-12; 19:22-20:3.  
22 Messrs. Kwan and Seto originally intended to continue running Pyrotronics' fireworks  
23 business, but the withdrawal of certain Chinese investors from a planned joint venture  
24 caused them to sell the Pyrotronics' fireworks' division shortly after it had been acquired.  
25 Kwan Dep., 32:22-24; 187:4-14.

26 The best picture of RDF Holding's short lived operations is provided by Margot  
27 Cartagena, who began working for Pyrotronics in 1980, then worked for RDF Holding,  
28 and continued on as an employee of Pyrodyne American Corporation and ultimately

1 APE until approximately 2002.<sup>71</sup> According to Ms. Cartagena, when RDF Holding  
2 acquired Pyrotechnics' fireworks division, there was still "quite a lot" of fireworks inventory  
3 on hand, including off-specification fireworks awaiting disposal in Building 51 and  
4 consumer fireworks for resale that were stored in the four main warehouses. Cartagena  
5 Dep., 278:1-280:1. There were also raw chemicals left over "in many different buildings"  
6 at the facility. Cartagena Dep., 33:4-9; 35:1-11. While she worked for RDF Holding, Ms.  
7 Cartagena made plans to purchase fireworks in Asia, cleaned up the property, including  
8 the portion where Apollo manufactured, and repaired some of the buildings. Cartagena  
9 Dep., 34:24-35:7. She also testified that RDF Holding burned on-site some of the off-  
10 specification fireworks contained in Building 51, and this testimony is supported by  
11 documentary evidence. Cartagena Dep., 280:23-281:15; Ex. 10159 (October 1988 burn  
12 of hazardous wastes); Ex. 10161 (November 1988 burn of fireworks material); Ex. 10439  
13 (December 1988 burn); Ex. 10875 (10/30/1988 Application and Permit to Burn).

14 The raw chemicals (including perchlorate) present at the facility when RDF  
15 Holding began operating were left-over from Apollo's<sup>72</sup> defunct manufacturing  
16 operations. Ms. Cartagena had observed these same chemicals on-site in the fall of  
17 1987, when she became manager for Pyrotechnics (which by then had declared  
18 bankruptcy) and began to cleanup the facility.<sup>73</sup> Cartagena Dep., 308:21-310:7; 311:3-8.  
19 But she was given no direction from her general manager, Mr. Apel, to dispose of the  
20

21 <sup>71</sup> On September 30, 1988, Margot Cartagena was "terminated" by Pyrotechnics; the very  
22 next day, October 1, 1988, she was "rehired" by RDF Holding, for whom she worked until  
23 January 20, 1989, when RDF Holding terminated her because its assets had been  
24 acquired by Pyrodyne American Corporation ("Pyrodyne"). Cartagena Dep., 34:24-35:1,  
25 278:1-7 and Ex. 1014; see also Kwan Dep., 42:5-43:5 (Cartagena performed same job  
26 for RDF Holding that she had for Pyrotechnics). In addition to Ms. Cartagena, RDF  
27 Holding also hired all of the other employees that had been working for Pyrotechnics in  
28 Rialto. Kwan Dep., 30:12-25; 47:13-48:2.

<sup>72</sup> It is not clear exactly when Apollo's manufacturing ceased. Mr. Hescox testified that  
the production of consumer fireworks such as cones and base fountains continued after  
Pyrotechnics declared bankruptcy. Hescox Dep., 512:23-513:16, 548:13-549:11.

<sup>73</sup> In fact, these were the same chemicals that Mr. Apel had ordered Ms. Cartagena to  
omit from the company's Hazardous Materials Business Plan, as discussed above.  
Cartagena Dep., 376:1-23.



1 chemicals, and in light of the fact that Pyrotronics was in bankruptcy, it apparently did not  
2 have, or at least did not wish to allocate, funds for proper disposal. Cartagena Dep.,  
3 318:16-21, 322:3-16; 322:23-323:6. Nothing was done by RDF Holding either. It was  
4 not until APE's predecessor Pyrodyne American Corporation ("Pyrodyne") acquired RDF  
5 Holding several years later that Ms. Cartagena received "authorization to go and contact  
6 someone for the disposal" of the raw chemicals. Cartagena Dep., 322:23-323:6.

7 On January 20, 1989, RDF Holding Company's consumer fireworks assets were  
8 purchased for \$1 million by Pyrodyne, which began operating on the 160-acre parcel.  
9 Kwan Dep., 56:4-15 and Ex. 1325; Kwan Dep., 59:7-10. RDF Holding sold to Pyrodyne  
10 the "whole package" it had purchased from Pyrotronics, which included consumer  
11 fireworks, equipment (including fireworks presses), fireworks stands, and trademarks.  
12 Kwan Dep., 58:3-23; 59:14-60:10; 340:11-20; 341:7-14. In 1990, Pyrodyne's name was  
13 changed to American West, Inc., and later to American West Marketing, Inc. On  
14 February 1, 1995, American West Marketing, Inc. and Freedom Fireworks, Inc., merged  
15 into APE, which acquired all of their respective assets and liabilities.<sup>74</sup> APE's operations  
16 continue to the present day, and are discussed below.<sup>75</sup>

17 After Pyrodyne's acquisition of RDF Holding, in early 1990, efforts were finally  
18 initiated to dispose of the above-referenced chemicals that were left over from Apollo's  
19 manufacturing operations. Cartagena Dep., 330:10-22. Ms. Cartagena contacted Findly  
20 Chemical Disposal, Inc. ("Findly") by letter of January 2, 1990<sup>76</sup>, seeking a quote for the

21  
22 <sup>74</sup> Because the entities that acquired Pyrotronics' consumer fireworks assets ultimately  
23 merged into APE, as described, APE may be the successor to Pyrotronics' liabilities.  
Discovery is ongoing in this regard.

24 <sup>75</sup> It should be noted that the Pyrotronics' consumer fireworks that were acquired by RDF  
25 Holding were ultimately distributed by APE. Cartagena Dep., 281:17-282:1. APE also  
26 acquired all of the material in Building 51, which it ultimately disposed of in the same  
27 manner that Pyrotronics had when it was operating. Cartagena Dep., 282:2-18. Further,  
shortly after Pyrodyne's acquisition, certain equipment on hand at the facility was  
inventoried and ultimately sold to an individual; with the money going to Pyrodyne/APE.  
Cartagena Dep., 441:2-442:7.

28 <sup>76</sup> The letter is dated January 2, 1989, but Ms. Cartagena's testimony makes clear that it  
was actually sent on January 2, 1990. Cartagena Dep., 328:25-329:16; 330:6-9.

1 disposal of several listed chemicals including 233 pounds of ammonium perchlorate.  
2 Ex. 10166. Findly responded with a proposal on January 15, 1990. Ex. 10193. But  
3 Findly's services were not ultimately used. Instead, according to Ms. Cartagena,  
4 Longhorn Fireworks, a manufacturer in New Mexico, picked up some of the chemicals.  
5 Cartagena Dep., 354:10-355:2; 359:11-360:3; 688:22-689:12; see also Mergil Dep.,  
6 156:11-25 (recalls men "with suits and masks" coming to the facility to retrieve leftover  
7 chemicals). And, according to Ms. Cartagena's testimony, the balance was taken by an  
8 individual named Dennis Manochio.<sup>77</sup> Cartagena Dep., 361:5-362:1. It is unclear what  
9 ultimately happened to these chemicals, but Ms. Cartagena acknowledged that  
10 Pyrodyne ended up saving about \$15,600 by finding an alternative to hiring Findly for the  
11 disposal and this pleased Ms. Cartagena and presumably her employer, RDF Holding.  
12 Cartagena Dep., 377:8-15, 381:4-16.

## 13 **VII. AMERICAN PROMOTIONAL EVENTS, INC. – WEST**

14 American Promotional Events, Inc. – West ("APE") is one of the largest importers  
15 and distributors of consumer fireworks in the United States. APE, through its  
16 predecessors, began operating on the northern portion of the 160-acre parcel in 1989  
17 and continues to do so today pursuant to a lease with property owner Wong Chung  
18 Ming.

### 19 **A. APE Handles a Large Volume of Potassium Perchlorate-Containing** 20 **Consumer Fireworks on the 160-acre Parcel**

21 Documents and witness testimony establish that a substantial number of  
22 consumer fireworks are received and maintained at APE's Rialto facility. Many of these  
23 products contain potassium perchlorate, (see, e.g., Cartagena Dep., 154:15-155:14,  
24 429:16-430:7; Cunard Dep., 550:3-7), as reflected in "chemical composition" sheets for

25 <sup>77</sup> Ms. Cartagena testified that she did not know Mr. Manochio, but that he was a  
26 collector of fireworks labels who had come to the plant seeking leftover labels from  
27 Apollo. Allegedly, during the course of this conversation, Ms. Cartagena mentioned the  
28 leftover chemicals, and Mr. Manochio happened to agree to take them for use in his own  
fireworks manufacturing. Cartagena Dep., 361:5-371:10. Mr. Manochio passed away in  
1993 and has not testified in connection with this litigation.

1 each firework received that indicate the percentage of various chemicals contained in a  
2 particular firework item. Ex. 10354 at USEPA003202, USEPA003334-335,  
3 USEPA003332-333 (71 out of 82 consumer fireworks tested by APE in Rialto in 2002  
4 contained potassium perchlorate).

5 APE's predecessor reported in 1993 that it was handling up to **169,000 pounds** of  
6 fireworks per year; a Hazardous Materials Inventory Form in 1998 stated that **320,000**  
7 **pounds** of consumer fireworks were on site; and a Business Emergency Plan submitted  
8 by APE to the County of San Bernardino in 2004 estimated that, on average, **175,000**  
9 **pounds** of "pyrotechnic composition", or "consumer fireworks 1.4G", were stored at the  
10 facility. Exs. 18229, 10334, 11025; see also Cartagena Dep., 619:15-620:20. And in  
11 2000, APE reported to San Bernardino County authorities that it had **400,000 pounds** of  
12 pyrotechnical composition on hand, (Ex. 10337), although this figure was "a little under  
13 estimate" according to the testimony of Ms. Cartagena, (APE's plant manager in 2000),  
14 as she believed there were times in 2000 when APE had in excess of 400,000 pounds of  
15 fireworks material on site. Cartagena Dep., 150:2-151:12.

16 APE's current Rialto plant manager testified that in 2006 APE received 220-250  
17 large shipping containers<sup>78</sup> of consumer fireworks. Ms. Cartagena, testified that from  
18 1989-2000 APE received at least 100 of the large metal shipping containers annually  
19 with consumer fireworks from China.<sup>79</sup> Cartagena Dep., 51:20-52:22. The fireworks in  
20 these shipping containers are unloaded, placed on wooden pallets, and transported to  
21 one of the four large warehouses maintained by APE in the north-east portion of the  
22 160-acre parcel; which are numbered as Buildings 76-79 and known as the Green,

23 <sup>78</sup> Matt Wilson testified that these containers were approximately 40' x 8' x 8', and came  
24 to the facility "maxed out" with fireworks. Wilson Dep., 107:15-108:1. He further  
25 estimated that 400-700 cases of fireworks were included in a large shipping container.  
Wilson Dep., 108:17-23. Ms. Salinas testified that the containers were 40 feet long and  
12 feet tall. Salinas Dep., 53:24-54:8.

26 <sup>79</sup> Matt Wilson, the Rialto supervisor from approximately 2001-2007, testified that some  
27 consumer fireworks were always stored at the facility during this time period, though the  
28 quantities varied over the course of the year. Wilson Dep., 75:2-9. The plant generally  
had its largest inventory around June 1, its smallest by June 28, and started to fill up  
again with returns after July 4. Wilson Dep., 187:2-9.

1 Blue, White and Red Warehouses.<sup>80</sup> See, e.g., Salinas Dep., 100:11-102:21.

2 **B. APE Burned “Off-Specification” Fireworks On Site**

3 APE burned damaged, defective or otherwise unsafe fireworks (“off-specification”  
4 fireworks) on the 160-acre parcel in Rialto from 1989 until at least 1993, if not later.  
5 Cartagena Dep., 48:20–50:7; Ex. 10354 at USEPA003203-3204; Wilson Dep., 147:10-  
6 148:4. A majority of the off-specification fireworks that were burned had been returned  
7 by customers after the Fourth of July but damaged during the return process. Cartagena  
8 Dep., 62:4-11; Mergil Dep., 234:25-236:10. Witnesses have testified that the return  
9 process was “a mess”, as boxes full of fireworks were thrown off of trailers with loose  
10 powder spewing out. Mergil Dep., 157:8-158:19; 234:25-236:10. Some fireworks  
11 imported from Asia were also received in poor condition, and other fireworks were  
12 damaged while being handled at the facility. Cartagena Dep., 62:12-16. Loose powder  
13 that had leaked out of fireworks items being handled in APE’s warehouses was also  
14 burned on-site; this material was placed in designated boxes (which included duds and  
15 other material to be burned), or into a bucket, and sent to Building 51, where it was  
16 stored until taken to the burn area for disposal.<sup>81</sup> Cartagena Dep., 137:5-24, 138:3-20;  
17 Mergil Dep., 256:18-257:8; Hescoc Dep., 522:8-13.

18 APE burned material on the northern portion of the property, in Fire Zone 2, at the  
19 same location Pyrotronics began using in 1968. See *supra* Section IV. Material was  
20 burned inside a section of large diameter (*i.e.*, around four feet) concrete pipe (the “Burn  
21 Pipe”) laying horizontal near or on a cement pad which had been the floor of a press  
22 room destroyed in a 1968 explosion (it is not clear when the pipe was added to the burn  
23 location). Cartagena Dep., 48:20-24; 63:1-8 and Ex. 994., 129:21-23, 130:1-12;  
24 Ex. 10354 at USEPA003203-3204 and USEPA003338; Wilson Dep., 56:21-58:17;

25 \_\_\_\_\_  
26 <sup>80</sup> These warehouses are also used for the “repackaging” of returned fireworks and the  
27 assembly of fireworks assortments for sale to consumers. Wilson Dep., 112:24-114:21;  
122:1-8; 122:13-22; 123:7-9.

28 <sup>81</sup> As discussed below, after APE ceased burning such material, these boxes were kept  
in Building 51 indefinitely to await transport to an off-site location.

1 Salinas Dep., 56:13-57:25; 58:4-6. A cage, with a door to allow the insertion of material,  
2 was also built to house flying debris during the burns. Mergil Dep., 143:15-145:15;  
3 Cartagena Dep., 130:9-12; Mergil Dep., 230:25-231:10.

4 Several boxes<sup>82</sup> containing off-specification fireworks would be placed into the  
5 Burn Pipe; then an employee would "toss a fireworks" (which were often loose  
6 "fountains") into the pipe to light the fire and "run" away from the pipe to avoid harm.  
7 Mergil Dep., 143:15-145:15, 229:11-231:16; Cartagena Dep., 63:24-64:10; 449:25-  
8 452:12. As the fire burned, additional boxes would be thrown into the pipe. Mergil Dep.,  
9 229:11-24, 230:18-21, 231:4-232:8. Videotapes of burning in this location by APE show  
10 it to be a haphazard practice generating sparks and ashes. Ex. 11219.

11 After a burn, the residue and ash that remained was swept up and put into 55-  
12 gallon drums,<sup>83</sup> which were taken to the Mid-Valley Landfill in Rialto for disposal. Mergil  
13 Dep., 147:12-148:14; 232:14-23; 233:4-10; 233:13-20; 255:16-19; 260:1-16, 260:21-25,  
14 265:13-17. Next, the Burn Pipe was hosed out with water. Mergil Dep., 349:13-350:3;  
15 Cartagena Dep., 129:8-13, 21-25, 130:1-2. Evidence conflicts as to whether this wash  
16 water ran into a sump or simply remained in the pipe and the burn area until it dried up.  
17 Mergil Dep., 350:5-7, Cartagena Dep., 131:13-16. Before the workers went home, water  
18 was also applied to the smoldering ashes that remained in the pipe at the end of the day,  
19 to ensure the material "was well-enough saturated so there was no more fire hazard."  
20 Cartagena Dep., 214:12-215:11; 454:22-455:9.

21 APE generally burned material at this location at least once or twice a month,  
22 depending on the weather, with three to five boxes typically burned each time. Mergil  
23 Dep., 258:9-25; Cartagena Dep., 120:5-9 (frequency of burns "all depended on the  
24 weather."). Weather permitting, burns might be conducted several times a week during

25 <sup>82</sup> Cardboard boxes to be sent to the Burn Pipe were sealed with red tape; which  
26 differentiated them from boxes containing usable merchandise. Cartagena Dep., 85:1-  
27 15. These boxes, which were approximately 18" x 20", were stored in Building 51.  
Cartagena Dep., 85:16-25; 451:12-22.

28 <sup>83</sup> When the drums were returned from the dump, they were also washed out with a hose  
at the Burn Pipe location. Mergil Dep., 261:14-262:2.

1 September through November, as there was always material on hand to be burned after  
2 the fireworks season in July. Cartagena Dep., 120:10-24. The sizes of the boxes  
3 varied, and so the weight of the material burned was estimated and recorded. *Id.*; Mergil  
4 Dep., 229:13-19.

5 APE's burning of off-specification fireworks was sanctioned by both the City of  
6 Rialto Fire Department and the SCAQMD, and documentary evidence indicates that a  
7 substantial amount of waste material was burned during this time period. Exs. 10168,  
8 10167, 10173, 10174, 10175, 10176, 10180, 10182, 10184, 10185, 10186, 10191,  
9 10226, 10227, 10230, 10231, 10232, 10233; Mergil Dep., 122:22-123:6; 135:15-136:7,  
10 125:17-126:6. During his tenure, Mr. Mergil was responsible for notifying the fire  
11 department prior to conducting burns on site, and he would call the City of Rialto Fire  
12 Department to notify it that a burn was going to take place after ensuring with the airport  
13 that it was not too windy for a burn to go forward. Mergil Dep., 348:6-25.

14 Consultants working for APE sampled the Burn Pipe location in 2003-2004 and  
15 detected perchlorate.

16 **C. APE Regularly Tests Consumer Fireworks at the Rialto Facility**

17 APE and its predecessors have routinely tested consumer fireworks in Rialto  
18 since Pyrodyne purchased RDF Holdings' consumer fireworks assets in 1989. To this  
19 day, APE continues to conduct these tests on a steel table, placed on top of three or four  
20 wooden pallets in an unpaved, gravel area located behind the main office on APE's  
21 leasehold.<sup>84</sup> Cartagena Dep., 164:11-23; Vanderford Dep., 113:22-114:8; 114:14-17;  
22 114:22-23; 116:4-7; 116:16-21; Wilson Dep., 38:5-13 40:10-41:14; 43:24-44:8; 44:19-24;  
23 Ex. 10964; Salinas Dep., 40:21-42:12; 42:10-12; Ex. 11000. The vast majority of these  
24 fireworks contain potassium perchlorate. According to a document prepared by APE  
25

26 <sup>84</sup> At one time, fireworks were also tested near the Burn Pipe. Mergil Dep., 170:15-  
27 171:1; Cartagena Dep., 165:2-4 ("We did a little testing at the burn site."). Mr. Mergil  
28 testified that he tested fireworks near the Burn Pipe when he had significant amount of  
testing to complete; otherwise he tested fireworks at the location behind the main office  
described above. Mergil Dep., 170:3-8, 170:15-172:2.

1 and included in APE's Response to EPA's Section 104(e) Information Request, 71 out of  
2 the 82 different fireworks items tested by APE in 2002 contained potassium perchlorate  
3 in varying percentages as high as 98.68%. Ex. 10354 at USEPA003332-333.

4 Joanne Vanderford, who had primary responsibility for APE's consumer fireworks  
5 testing from 1995 until approximately 2006, testified that fireworks were tested from  
6 September through May of each year and at least once every other week, although  
7 during peak season fireworks could be tested more than once per week and for up to  
8 five hours per day. Vanderford Dep., 32:18-33:25, 233:24-234:6. Noree Salinas took  
9 over Ms. Vanderford's testing responsibilities in or around 2006; she testified that a  
10 portion of each fireworks shipment APE received was tested, except for items that had  
11 already been tested, with shipments arriving in Rialto between September and April.  
12 Salinas Dep., 44:24-45:24; 48:2-15. Multiple witnesses have testified that APE always  
13 tested items imported from China within ten days of their receipt and before any were  
14 distributed to consumers. Vanderford Dep., 166:10-19; Cartagena Dep., 55:15-25 (each  
15 batch of fireworks received from China was tested); Cartagena Dep., 86:12-13 (fireworks  
16 usually tested within a couple days of receiving a shipment); Mergil Dep., 168:24-169:1,  
17 173:16-19 (during Mr. Mergil's tenure, under the auspices of Red Devil/Pyrodyne,  
18 fireworks imported from China were tested "[e]very time a shipment came in.").

19 No specified amount of each shipment was tested, and it appears that the  
20 frequency of testing has varied over the years. During Ms. Cartagena's tenure, APE's  
21 policy was to test each item that was received; and she typically tested 12 pieces from  
22 each shipment. If there were problems, 12 more were tested; if the problems persisted,  
23 even more would be tested. Cartagena Dep., 165:13-21, 167:14-16. According to Ms.  
24 Vanderford, the number of tests varied with the items received. New items were tested  
25 at the standard level; items that had passed previous tests received less scrutiny; and  
26 items that had failed in the past were subject to more rigorous testing. Vanderford Dep.,  
27 208:24-209:4. Ms. Salinas testified that she retains discretion with respect to the amount  
28 of each item she tests, and views her testing as a quality control check of testing now

1 done by the AFSL in China before products are sent to the United States. Salinas Dep.,  
2 55:5-56:3; see also Wilson Dep., 223:6-16 (Because fireworks are now tested by the  
3 AFSL before being sent from China, APE has reduced the frequency of testing in Rialto).  
4 After internal testing by APE, items were sent to Sacramento for testing by the State Fire  
5 Marshall before being sold to consumers. Vanderford Dep., 238:25-239:5.

6 Videos of fireworks testing at APE in the late 1990s reveal it to be a dirty process  
7 that generates sparks, ash and other debris, with ashes swept from the test stand onto  
8 the bare ground below. Exs. 10304, 10300, 10310, 10314. The spent firework item that  
9 remains after a test is placed in a 55-gallon drum to cool down, and then put in the  
10 regular trash for disposal at the "local dump" – the San Bernardino Mid-Valley landfill  
11 adjacent to the facility. Wilson Dep., 41:15-21, 241:16-243:2; Salinas Dep., 44:6-23;  
12 200:25-202:1. Residue and ash resulting from the testing is also placed in the above-  
13 mentioned drum for disposal in the regular trash. Wilson Dep., 42:2-7, 43:2-12.

14 Items that failed testing were pulled out of one of the regular storage warehouses  
15 and transported by forklift to Building 51, where they were maintained while the RFD  
16 sought approval to burn them. Cartagena Dep., 86:12-17, 88:6-8; 169:4-19. But "most  
17 of the time we did not have a burn permit so we could not even burn in there. So we just  
18 stored it in Building 51." *Id.* The storage of such material in Building 51 is further  
19 discussed below.

20 To date, APE's consumer fireworks test site has not been sampled for  
21 perchlorate.

22 **D. APE's Accumulation of Off-Specification Fireworks and Floor**  
23 **Sweepings in Building 51**

24 APE has acknowledged that it now stores fireworks that are damaged, defective,  
25 wet, failed testing, or are otherwise unusable ("off-specification" fireworks) in Building 51,  
26 and that it has done so since at least 1994. Ex. 10354 at USEPA003200-201;  
27 Cartagena Dep., 86:12-17, 88:6-8; 623:20-624:22; see also Cunard Dep., 511:14-25.

28



1 Similarly, sweepings<sup>85</sup> collected from the warehouse floors are placed into boxes located  
2 at the end of the bay door of each warehouse, and these boxes are also taken to  
3 Building 51 to await disposal.<sup>86</sup> Salinas Dep., 114:2-116:5; Wilson Dep., 144:22-145:18;  
4 Cartagena Dep., 137:5-24, 138:3-20; Mergil Dep., 256:18-257:8; Hescocx Dep., 522:8-13.  
5 Off-specification fireworks from APE's Norwalk facility have also been sent to Rialto for  
6 storage in Building 51 on at least one occasion to await "disposition of the bad  
7 product."<sup>87</sup> Cartagena Dep., 579:18-580:1. Because APE has not been permitted to  
8 burn this material since approximately 1994, it now sits in Building 51 for extended  
9 periods of time with no regular plan for its ultimate disposal,<sup>88</sup> and it is unclear what has  
10 happened, or will happen, to some of this hazardous material.

11 There is evidence that APE shipped off-specification material held in Building 51  
12 to California City, California, to be disposed of in a large burn held by the State Fire  
13 Marshall on November 7, 1998<sup>89</sup>, and that off-specification material was similarly sent to  
14 a burn at the city dump in Santa Maria, California in November 1995. Exs. 10354 at  
15 USEPA003204, 1120; Cartagena Dep., 176:5-21, 401:12-17 (one truckload of APE  
16 merchandise taken to Santa Maria). Records indicate that APE sent **40,570 pounds** of  
17

18 <sup>85</sup> These sweepings can contain perchlorate, as, for example, witnesses have testified  
19 that loose fireworks powder fell onto the floor of the warehouses while arrangements  
20 were being prepared for sale. Mergil Dep., 162:13-163:9.

21 <sup>86</sup> According to the current plant manager, Ms. Salinas, APE had about four or five of  
22 these boxes in Building 51 in January 2007. Salinas Dep., 116:11-13; 116:16-117:4.

23 <sup>87</sup> Ms. Cartagena did not know who decided to send such material from Norwalk to  
24 Rialto, but she was unhappy about it because she did not "want problems" and "all duds  
25 are problems." Cartagena Dep., 580:23-581:14.

26 <sup>88</sup> For example, APE's current warehouse manager testified that she does not know  
27 what APE intends to do with certain illegal fireworks, "rework items", and/or damaged or  
28 defective fireworks currently maintained by APE in Building 51. Salinas Dep., 133:6-  
134:2; 135:6-17; 136:15-22

29 <sup>89</sup> Prior to this burn, APE was "crying about the fact that we could not burn no longer on  
30 the property for quite some time", and material was therefore accumulating in Building 51  
31 because AQMD would not allow open burning. Cartagena Dep., 415:20-25, 416:7-16.  
32 The shipment to California City consisted of all fireworks for which APE had  
33 authorization to burn, as well all damaged product on hand, although it did not  
34 completely empty Building 51. Cartagena Dep., 418:8-21. After the burn, such material  
35 began to accumulate again. Cartagena Dep., 420:17-19.

1 consumer fireworks (1,885 cases) to the burn in California City. Ex. 10466. APE also  
2 returned several shipping containers with defective fireworks back to the manufacturer in  
3 China; with estimates ranging from two containers to eleven. Cartagena Dep., 176:5-21.  
4 These shipments were apparently sent in between the California City and Santa Maria  
5 burns. Cartagena Dep., 464:13-465:1.

6 Ms. Cartagena, who was APE's plant manager from 1989 through 2002, testified  
7 that aside from the material sent to California City, Santa Maria or China, a substantial  
8 portion of the remaining off-specification material simply sat indefinitely in Building 51,  
9 which housed "years" of defective fireworks product. Cartagena Dep., 177:11-20. Some  
10 of the off-specification material was burned during that time period, but not a large  
11 amount. Cartagena Dep., 176:5-25. When Ms. Cartagena left APE in 2002, Building 51  
12 – which measures 4,000 square feet – was eighty percent full with accumulated  
13 defective fireworks. Cartagena Dep., 177:21-178:22.

14 APE employees have testified that in 2005 APE sent six to seven truckloads of  
15 material from Building 51 to APE - East's headquarters in Florence, Alabama. But there  
16 appears to be no written record of the contents of these shipments, which were sent  
17 without a hazardous waste manifest and therefore constituted an unlawful transport of  
18 hazardous wastes. Salinas Dep., 137:11-20; 139:15-18; 139:24-140:15; Wilson Dep.,  
19 86:25-88:7. Even Ms. Salinas, who oversaw the loading of material from Building 51  
20 onto the Florence-bound trucks, was unaware of exactly what type of material was being  
21 shipped. Salinas Dep., 137:22-138:7; 141:18-142:4. It is unclear what was done with  
22 this material after its arrival in Alabama. Salinas Dep., 143:16-18; Wilson Dep., 88:8-10.  
23 As of February 8, 2007, there had not been a single off-site transport of material from  
24 Building 51 since the shipment that was sent to Florence, Alabama in 2005, although off-  
25 specification material has since continued to accumulate. Wilson Dep., 88:18-89:6;  
26 90:16-24; Wilson Dep., 145:14-146:3; 146:6-19; Salinas Dep., 145:3-12.

27  
28

1           **E.     Allegations That Ms. Cartagena Intentionally Buried Drums On the**  
2           **160-acre Parcel**

3           On June 11, 2002, an anonymous individual informed the Regional Board that he  
4           had been directed by Ms. Cartagena to bury forty drums containing fireworks waste  
5           material (including perchlorate) at the 160-acre parcel in 1982. Ex. 10463 (Affidavit in  
6           Support of Search Warrant). Kenneth Ayers of the County of San Bernardino District  
7           Attorney's Office investigated this allegation and ultimately submitted an Affidavit in  
8           support of a search warrant seeking to locate these drums. A search warrant was  
9           issued by the San Bernardino Superior Court on November 5, 2002. *Id.*; Ex. 11234.  
10          According to the informant, the drums were buried because Apollo was closing and  
11          needed to get rid of its accumulated waste. *Id.*

12          Mr. Ayers spoke with Ms. Cartagena on multiple occasions during his  
13          investigation, and she told him that if the drums were buried at the property they would  
14          have to be located behind the old maintenance building, as water hydrants and water  
15          lines would preclude burial in other locations. Cartagena Dep., 334:20-335:11, 345:22-  
16          349:14; Exs. 10435, 10460. The alleged burial site identified by the informant (as stated  
17          in the Affidavit) was in the same location described by Ms. Cartagena; however, the  
18          County searched this location and could not locate any drums. Cartagena Dep., 340:8-  
19          341:4; Wilson Dep., 131:3-132:17; 136:3-16; Salinas Dep., 166:8-17; 167:13-20; 167:24-  
20          168:1; 169:24-170:1.

21          Ms. Cartagena testified that she knew nothing about the alleged incident and had  
22          never ordered anyone to bury drums. Cartagena Dep., 337:1-5, 352:13. Mr. Mergil, who  
23          was also interviewed by Mr. Ayers as part of the investigation,<sup>90</sup> stated that he was not  
24          personally aware of any drums being buried, but had heard that employees at one time  
25          had discovered drums which must have been buried at an earlier time, although he had

26          <sup>90</sup> Ms. Cartagena told Mr. Ayers that the only person she felt might fit the limited  
27          description provided of the individual who allegedly ordered the drums to be buried –  
28          someone employed by Apollo for fifteen to eighteen years – was Pedro Mergil.  
Cartagena Dep., 350:24-351:15.

1 not seen them and did not know what happened to them. No other witness has come  
2 forward with information pertaining to the allegations of intentionally buried drums at the  
3 160-acre parcel.<sup>91</sup>

4 The buried drums uncovered by Ken Thompson's contractors in 1987 while  
5 excavating for his building have never been correlated by the County of San Bernardino,  
6 the City of Rialto or the Regional Board with the allegations of buried drums at the  
7 facility.

8 **VIII. DISPOSAL OF CONFISCATED FIREWORKS BROUGHT TO THE 160-ACRE**  
9 **PARCEL BY THE CITY, COUNTY, AND STATE**

10 Included among the off-specification fireworks that have been stored and  
11 disposed of through open burning on the 160-acre parcel are confiscated fireworks sent  
12 to the 160-acre parcel by officials from the City of Rialto (including the Fire and Police  
13 Departments), the California State Fire Marshall, and the County of San Bernardino.

14 Several witnesses have confirmed that confiscated fireworks brought to the facility  
15 by City officials were disposed of in the Fireworks Burn Pit. Apel Dep., 288:5-21; Shilling  
16 Dep., 414:2-11, 414:15-21; 416:18-25. On one occasion, an entire truckload of  
17 confiscated fireworks brought to the 160-acre parcel by the City were burned at the  
18 Fireworks Burn Pit. Apel Dep., 288:5-21. The City of Rialto Fire Department also  
19 brought confiscated fireworks that were burned at the Burn Pipe. Mergil Dep., 250:3-11.  
20 Mr. Mergil testified that a uniformed fire marshal from the City of Rialto Fire Department  
21 would drive onto the facility in an City of Rialto Fire Department pickup truck to arrange  
22 for the burning of confiscated fireworks; which were contained in boxes marked to  
23 indicate that they contained "illegal fireworks from fire department." Mergil Dep., 250:18-  
24 251:16, 251:24-252:13, 253:10-254:24. Boxes designated as such were then stored in

25 \_\_\_\_\_  
26 <sup>91</sup> A July 18, 1987 letter from C.H.J. Incorporated to Ken Thompson indicates that during  
27 sub-excavation operations on the southern portion of the 160-acre parcel, "deteriorated  
28 metal barrels were uncovered", and that the soil was stained and a distinct smell was  
present in that area. The letter indicated that the County Department of Environmental  
Health and the RFD were notified, and that no determination had yet been made  
regarding the content of the substance in the drums. Ex. 11121.

1 Building 51 on-site (along with other off-specification fireworks and pyrotechnic powder),  
2 before they were apparently taken to the Burn Pipe for disposal.<sup>92</sup> *Id.*, Mergil Dep.,  
3 255:16-256:12. Confiscated fireworks included Roman Candles and bottle rockets.  
4 Mergil Dep., 315:9-12, 319:9-16.

5 According to Enselmo Gutierrez of the City of Rialto Fire Prevention Department,  
6 Mr. Mergil picked up confiscated fireworks from the City of Rialto Fire Department (as  
7 well as those confiscated by the Rialto Police Department), and took them back to Red  
8 Devil's facility for storage; records show that material from these Departments was later  
9 disposed in the Fireworks Burn Pit.<sup>93</sup> Gutierrez Dep., 146:19-156:12; 163:19-164:13;  
10 Ex. 10689; see also Shilling Dep., 416:18-25 (recalling conversations with Mr. Mergil  
11 about his receiving confiscated fireworks from the City of Rialto). For example, on  
12 December 14, 1998, Red Devil records indicate that it burned confiscated fireworks from  
13 the Rialto Police and Fire Departments. Cartagena Dep., 118:1-7 and Ex. 1000; see  
14 also Mergil Dep., 115:10-23.

15 There is also evidence that on several occasions the State Fire Marshall's office  
16 sent confiscated fireworks to the Pyrotronics facility for disposal. Hescox Dep., 342:24-  
17 343:1-6, 343:13-22; 346:10-347:21; 465:12-466:7. Recently, in or around 2005, seized  
18 and confiscated merchandise from the State Fire Marshall's office, in cooperation with  
19 the County, was sent to APE's facility to be stored in Building 51. This was apparently  
20 done due to DTSC's refusal to allow disposal by burning anywhere in California, and the  
21 confiscated fireworks are therefore awaiting shipment to an off-site disposal location  
22 which may include Florence, Alabama. Trout Dep., 281:7-284:8; see also Salinas Dep.,  
23 133:6-18; 205:1-8 (confiscated fireworks from the fire or sheriff department of Los

24 \_\_\_\_\_  
25 <sup>92</sup> Though unequivocal about the fact that the RFD brought confiscated fireworks to the  
26 Rialto facility which were then stored in Building 51, Mr. Mergil did express some  
uncertainty as to whether or not these fireworks were ultimately burned on-site. Mergil  
Dep., 315:13-20.

27 <sup>93</sup> According to Mr. Gutierrez, Chief McVeitty made the decision that confiscated  
28 fireworks should be turned over to Red Devil for handling. Gutierrez Dep., 161:21-  
162:16.

1 Angeles or San Bernardino County are currently stored in Building 51).<sup>94</sup>

2 **IX. COUNTY OF SAN BERNARDINO AND ROBERTSON'S READY MIX**

3 In 1999, two years after the discovery of perchlorate in the Rialto/Colton  
4 Groundwater Basin (Saremi Dep., 71:17-72:3), the Regional Board staff approved a soil  
5 washing operation on the former bunker area previously used by fireworks companies  
6 for the storage of pyrotechnic materials including oxidizers. Ex. 20325 (CAO No. R8-  
7 2003-0013 at 2). This project proposed by the County and its contractor Robertson's  
8 Ready Mix ("Robertson's") in connection with its expansion of the County's landfill. The  
9 County, through Robertson's, proposed a massive excavation project which included soil  
10 washing and the installation of four unlined settling ponds, each 200' x 250' to 350' x 10'  
11 with a capacity of 13 million gallons. Ex. 20083 (May 20, 1999 letter from Mr. Roberts to  
12 Ms. Lass).

13 The direct causal connection between the mobilization of massive amounts of  
14 perchlorate to the groundwater and the millions of gallons of water discharged to the  
15 settling ponds was confirmed by Mr. Thibeault during his March 16, 2007 deposition:

16 Q. Do you have an opinion sitting here today whether or not it [the  
17 settling ponds] caused perchlorate to reach the groundwater  
underneath it?

18 A. Yes.

19 Q. And what is your opinion?

20 A. I believe that the wash water from the aggregate operation  
21 mobilized perchlorate in the subsurface and pushed it down  
towards the groundwater.

22 Thibeault Dep., 59:24-60:6.

23 At first, Mr. Thibeault denied in his deposition that either the Regional Board or his  
24 staff even had any jurisdiction over the settling ponds:

25 Q. And in connection with that [the permitting of the  
26 settling ponds], what investigation, if any did, the

27 <sup>94</sup> APE's current plant manager testified that APE is trying to sell certain illegal fireworks  
28 that are not legal in California and that are stored in Building 51 in Texas, where she  
indicated they are legal.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

regional board staff conduct prior to allowing that gravel washing operation to take place?

A. Well, I think I testified to you that we don't - - I don't think we have a permitting jurisdiction.

*Id.* at 60:8-13. But when confronted with the July 6, 1999 letter from Ms. Lass, a Regional Board staff member, approving Robertson's request for Regional Board approval of the unlined settling ponds, Mr. Thibeault was forced to agree that Ms. Lass, on behalf of the Regional Board staff, authorized Robertson's to place the four ponds directly over historical bunker areas where it was known that fireworks manufacturers had stored materials and products containing perchlorate. Ex. 20084. He was also forced to acknowledge that Ms. Lass approved Robertson's request that these ponds be unlined. Thibeault Dep., 452:22-454:4, Ex. 20084. Indeed, Ms. Lass's letter to Robertson's unambiguously provided: "After careful review, we [Regional Board staff] have determined that the proposed project should not have any negative impact on water quality at the landfill." Ex. 20084.

Extraordinarily, this action by the Regional Board staff was taken without a public hearing, without the approval of the appointed members of the Regional Board, without the imposition of any waste discharge requirements, and without requiring confirmation that the soil in the bunker area underlying the proposed ponds did not contain perchlorate or any other hazardous material. Thibeault Dep., 435:18-438:22.

On March 14, 2001, less than two years after Regional Board staff authorized the construction of the four unlined settling ponds, the County wrote Ms. Lass a letter which advised that perchlorate was being detected in ever increasing numbers in a monitoring well immediately down gradient of the ponds. Ex. 20349. In that letter, the county reported the following increasing perchlorate concentrations:

April 2000	1.9 ppb
July 2000	10 ppb
October 2000	51 ppb
January 2001	250 ppb

1 *Id.* The County's letter asked for a prompt response. *Id.*

2 One month later, on April 17, 2001, the County wrote Ms. Lass a second letter  
3 which restated its concern about the "serious nature" of the rising perchlorate  
4 concentrations in a monitoring well down gradient of Robertson's settling ponds and  
5 urged prompt action:

6 The County . . . is writing this letter to advise the Regional  
7 Water Quality Control Board (RWQCB) that the  
8 concentrations of perchlorate have continued to rise in  
9 samples obtained from groundwater monitoring well F-6 at  
10 the Mid-Valley Sanitary Landfill (BVSL). Retest analyses . . .  
confirm that the concentration of perchlorate in groundwater  
samples obtained in January 2001 ranged from about 250 to  
270 micrograms per liter (ug/l). Before the latest detections,  
perchlorate was measured at 51 ug/l on October 2000.

11 \* \* \*

12 The [County's] SWMD is currently arranging meetings to  
13 discuss the current conditions with the aggregate processing  
contractor, and would like to meet with the RWQCB staff as  
14 soon as possible to discuss the same subject. . . .  
Please be assured that [County's] SWMD recognizes the  
15 serious nature of the current data and is committed to  
investigating the source of the impacts at well F-6.

16 Ex. 20101.

17 More than a year later, on September 26, 2002, within days of the Regional  
18 Board's order rescinding for lack of proof Mr. Thibeault's CAO R8-2002-051 which  
19 sought to place all responsibility and liability for the perchlorate release to the  
20 Rialto/Colton Basin on Kwikset and Goodrich, Mr. Thibeault ordered the County to  
21 investigate the releases of perchlorate to the groundwater (then at a concentration of  
22 800 ppb) mobilized by Robertson's settling ponds. What had heretofore remained  
23 hidden by the Advocacy Team was suddenly disclosed; the County had become the  
24 staff's new target. Mr. Thibeault wrote:

25 The evidence indicates that the bunkers adjacent to the  
26 MVSL [Mid-Valley Sanitary Landfill] were used for storing  
explosives, ordinance, propellant, and pyrotechnic chemicals  
27 (including perchlorate salts), on property that now belongs to  
the County. . . . In addition, gravel washing operations on  
28 county property may have contributed to mobilization or  
spread of perchlorate. Perchlorate has been detected in  
groundwater in groundwater downgradient of the County's



1 properties (the former bunker area, and the MVSL) . . . [in]  
2 concentrations in excess of 800 ppb.

3 Ex. 20385 (September 26, 2002 letter from Mr. Thibeault to Mr. Miller at 2).

4 In January 2003, Mr. Thibeault issued CAO R8-2003-0013 which required the  
5 County to clean up the perchlorate contamination coming from its property where the  
6 settling ponds were located. What had been known by the Advocacy Team since at  
7 least April 2001, now was suddenly crystal clear: "it is evident that perchlorate is being  
8 discharged to groundwater from property that is currently owned by the County." Ex.  
9 20325 (CAO R8-2003-0013 at 3). By January 2003, the monitoring well down gradient  
10 of the settling ponds reported a concentration of 1,000 ppb of perchlorate. Ex. 20325  
11 (CAO R8-2003-0013 at 3).

12 When asked if he ever investigated the actions of his staff in connection with their  
13 permitting the unlined settling ponds, Mr. Thibeault testified that because the County had  
14 assumed responsibility for the release there was no need to deal with "those kind of  
15 issues":

16 Q. Did you ever direct any investigation to take place with  
17 regard to how it came to be that these settlement ponds were  
18 allowed to go in unlined over bunker areas where there had  
19 been historical uses of perchlorate, which everyone now  
believes is the major source, if not the sole source, of the . . .  
western plume?

20 A. Given that the County was very cooperative in addressing  
21 the effects of their discharge and they were doing a great job  
22 in – both characterizing the plume and remediating the plume  
and providing replacement water, we didn't feel it was  
necessary to go back in and deal with those kind of issues.

Thibeault Dep., 452:3-15.

23 Later, during cross-examination, Mr. Thibeault changed this testimony, admitting  
24 he talked with his staff about the issue but maintained that he did not know about Ms.  
25 Lass's written approval of the unlined settling ponds:

26 Q. My question is to you, why hasn't the executive officer of  
27 the regional board, who has responsibility for ensuring the  
28 integrity and healthfulness of the groundwater – why haven't  
you undertaken an investigation of your staff . . . so that it

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

won't happen again?

A. Well, you're assuming that I didn't.

\*Objection omitted\*

Q. Did you do that?

A. We have talked internally about the need to -- to be looking for this kind of material in the future, yes.

Q. And who did you talk to specifically?

A. All of the staff that are involved with these kinds of activities.

Q. Were you angry about that?

A. Was I angry. No.

Q. You weren't angry over the fact that your staff had allowed the pond to go forward with inadequate characterization of the soil under the pond which resulted in the discharge of -- I think the right word is massive quantities of perchlorate to the groundwater that have severely impacted its beneficial uses?

A. Okay. Well, first of all, this is the first time I've seen this letter I can recall.

*Id.* at 459:6-460:9. Finally, Mr. Thibeault conceded that his staff's actions negligently caused the County Release:

Q. And Dixie Lass' letter of June 6, 1999 permitted . . . this settling pond operation to go forward, which resulted in significant quantities of perchlorate being released to the groundwater; isn't that correct?

A. Yes.

Q. And so in that sense the mistakes that were made in connection with allowing this to happen . . . were the reason it happened isn't that correct?

\* \* \*

A. Allowed it to happen, yes.

*Id.*, 456:24-457:20.

Q. . . . Isn't it the case, Mr. Thibeault, that every discharge to groundwater in your jurisdiction is something of concern to the staff and the regional board itself?

1 A. Yes.

2 Q. And any proposed discharge to the groundwater requires  
3 careful investigation to determine whether or not it's  
4 potentially harmful to the beneficial uses; isn't that correct?

4 A. Yes.

5 Q. And that wasn't done here, was it?

6 A. It wasn't careful enough.

7 *Id.*, at 463:7-18.

8 **X. THE REGIONAL BOARD'S DECISION TO PROSECUTE GOODRICH**

9 In 1997, the Regional Board requested that its staff perform an investigation into  
10 the perchlorate contamination in the Rialto/Colton Basin. Saremi Dep., 72:6-23. Mr.  
11 Saremi, a Regional Board staff member, was given the task of conducting this  
12 investigation, but in the next five years Mr. Saremi's only attempt to identify persons  
13 potentially responsible for the perchlorate contamination in the Rialto area was a single  
14 trip to the Rialto Historical Society, which yielded a four page report, only one and half  
15 pages of which discussed Goodrich's operations in Rialto. Saremi Dep., 475:9-21.  
16 Indeed from 1997 to 2002, Mr. Saremi chose not to review any of the Regional Board  
17 files pertaining to the 160-acre site, including the McLaughlin Pit, and he did not drive to  
18 the 160-acre site, where he surely would have observed the evidence of  
19 Pyrotronics/Apollo's historical operations and APE's current operations. Saremi Dep.,  
20 85:8-88:8, 101:9-14.

21 After five years of this so-called investigation, the Regional Board staff had either  
22 failed, or chosen not, to discover any evidence regarding Pyrotronics/Apollo's  
23 operations, which, as demonstrated above, (1) involved the use of large amounts of  
24 perchlorate, (2) resulted in multiple fires and explosions on the 160-acre site, and (3)  
25 required the Regional Board staff's oversight in closing a swimming pool full of  
26 pyrotechnic material, including perchlorate, only ten years earlier.

27 Apparently frustrated with years of inaction by the Regional Board staff, on May  
28 23, 2002, Senator Nell Soto wrote Mr. Thibeault, the Regional Board's Executive Officer,

1 asking a number of pointed questions concerning the lack of progress by his staff in its  
2 investigation and cleanup of perchlorate in the Rialto/Colton Groundwater Basin. Ex.  
3 20067. Senator Soto's letter specifically referenced the recently released GeoLogic  
4 Report prepared by the County and which identified various potential sources of  
5 perchlorate contamination and asked, among other questions: (1) what facilities is the  
6 Regional Board aware of as the result of its investigation, other than Goodrich and  
7 Kwikset, that are possible sources of perchlorate in the groundwater (Question 5); and  
8 (2), referencing the GeoLogic Report, "[w]hat effort had been made by the RWQCB to  
9 **correlate the operations of Red Devil Fireworks** and Broco/Denova to perchlorate  
10 contamination?" (Question 6.). Ex. 20067 at 2-3 (emphasis added).

11 On June 6, 2002, Mr. Thibeault, in response to Senator Soto's Question 5,  
12 advised the Senator that the Regional Board staff was unaware of any potential sources  
13 of perchlorate contamination other than Goodrich and Kwikset:

14 We are not aware of any other facilities in the vicinity of the  
15 site that have been identified as having used perchlorate, or  
16 that were subject to a related regulatory enforcement action  
17 in the past. In addition, our investigation concluded that  
18 Goodrich and Kwikset are the most likely sources of  
19 perchlorate based on the time period they operated.

20 Ex. 20058 at 4. And in response to Question 6, Mr. Thibeault wrote:

21 We have not yet pursued additional detailed investigations to  
22 correlate operations at Red Devil and Broco/Denova to  
23 perchlorate contamination. This is because **the preliminary  
24 information we have indicates that these facilities may  
25 not be likely sources.** However, we will attempt to obtain  
26 additional information on these sites. **It appears that the  
27 assembly, storage and shipping of fireworks, and not  
28 necessarily the manufacture of fireworks, which is the  
type of activity that likely would have resulted in a  
release of perchlorate. We have no evidence of disposal  
or use of perchlorate at the current Pyro Spectacular  
facility.** Based on our experience in this region, and the  
information obtained from perchlorate groundwater  
investigations that have been conducted outside of our  
region, it is apparent that solid rocket propellant manufacture  
and research facilities have generally been the primary  
sources of perchlorate forum in groundwater.

*Id.* at 5 (emphasis added). These statements were both false and misleading.

1 Mr. Berchtold conceded, in his deposition, that in 2002 there was information in  
2 the Regional Board's files that demonstrated that Pyrotronics/Apollo manufactured  
3 fireworks on the 160-acre site and that they disposed of significant quantities of  
4 pyrotechnic waste in the swimming pool also referred to as the McLaughlin Pit.  
5 Berchtold Dep., 328:7-20. Mr. Thibeault similarly admitted during his deposition that  
6 evidence regarding the fireworks and gravel washing operations were in his files at this  
7 time:

8 Q. And so in 2002, the regional board had in its files highly  
9 relevant information about the discharge of perchlorate  
10 caused by a fireworks manufacturer; is that correct?

11 A. Yes.

12 Thibeault Dep., 146:1-5. Further, Mr. Berchtold testified that he *personally witnessed*  
13 several violations of Pyrotronics/Apollo's waste discharge requirements regarding the  
14 McLaughlin Pit, and on one occasion when Mr. Berchtold was inspecting the Pit, he  
15 noted there was no freeboard on the Pit and that, due to rainfall, the Pit had actually  
16 overflowed on to the surrounding area. Berchtold Dep., 153:11-14, 176:3-25, 179:4-17;  
17 see *also* Berchtold Dep., 164:10-175:20 (descriptions of other Pyrotronics/Apollo WDR  
18 violations). Contrary to Mr. Thibeault's representations to Senator Soto in 2002, the  
19 Regional Board staff was actually intimately aware of "other facilities in the vicinity of the  
20 site that have been identified as having used perchlorate." Ex. 20058 (June 6, 2002  
21 Letter from Mr. Thibeault to Senator Soto).

22 Nevertheless, Mr. Thibeault did not report to Senator Soto that he, Mr. Berchtold,  
23 and Mr. Holub, all current members of the Advocacy Team, had been aware for many  
24 years of Pyrotronics/Apollo's fireworks *manufacturing* operations on the 160-Acre Site,  
25 *the disposal* of thousands of gallons of Class 1 hazardous wastes at the McLaughlin Pit  
26 that contained perchlorate, and his and his staff's decision to allow its closure without  
27 compliance with Subchapter 15 of the State Water Board's regulations.

28 Moreover, Mr. Thibeault made no reference to the County's soil washing  
operation even though more than a year before Mr. Thibeault's June 6, 2002 letter to

1 Senator Soto, the County reported to Ms. Lass rising concentrations of perchlorate (250-  
2 270 ppb in January 2001) in a monitoring well downgradient of Robertson's aggregate  
3 washing operations and settling ponds, and urged prompt action. Ex. 20349 (March 14,  
4 2001 letter from Mr. Rivera to Ms. Lass). Nor did Mr. Thibeault mention that his staff had  
5 approved the settling ponds without liners or that in his opinion his staff had negligently  
6 caused this release. Thibeault Dep., 456:24-457:20, 463:7-18.

7 Mr. Thibeault's omission of these critical facts regarding confirmed sources of  
8 perchlorate contamination in the Rialto area is especially troubling given that the  
9 Regional Board's own files are the best evidence of the 16 years of fireworks  
10 manufacturing and disposal practices on the 160-Acre Site. Even if the Regional Board  
11 staff members somehow forgot their personal involvement with the McLaughlin Pit and  
12 the gravel washing operations by June 2002 when Mr. Thibeault (with his staff's  
13 assistance) wrote Senator Soto, certainly, those memories were refreshed by the  
14 evidence provided in the April 2002 GeoLogic Report, which identified numerous  
15 possible sources of the alleged contamination, including Pyrotronics/Apollo's  
16 manufacturing operations and the McLaughlin Pit. Ex. 20068 (April 2002 Environmental  
17 Audit Report).

18 On June 8, 2002, Mr. Thibeault, Mr. Berchtold, Mr. Holub, Ms. Sturdivant, and Mr.  
19 Saremi, all members of the Advocacy Team, met with Senator Soto and her staff to  
20 discuss the progress of their investigation. During this meeting, Senator Soto expressed  
21 outrage at the Regional Board staff's failure to timely identify the parties responsible for  
22 the Rialto area's perchlorate contamination and even threatened to have Mr. Thibeault  
23 fired because of the lack of progress by the staff. Saremi Dep., 110:25-113:9; Ex. 20074  
24 (e-mail from Mr. Thibeault to Regional Board). On June 11, 2002, Mr. Thibeault wrote a  
25 detailed e-mail to the members of the Santa Ana Regional Board summarizing his  
26 meeting with Senator Soto, including her threats to have him fired:

27 The Senator said that she was thinking of going to the  
28 Governor and ask why he had me working for the Board,  
since I obviously didn't know what I was doing. She said that

1 she was going to get to the bottom of this matter, and if  
2 necessary, she would hold Senate hearings.

3 Ex. 20074 at 1. Mr. Thibeault confirmed at his deposition that he felt threatened by the  
4 Senator's comments. Thibeault Dep., 191:11-22.

5 In his e-mail to the members of the Regional Board, Mr. Thibeault attempted to  
6 deflect attention from the evidence regarding the McLaughlin Pit in the GeoLogic Report,  
7 which, if examined, would lead directly back to staff negligence. He wrote that:

8 [It] added very little to what [staff] already knew of responsible  
9 parties. . . [and that while] . . . [t]here have been a number of  
10 fireworks manufacturers at the site since Goodrich left, but  
11 information to date indicates that these were just fireworks  
12 assembly companies, and that no actually [sic] manufacturing  
13 took place where perchlorate-containing liquids would have  
14 been present.

15 Ex. 20074 at 2. This statement was demonstrably false, as Pyrotronics/Apollo was one  
16 of the largest manufacturers in the 1970s and 1980s of fireworks in the United States.

17 Mr. Thibeault then continued: "[w]e are still looking into this, but there simply is not  
18 enough (or any) information that would stand reasonable scrutiny in naming any of these  
19 operators yet." *Id.* The record is clearly to the contrary; as demonstrated above, the  
20 Regional Board staff was, at this time, in possession of extensive evidence relating to  
21 Pyrotronics/Apollo's Rialto operations. See Berchtold Dep., 81:12-16 (staff did not  
22 inform the Regional Board of Pyrotronics' operations or its use and disposal of  
23 perchlorate at the 160-acre site).

24 Further, in the most telling section of the email to the Regional Board, Mr.  
25 Thibeault cautioned that if the fireworks companies were now pursued it might "muddy  
26 the waters" of his purported case against Goodrich and Kwikset:

27 It's not yet a dead issue, in fact, as a result of the articles I  
28 sent to you today, a former fireworks company employee  
wants to meet with staff. However, we didn't want to muddy  
the waters and possibly give Goodrich or Kwikset a reason to  
delay the work we are requiring of them.

Ex. 20074. This quote indicates that the staff had made a decision to focus its efforts on  
Goodrich and Kwikset, and no amount of evidence pointing to other parties would be

1 permitted to affect their case against Goodrich and Kwikset.

2       Shortly thereafter, Goodrich and Kwikset were charged by the Advocacy Team,  
3 led by Mr. Thibeault, in CAO R8-2002-0051 ("2002 CAO") as the persons responsible  
4 under Section 13304 for the perchlorate in the Rialto/Colton Groundwater Basin. With  
5 respect to Goodrich, this order was based on one supporting piece of evidence, the one  
6 and a half page document that Mr. Saremi obtained from the Rialto Historical Society.  
7 Saremi Dep., 76:15-77:13. By the 2002 CAO, the Advocacy Team sought to compel  
8 Goodrich and Kwikset to investigate and cleanup the entire basin, and required nothing  
9 of other parties such as Pyrotronics/Apollo, Ken Thompson, Inc., or the County. Ex.  
10 11114 (2002 CAO). The Regional Board, however, ordered the 2002 CAO rescinded  
11 because the Advocacy Team could not prove its allegations against Goodrich and  
12 Kwikset. Ex. 11202 (Resolution No. R8-2003-0070).

13 **XI. THE REGIONAL BOARD STAFF AND THE CITY OF RIALTO REFUSE TO**  
14 **PROSECUTE KEN THOMPSON, INC.**

15       Strangely, Ken Thompson, Inc., who owns the property where the McLaughlin Pit  
16 is located and who agreed in 1987 to fully and properly close and clean up any releases  
17 from the McLaughlin Pit, has never been required by the Regional Board or the City of  
18 Rialto to do anything and has never been the subject of a cleanup and abatement order.  
19 In paragraph 7 of its deed, Ken Thompson, Inc. agreed:

20             Buyer shall take property subject to covenants, conditions and  
21             restrictions of record agreeable to Buyer which would restrict Buyer,  
22             its heirs and assigns, from objecting to Seller, its heirs and assigns,  
23             manufacturing and storing of fireworks, munitions, volatile matter or  
24             related items.

25             ***Buyer agrees to indemnify and hold seller harmless for any and***  
26             ***all requirements of Federal, State and local municipalities for***  
27             ***any requirements for on-site or off-site improvements***  
28             ***necessary to comply with development of Parcels 10 and 11 of***  
29             ***Parcel Map 7173 or otherwise, and Buyer is fully responsible***  
30             ***for all Federal, State and local government requirements . . . .***

31             Buyer covenants to comply with all City and State standards and  
32             requirements in order to develop the subject parcels.

33             Buyer is aware that the subject property contains a fireworks  
34             residual pit of hazardous material, and Buyer is in possession of a  
35             letter dated January 26, 1987 from McLaughlin Enterprises outlining



1 an approach for the clean up of the fireworks residual pit. Buyer and  
2 Seller [Pyrotronics] agree that seller shall credit to Buyer by a  
3 reduction in Buyer's note created in this escrow the sum of 29,800 in  
4 consideration of **Buyer's full and complete release of all Seller's**  
5 **responsibilities related to the fireworks residual pit.**

6 Ex. 11116 (Escrow instructions 4, 6, & 7) (emphasis added); see also Ex. 11215  
7 (Pyrotronics' Motion to Sell Real Property at 5).

8 The Regional Board staff is well aware of the effect of this deed and Ken  
9 Thompson, Inc.'s subsequent responsibility for Pyrotronics/Apollo's use of the  
10 McLaughlin Pit, as it sent Ken Thompson, Inc. an investigation order on February 6,  
11 2004 based on Pyrotronics/Apollo's prior use of the property. Ex. 11115. And the  
12 documents attached to the Regional Board's February 6, 2004 order under California  
13 Water Code Section 13267 further indicated that it was based on Pyrotronics/Apollo's  
14 former operations: "Excerpts from Pyrotronics 1985 Hazardous Materials Disclosure  
15 Form includes the use of 25,000+ pounds per month of potassium perchlorate." Ex.  
16 11115 at 3 and enclosure 3. Moreover, an August 1987 Regional Board Inspection  
17 Report acknowledges that: "Apollo no longer owns the concrete waste pit. They sold the  
18 property to Western Pre-Cast Products, Inc. [Ken Thompson, Inc.]. Western Pre-Cast  
19 Products [Ken Thompson, Inc.] assumed the investigation and cleanup of the [pit] when  
20 they bought the property from Apollo." Ex. 10370 at 2.

21 Although Ken Thompson, Inc., as the owner of the property on which the  
22 McLaughlin Pit resides and the party who specifically took responsibility for its closure, is  
23 the most logical candidate to both compel future work and seek recovery of past costs  
24 from, the Regional Board staff inexplicably refuses to pursue Ken Thompson, Inc. After  
25 receiving the February 2004 work order, Mr. Cowden, a representative of Ken  
26 Thompson, Inc., sent a letter to Mr. Thibeault, indicating that he was "shocked to the  
27 bone" that the Regional Board staff was requiring Ken Thompson, Inc. to conduct an  
28 investigation. Ex. 20077. In response, after well over a year had passed since ordering

1 Ken Thompson, Inc. to conduct an investigation,<sup>95</sup> Mr. Thibeault assured Mr. Cowden  
2 that **nothing** would be required of Ken Thompson, Inc.:

3 [T]he Regional Board will pursue the former owners and operators  
4 responsible for the past discharges, including Goodrich, Emhart and  
5 Pyro Spectaculars, to perform this work. At this time the only  
6 necessary participation by Rialto Concrete Products/[ Ken  
7 Thompson, Inc.] in this work would be to provide reasonable access  
8 to its property.

9 Ex. 20078 (July 8, 2005 letter from Mr. Thibeault to Mr. Cowden at 2). Despite Ken  
10 Thompson, Inc.'s express assumption of responsibility for the McLaughlin Pit, this letter  
11 apparently discouraged the Regional Board staff from requiring Ken Thompson, Inc. to  
12 complete the closure of the McLaughlin Pit, including any necessary corrective action, as  
13 Ken Thompson, Inc. had already promised it would do.

14 Similar to the Regional Board staff's inexplicable failure to prosecute Ken  
15 Thompson, Inc., the City of Rialto also has apparently no interest in pursuing Ken  
16 Thompson, Inc. Rialto initially sued Ken Thompson, Inc., along with other defendants  
17 and alleged dischargers, in federal court in 2004. Ex. 11224 (Rialto's First Amended  
18 and Supplemental Complaint). Then, when Ken Thompson, Inc.'s agent, Mr. Cowden,  
19 wrote simply that "we are doing everything possible to help in this matter" to the Rialto  
20 City Attorney, Robert Owen (Ex. 11218 (Email between Mr. Cowden and Mr. Owen)), the  
21 City of Rialto dismissed Ken Thompson, Inc. Ex. 11222 (Rialto's Second Amended and  
22 Supplemental Complaint). Ken Thompson, Inc. is a "potentially responsible party" under  
23 CERCLA and has wholly failed to complete the key environmental mitigation measure  
24 that the City imposed on him in 1987 as a condition to begin grading the site for his  
25 project—full and complete closure of the McLaughlin Pit. See 42 U.S.C. § 9607(a).  
26 Further, according to Mr. Thompson, Ken Thompson, Inc. did not agree to do anything

27 <sup>95</sup> Mr. Thibeault's July 8, 2005 letter indicated that Mr. Cowden had a conversation with  
28 Mr. Berchtold regarding Ken Thompson, Inc.'s environmental liability, but there is no  
indication as to what was said during that conversation. Ex. 20078 at 1. Further, Mr.  
Thompson testified that he, along with representatives from his company, participated in  
a meeting with Regional Board staff, but aside from Mr. Thompson's testimony that he  
was upset at the meeting and that he discussed providing access to his property, it is  
unclear what transpired at this meeting. Thompson Dep., 159:4-165:6.

1 for the City of Rialto nor did it give anything to the City of Rialto in return for its dismissal;  
2 it appears that the City of Rialto simply decided that it would rather not seek recovery  
3 from the facially liable Ken Thompson, Inc. Thompson Dep., 172:20-174:16.

4 **XII. THE PROPOSED CAO FAILS TO ADDRESS RIALTO AMMUNITION**  
5 **STORAGE POINT AS A SOURCE OF CONTAMINATION**

6 The Notice of Hearing states that one of the purposes of the hearing is to permit  
7 relevant testimony and evidence and hear legal arguments and policy statements  
8 concerning legal responsibility for site investigation and remediation. This section  
9 addresses the activities by the United States Department of Defense ("DOD") at the  
10 Rialto Ammunition Storage Point ("RASP") that is highly likely a source of perchlorate  
11 and trichloroethylene ("TCE") contamination in the Rialto-Colton Basin, which the  
12 Advocacy Staff is attributing to Goodrich. The State Board should find DOD in violation  
13 of the Regional Board's directive of October 24, 2002 and order it to comply.

14 **A. Location and Extent of RASP Site**

15 The RASP covered 2,822.15 acres of land within what is now the northern limits  
16 of the City of Rialto, San Bernardino County, California.<sup>96</sup> "Final Report Operational  
17 History 1941-1945 Rialto Ammunition Backup Storage Point" ("Corps Report"),  
18 Ex. 20270, 2-1. The facility location is seven miles northwest of the City of San  
19 Bernardino and north-northeast of the City of Fontana, in San Bernardino County;  
20 bounded by Linden Avenue (east), Riverside Avenue (north), Sierra Avenue (west), and  
21 Highland Avenue (south); and in parts of Sections 17, 20, 21, 28, and 29 of Township 1  
22 North, Range 5 West, San Bernardino Base and Meridian. *Id.* The existing central  
23 business district of the City of Rialto is located just east of the former RASP site. *Id.*  
24 Remnants of the RASP can still be found in Rialto today, including former berms from

25 \_\_\_\_\_  
26 <sup>96</sup> The RASP site was also referred to as (1) the "Rialto Ammunition Back-up Storage  
27 Point," (2) "Fontana Ammunition Storage Point," (3) "Ammunition Back-up Storage  
28 Facility, Rialto," (4) "Ammunition Back-up Storage Facility, Fontana," (5) "Los Angeles  
Ammunition Back-up Storage Facility," (6) "Los Angeles Ordnance Depot," (7) "Los  
Angeles Back-up Storage Facility," and (8) "Rialto Military Reservation." Ex. 20270, p. 1-  
1.

1 railroad car staging area spurs on the 160-acre parcel, which was located entirely within  
2 the RASP, and concrete ordnance storage igloos southwest of the 160-acre parcel, most  
3 of which were demolished in the 1990's by the County of San Bernardino for the  
4 expansion of the Mid-Valley Landfill.

5 **B. History of RASP Site**

6 The United States acquired the land for the RASP over the course of 1941 and  
7 1942. Corps Report, Ex. 20270, ES-1. Approximately 740 acres of the RASP site were  
8 subsequently developed by the Department of the Army to serve as an ammunition  
9 storage location to support operations in the China-Burma-India Theatre of War. Corps  
10 Report, Ex. 20270, p. 1-2. The Army began construction of the RASP facilities in  
11 February 1942. Corps Report, Ex. 20270, 3-1. On November 16, 1942, the RASP was  
12 activated. Corps Report, Ex. 20270, p. 3-1. Operations at the RASP site continued  
13 through World War II until September 1945. Corps Report, Ex. 20270, 3-1.

14 The RASP site was used as the location for the staging of railcars and storage  
15 munitions, fuses and explosives prior to being shipped off to the Pacific Theater during  
16 World War II from the Port of Los Angeles. Corps Report, Ex. 20270, p. 3-9. The RASP  
17 was necessitated by the limitations on the number of railcars and amount of munitions  
18 that could be safely staged at the Victory Pier at the Los Angeles Port of Embarkation.  
19 Corps Report, Ex. 20270, 3-9. According to the Standard Operating Procedure (SOP)  
20 for explosives handling at the Los Angeles Port of Embarkation, all railcars were to be  
21 routed through the RASP site except in the case of military necessity. Corps Report,  
22 Ex. 20270, App. B, p. 7.

23 Approximately 320,000 tons of ordnance were stored at the RASP site before  
24 being shipped from the Port of Los Angeles. Ex. 20270, p. 3-27. In 1943, an average of  
25 248 railcars per month, or about 8 per day, passed through the RASP site. (Corps  
26 Report, Ex. 20270, p. 3-26.) At times, the volume of railcars per month significantly  
27 exceeded this average, as the Corps Report documents that 461 railcars were received  
28 at the RASP site in March 1944. Ex. 20270, p. 3-26. Based on the 1943 average of 248

1 railcars per month, over 8,000 railcars would have passed through the RASP site during  
2 its nearly three years of operation.

3 The configuration of the RASP is depicted in the General Layout Plan prepared  
4 by the U.S. Army Real Estate Division in 1946 prior to sale of the property. (General  
5 Layout Plan, Ex. 20104; Ex. 20270, p. 3-4. Improvements to the RASP site made by the  
6 military included 20 ordnance concrete storage "igloos"; 40 bunkers for storage of  
7 ordnance-loaded railcars; four magazines for storage of fuses and explosives; facilities  
8 for railcar maintenance and repair, including a locomotive shop; an incinerator; and  
9 seven underground storage tanks.<sup>97</sup> Ex. 20104 (General Layout Plan); Ex. 20270, p. 3-  
10 8. The 20 earthen-covered concrete "igloos" were each 26 feet, 6 inches wide and 81  
11 feet deep. Ex. 20270, p. 3-4. The 20 igloos and four storage magazines collectively  
12 encompassed approximately 37,200 square feet. Ex. 20270, p. 3-26.

13 The operations at the RASP also included the inspection of railcars for conditions  
14 of the contents and to detect attempts at sabotage; repair and maintenance of  
15 locomotives and railcars; recovering damaged bracing and dunnage; consolidation of  
16 partial shipments; and receipt and dispatch of railcars. Ex. 20104 (General Layout  
17 Plant); Ex. 20270 (Corp. Report) p. 3-11. The RASP site was also used to store  
18 ammunition used by troops of the Army Ground Forces training at the Desert Training  
19 Center in the Mojave Desert. Ex. 20270 (Corps Report) p. 1-2.

20 The RASP site operations did not merely involve the "pass through" of railroad  
21 cars, but also involved the staging of the railroad cars and handling and disposal of  
22 munitions. Some of the railcars passing through the RASP had the cargo (*i.e.*,  
23 ordnance) unloaded into the igloos until being reloaded for shipment to the Port.<sup>98</sup>  
24 Documents indicate that as many as nine railcars per month were unloaded. Ex. 2-265

25 <sup>97</sup> The Corps Report states that the City of Rialto removed one tank, four were removed  
26 by "others," and Ecology Control Industries, under contract to the U.S. Army Corps of  
27 Engineers, removed the remaining two storage tanks in 2000. Ex. 20270, p. 3-27.

28 <sup>98</sup> The Corps Report makes no effort to explain why the military would construct the 20  
storage igloos and four magazines for fuzes and explosives (over 37,000 square feet of  
space) if it did not intend to unload railcars and store munitions at the RASP site.

1 (Rialto Ammunition Back-up Storage Point, Historical Report for Month of December,  
2 1943). The Army's SOP suggests that unloading of railcars was a regular occurrence.  
3 For example, the SOP notes that the construction of additional igloos would "increase  
4 the ammunition storage capacity of this installation." Ex. 20270, App. B, p. 8.  
5 Moreover, not only were munitions stored in the igloos, but often for extended periods.  
6 *Id.*, 13.

7 **C. The DOD has violated Regional Board Orders**

8 On October 24, 2002, pursuant to Water Code Section 13267, the Regional  
9 Board issued a "Directive to Submit a Work Plan and Conduct Perchlorate Investigation  
10 in the Vicinity of the Former Rialto Ammunitions Storage Point, City of Rialto, San  
11 Bernardino County, California" ("RB Directive"). Ex. 20272, p. 1. The RB Directive was  
12 issued by the Regional Board, which concluded that "evidence indicates that the U.S.  
13 Department of the Army constructed storage 'igloos' and concrete underground bunkers  
14 for storing fuse and power magazines, explosives, and ordnance, which are likely to  
15 have contained perchlorate salts." Ex. 20272, p. 2.

16 While it did not comply with the RB Directive, in January 2004, the Corps  
17 belatedly submitted the Corps Report, describing aspects of the operational history at  
18 the RASP site. While the Corps Report confirms certain information concerning the  
19 military's operations at the RASP, much of it is unsupported and self-serving. Moreover,  
20 the Corps Report presents only a selected portion of the information gathered by DOD,  
21 as it was released subject to a limited waiver of a claimed attorney work product  
22 privilege, and was based primarily on accounts from an individual who spent minimal  
23 time (perhaps a few hours) at the RASP site during the entire period of operation.  
24 Ex. 20270, p. [intro letter].

25 The Regional Board responded to the Corps Report by letter dated July 29, 2004,  
26 finding the Corps Report to be "incomplete."<sup>99</sup> Ex. 20273 ("RB Letter on Corps Report")

27 <sup>99</sup> A number of factors support the Regional Board's dispute of the findings of the Corps  
28 Report. First, the Corps Report relies extensively on the recollection of Robert K.  
Weyand, Captain, Ordnance Department in the United States Army, who had almost no

1 The Regional Board also stated that it had reviewed records provided by the City of  
2 Rialto that included the following information: (1) approximately 200,000 tons of  
3 explosives, ordnance, and ammunition moved through the RASP over a three year  
4 period; (2) An estimated 5% of the 200,000 tons (or 10,000 tons or 20 million pounds) of  
5 military products containing perchlorate passed through the RASP; and (3) of 7,446 tons  
6 of ammunition returned from overseas to the Port of Los Angeles between January 1944  
7 and June 1945, all damaged material was sent to the RASP to be "recoopered or  
8 destroyed." Ex. 20273, p. 2. The Regional Board concluded, based on review of all  
9 information available to it including the Corps Report, that "there is a more than  
10 adequate basis for suspicion that one or more releases of perchlorate salts could have  
11 occurred during the extensive operations that took place at the RASP site." Ex. 20273,  
12 p. 2. While the Regional Board itself has found that the United States military's activities  
13 at the RASP site are likely source of groundwater contamination in the Rialto area and  
14 that DOD has not complied with its directive, it has taken no action to enforce the RB  
15 Directive nor to address the RASP as a possible source of the alleged perchlorate and  
16 TCE contamination in its submission to the State Board.

17  
18  
19 direct involvement in activities at the RASP site. While the Corps Report notes that Mr.  
20 Weyand "visited the RASP site as part of his responsibilities, the Corps Report does not  
21 clarify that he visited the RASP site just one time as a "courtesy call" to have lunch with  
22 the captain stationed there. Ex. 20271, pp. 28-29. Other than a few hours at the RASP  
23 site on that single occasion, Mr. Weyand was stationed at the Port of Los Angeles and  
24 therefore had no direct observation of the activities and practices at the RASP site. Also,  
25 the Corps Report itself notes that Mr. Weyand's recollection that less than ten percent of  
26 railcars passed through the RASP site en route to the Port is contradicted by the SOP for  
27 the RASP site, which specified that all munitions were to be routed to the RASP site  
28 before proceeding to the Port of Los Angeles. Ex. 20270, pp. 3-13. The SOP was  
prepared in October 1945 as operations were concluding, and therefore largely  
documented the activities at the RASP site. Ex. 20270, App. B, p. 1. In fact, the SOP  
actually describes the procedure in the past tense: "All ammunition and explosives  
shipped by [the Los Angeles Port of Embarkation] were routed through Rialto except in  
case of military necessity." Ex. 20270, App. B, p. 7. The prior version of the SOP, dated  
January 1, 1945, also provided that all ammunition would be routed through Rialto. Ex.  
20270, App. B, p. 2 [of January 1 version]. The Corps Report also relies on Mr.  
Weyand's statement that unloading of railcars was not a common practice (Corps  
Report, Ex. 20270, pp. 3-13) despite the fact that Mr. Weyand was not present at the  
RASP site.

1           **D. TCE Use and Disposal at the RASP Site**

2           Evidence regarding the Army's activities at the RASP site indicates that its  
3 activities very likely resulted in the release of solvents such as TCE.

4           With over 8,000 railcars passing through the RASP site, and an onsite locomotive  
5 used to pull cars along tracks at the site, the Army's operations from 1942 to 1945  
6 included extensive maintenance and repair of railcars and other military equipment.  
7 Ex. 20270, p. 3-16. The General Layout Plan for the RASP site documents that the  
8 improvements at the site included a locomotive shed, an oil house, a parts room, two  
9 storage houses, a railcar inspection pit, a sludge bed, an incinerator, and seven  
10 underground storage tanks. Ex. 20104. These facilities supported the Army's activities  
11 associated with railcar maintenance and repair.

12           Documents confirm that railcar and locomotive repair, maintenance, and  
13 associated activities occurred at the RASP site. For instance, in a report prepared for  
14 the month of April 1944, the Security Officer at the RASP described a "short circuit in the  
15 electrical system of 80 ton locomotive caused fire in one of the traction motors.  
16 Locomotive was tied up several days for repairs." Ex. 20269, p. 2 (Rialto Ammunition  
17 Back-up Storage Point, Historical Report for Month of April, 1944). A report prepared for  
18 April 1945 stated that "a spur has been added to the railroad track at the locomotive  
19 shed for storage of the 30 ton gas locomotive and tank car so that the tank car will be  
20 quickly available for use on any area fire." Ex. 20268, p. 2 (Rialto Ammunition Back-up  
21 Storage Point, Historical Report for Months of April to July, 1945).

22           Railcar maintenance and repair activities are frequently associated with soil and  
23 groundwater contamination. The U.S. Environmental Protection Agency has identified  
24 more than 120 sites of former railcar operations that have been or are on the CERCLIS  
25 list. Ex. 20258, pp. 1-2 (Hazardous Substance Research Center, Environmental Update  
26 #20). More specifically, maintenance areas at rail sites often involve use and improper  
27 disposal of solvents, such as TCE. *Id.* Railcar maintenance and repair typically includes  
28 the following activities involving the use of solvents: oil and grease removal, car and



1 equipment cleaning, rust removal, painting, and paint removal. *Id.* Locomotive  
2 maintenance has been identified as a specific activity that often leads to improper  
3 handling and disposal of spent solvents. Ex. 20259, pp. 2-3 (Fact Sheet from AIG  
4 Environmental).

5 The widespread use of TCE by the DOD has resulted in more than 1,000 military  
6 properties nationwide polluted by TCE. (see, e.g., "How Environmentalists Lost the  
7 Battle Over TCE," *Los Angeles Times*, March 29, 2006.) Railcar and other maintenance  
8 activities at the RASP site would have involved the use of TCE. Contrary to the  
9 Regional Board's unsupported claim that TCE was not available until the early 1950s  
10 (see Advocacy Team Submission, p. 8), TCE use was widespread during the time that  
11 the Army operated at the RASP site (*i.e.*, beginning at least in the early 1940s) and  
12 historical documents indicate that, during World War II, the military was a priority  
13 recipient of supplies. As summarized in a comprehensive study on the history of TCE  
14 use:

15 [In the early 1940s], TCE continued to be very widely accepted for  
16 metal degreasing, and it was reported to be rapidly replacing other  
17 solvents at this time (Byers 1943). ... During World War II, TCE  
18 saw significantly increased use in degreasing metal machinery parts  
19 (Lowenheim and Moran, 1975). Supplies of TCE and other solvents  
20 were controlled so that military demands could be met.  
21 Manufacturers of TCE during the war years included Dow, Du Pont  
22 and Westvaco Chlorine (United States Tariff Commission, 1941-  
23 1945). Ex. 20264, p. 4 ("A History of the Production and Use of  
24 Carbon Tetrachloride, Tetrachloroethylene, Trichloroethylene, and  
25 1,1,1-Trichloroethane in the United States: Part 2—  
26 Trichloroethylene and 1,1,1—Trichloroethane," *Journal of*  
27 *Environmental Forensics* (2000).

28 This summary is corroborated by the government documents from the time of the  
RASP. For example, a report prepared for the Chemical Division Requirements  
Committee identified a need for approximately 220,000,000 pounds of TCE. Ex. 20263,  
p. 3. Of this amount, about 203,000,000 pounds were for use in metals degreasing. (*Id.*)  
Also, a 1946 United States government report states that, at a single plant in West  
Virginia, production of TCE was as high as 4 million pounds per month. Ex. 20262, p. 2

1 ("History of the Chemicals Bureau of the War Production Board").

2 In fact, the "production increase [of TCE] during the war was made necessary by  
3 the heavy demand for use of trichloroethylene as a metal degreasing agent." (*Id.*)  
4 During the closing months of the war, almost 100 percent of TCE was used for metal  
5 degreasing for direct and indirect military use. (*Id.*) A 1944 War Department Technical  
6 Bulletin, directed to "Ordnance Department field personnel," stated: "During maintenance  
7 operations, solvent, dry-cleaning, should be used for the general cleaning of all  
8 automotive, artillery, and other equipment parts which may be coated with oil or grease."  
9 Ex. 20261, p. 1 (Use of Solvent Dry Cleaning, TB 9-850-4). This document also stated  
10 that when solvent was not available through ordnance channels, "it should be purchased  
11 locally." (*Id.*) A 1944 Ordnance Supply Catalog, developed to aid Ordnance personnel to  
12 select and purchase "recommended and approved available materials" includes  
13 trichloroethylene. Ex. 20255, p. 20 (Army Service Forces Catalog ORD 5 SNL K-1).

14 In addition to the information on general use of TCE by the United States military  
15 during World War II, and resulting contamination, evidence exists that TCE would have  
16 been used at the RASP. For example, TCE was used at other Army installations nearby  
17 the RASP site during World War II. In deposition, Harold Augustin, stationed at Camp  
18 Anza in Riverside during World War II, testified that he worked in the ordnance shop  
19 cleaning small arms with TCE. Ex. 20254, p. 6 (Augustin Deposition). Mr. Augustin also  
20 stated under oath that TCE was readily available during World War II. *Id.* at p. 21.

21 Additionally, a July 1993 DERP-FUDS Inventory Project for the San Bernardino  
22 Engineer Depot, a site located within 10 miles of the RASP site that primarily operated  
23 during World War II, states: "U.S. Army used solvents in the railcar and tank degreasing  
24 operations. The grease and solvents were dumped into open pits thereby contaminating  
25 the soil and possibly the groundwater." Ex. 20260, p. 3 (Site Survey Summary Sheet for  
26 DERP-FUDS Site No. J09CA058400, San Bernardino Engineering Depot). Documents  
27 clearly show that not only did RASP conduct maintenance on its trains, but it had a  
28 sludge bed Ex. 20104 (General Layout Plan). Moreover, diagrams of the RASP clearly

1 show a maintenance yard. *Id.*

2 **E. Perchlorate Use and Disposal at the RASP Site.**

3 As concluded by the Regional Board, the RASP operations and substantial  
4 volume of materials passing through the site indicate a strong likelihood that perchlorate  
5 discharges occurred at the RASP site during the Army operations.

6 The RB Letter documents the fact that a significant percentage of the munitions  
7 handled at the RASP site contained perchlorate. Specifically, the RB Letter reports the  
8 following:

- 9
- 10 • Approximately 10,000 tons of military products containing perchlorate  
passed through the RASP site. Ex. 20273, p. 2.
  - 11 • Products handled at the RASP site that contained perchlorate  
include: (1) 81 millimeter mortar projectiles (over 12% potassium  
12 perchlorate); (2) 22 millimeter cartridges (36 % potassium  
perchlorate); (3) 35 millimeter rockets (64% potassium perchlorate in  
13 the flash mix and 8% in the projectile); (4) 40 millimeter grenades  
(68% potassium perchlorate). Ex. 20273, p. 2.

14 A substantial volume of munitions were stored at the RASP site, and an important  
15 role of the RASP site personnel was to inspect these munitions. Ex. 20270, App. B, pp.  
16 12-13. Among other purposes, inspection served to detect munitions, explosives and  
17 other materials that were damaged, off-spec, or otherwise unsuitable for shipment to the  
18 Port for use in the war. While the Corps Report states that no evidence was found of  
19 handling of damaged munitions at the RASP site (Corps Report, Ex. 20270, p. 3-11), the  
20 nature of the operations (storage, handling and inspection of munitions) strongly suggest  
21 that any munitions found to be unsuitable for shipment would likely have been disposed  
22 of at or near the RASP site. This is supported by information presented in the Corps  
23 Report, which includes the following excerpt from an October 1944 document titled  
24 "Report on Explosives Loading and Storage Facilities, Los Angeles Port of Embarkation":

25           Recoopering is done between or around the igloos, one box at a  
26           time. Damaged material is destroyed out in the area. There is no  
27           designated burning ground. Small quantities have been burned in a  
28

1 pit. However, this is now a target range. The 1944 Report is  
2 attached as Exhibit 20256.<sup>100</sup>

3 Not only is there historical evidence that damaged munitions were burned near  
4 the RASP site, but logistical issues also support the conclusion that disposal occurred  
5 on-site. First, given that the RASP site covered about 2800 acres, with only 740  
6 developed with improvements, the Army had ample area (over 2000 acres) to dispose of  
7 munitions without running the risk of transporting such munitions to a distant location.  
8 This is in contrast to the situation at the Port of Los Angeles—where Mr. Weyand was  
9 stationed—which was located in an urbanized area with little or no open area to safely  
10 detonate or otherwise dispose of damaged munitions (hence Mr. Weyand's recollection  
11 of bomb disposal offshore). Further, the risk of transporting damaged munitions to  
12 distant locations would not be practical, as it would unnecessarily increase the risk of  
13 accidental detonation or explosion of such damaged munitions during transit. These  
14 factors (and the October 1944 Monthly History Report for the RASP site quoted above)  
15 indicate that burning of damaged munitions at the RASP site most likely occurred.

16 With over 10,000 tons of perchlorate-containing munitions stored at the RASP site  
17 during the Army's tenure, even a small rate of damaged munitions would have resulted  
18 in disposal of perchlorate. For example, a damaged munition rate of 1% would have led  
19 to disposal of about 100 tons of perchlorate-containing material in a three year period.

20 **XIII. USE OF CHILEAN NITRATE FERTILIZER CANNOT BE DISREGARDED AS A**  
**SOURCE OF PERCHLORATE CONTAMINATION**

21 Overwhelming evidence indicates that Chilean nitrate fertilizer used in citrus  
22 groves and other agricultural activities in the Rialto-Colton Basin is a source of the  
23 perchlorate found in many of the affected wells in the Rialto-Colton Basin. National,  
24

25 <sup>100</sup> The Corps Report discounts this evidence of burning of munitions at the RASP site  
26 based on a statement by Mr. Weyand that any burning would have been limited to  
27 damaged wooden bracing material or dunnage, and that munitions would not have been  
28 burned at the RASP site. (Corps Report, Ex. 20270, p. 3-14.) Mr. Weyand's view  
appeared to be based largely, if not entirely, on his experience at the Port of Los  
Angeles and in Riverside (as he was never stationed at the RASP site). (Corps Report,  
Ex. 20270, p. 3-14.)

1 state and local regulatory agencies, including the Regional Board, have acknowledged  
2 Chilean nitrate fertilizer as a source of perchlorate contamination. Yet in this instance,  
3 the Advocacy Staff has inexplicably ignored the historical use of Chilean nitrate fertilizers  
4 in the Rialto-Colton Basin as a source.

5 In its submission, the Advocacy Team mentions Rialto-area agricultural activities  
6 only once – in the second paragraph of the introduction, stating, “Aerial photographs  
7 from the 1930s show no evidence of agricultural uses of the Property, or adjacent areas  
8 hydrologically upgradient of the Property overlying the Rialto Groundwater Management  
9 Zone.” Ad. Team P&As, 2. The Advocacy Team’s conclusory dismissal of Rialto’s  
10 agricultural history and Chilean nitrate fertilizer as a source of perchlorate contamination,  
11 however, is based upon a wholly inadequate investigation.

12 Historically, the Inland Empire, and Rialto in particular, was a hub of California’s  
13 citrus growing industry. Kavanaugh Dec., ¶ 83. One need not go any further than  
14 downtown Rialto to see reminders of its proud citrus history. Ex. 20401. Despite having  
15 made public presentations to the Regional Board members and admitting under oath in  
16 deposition that the existence of historical citrus growing activities in Rialto and the  
17 accompanying use of Chilean nitrate fertilizer should be considered sources of  
18 perchlorate contamination, in their prosecution of this matter, the Advocacy Staff  
19 disregards the widespread existence of the citrus groves and other agricultural activity as  
20 sources of perchlorate contamination in the Rialto-Colton Basin. Holub Dep., 127:1-6,  
21 128:24-129:9; Thibeault Dep. 76:23-77:16

22 Many of the Rialto-Colton Basin wells in which perchlorate has been detected are  
23 in very close proximity to or downgradient of historical citrus grove sites (Bennett Dec., ¶  
24 8, Ex. I), which are likely sources of the perchlorate detected in those wells. As  
25 documented below, during the early-to-mid 1900s, extraordinarily large quantities of  
26 Chilean nitrate fertilizer were applied to citrus groves located in and around the Rialto  
27 Groundwater Management Zone. Given the amount of Chilean nitrate fertilizer used in  
28 the Rialto area, and the amount of perchlorate therefrom that would have migrated to

1 groundwater through irrigation and agricultural wells and other conduits, the widespread,  
2 varying detections of perchlorate in a number of area wells can be attributed to the use  
3 of Chilean nitrate fertilizer.

4 **A. The Advocacy Team's Disregarding of Chilean Nitrate Fertilizer is**  
5 **Unsupported and Contrary to the Evidence**

6 The Advocacy Team contends that "Chilean nitrate does not appear to be a  
7 source of perchlorate at the 160-acre site," because although "the historical use of  
8 Chilean nitrate is a source of low concentrations of perchlorate that appear to be  
9 widespread in groundwater throughout the Inland Empire in areas where citrus groves  
10 existed," "citrus groves do not appear to have existed at or hydrologically upgradient of  
11 the Property." The Advocacy Team's position is flawed for two very important reasons:  
12 (1) whether or not Chilean nitrate is a "source of perchlorate at the 160-acre parcel" itself  
13 does not address the issue of whether it is a source of perchlorate at the wells  
14 throughout the basin; and (2) the statement that citrus groves did not exist  
15 "hydrologically upgradient of the Property" is empirically false. Bennett Dec., ¶¶ 8-10,  
16 Exs. I, J, K, N, O, P, Q, X, Z, AA, BB, CC, LL. In fact, the Advocacy Team is seeking to  
17 order Goodrich to provide replacement water for wells that are miles away from the 160-  
18 acre parcel, but in very close proximity to historical citrus groves and other agricultural  
19 sites.

20 The Advocacy Team has identified Robert Holub, Supervising Water Resource  
21 Control Engineer for the Regional Board, as the source of its opinion that Chilean nitrate  
22 fertilizer may be disregarded as a source of perchlorate in the Rialto Basin. However, in  
23 his April 9, 2007 deposition, Holub admitted that he has no personal knowledge of the  
24 amount of citrus growing activities that took place in early-to-mid-20th Century Rialto,  
25 and that he is not an expert in Chilean nitrate fertilizer, agriculture, or the distribution of  
26 fertilizers in agriculture. Holub Dep., pp. 809:21-811:13.

27 Moreover, in his deposition, Holub also revealed that his research into the  
28 historical use of Chilean nitrate fertilizer as a source of perchlorate contamination in the

1 Rialto-Colton Basin was extremely limited and that he had not considered several pieces  
2 of information which indicate that significant amounts of perchlorate were introduced to  
3 soil (and eventually the groundwater) in the Rialto-Colton Basin through the use of  
4 Chilean nitrate fertilizer. For example, Holub testified that: (a) he did not speak with any  
5 farmers or anyone who lived in Rialto during the early-to-mid-1900s regarding where  
6 Chilean fertilizer was used (Holub Dep. 811:2-6, 11-13); (b) he did not speak to anyone  
7 regarding the historical location of agricultural activities in the Rialto area (*Id.*, 811:7-10);  
8 (c) he has no idea how much Chilean nitrate was brought into the Rialto area since the  
9 1920s (*Id.*, 817:5-13); (d) he does not know how many acres of agricultural activities  
10 would have used Chilean nitrate fertilizer in the Rialto-Colton basin (but estimates that it  
11 would have been "a few thousand") (*Id.*, pp. 822:22-823:8); (e) he has done no  
12 investigation into how many agricultural wells existed in Rialto, nor how many were  
13 properly closed (*Id.*, 823:15-24); and (f) he has done no investigation of other areas  
14 outside of the Inland Empire that used Chilean nitrate fertilizer and experienced similar  
15 perchlorate contamination in groundwater (*Id.*, 824:23-825:2).

16 In addition, Holub admitted that his opinion that "citrus groves do not appear to  
17 have existed at or hydrologically upgradient of the Property," is based on his review of  
18 only one photograph, taken in 1930. *Id.*, p. 828:21-831:10. Obviously, the mere fact  
19 that no citrus groves are visible in that lone photograph, which covers a fraction of the  
20 nine-mile Rialto Groundwater Management Zone, cannot conclusively rule out the  
21 existence of citrus groves hydrologically upgradient of the Property beyond the view of  
22 that photographer's camera lens. In fact, as discussed below, agricultural activities did  
23 exist hydrologically upgradient of the Property. Bennett Dec. ¶¶ 8, 10, Ex. I, J, K, N, O,  
24 P, Q, X, Z, AA, BB, CC, LL. Ultimately, the Advocacy Team has erred in disregarding  
25 Chilean nitrate fertilizer as a source of perchlorate contamination in the Rialto-Colton  
26 Basin.

27  
28

1           **B. Chilean Nitrate Fertilizer Used In Agricultural Activities Is A Known**  
2           **Source Of Perchlorate Groundwater Contamination.**

3                   **1. Chilean Nitrate Fertilizer Contains Perchlorate**

4           The raw product used in the production of nitrate fertilizers was commonly called  
5 Chilean nitrate, nitrate of soda, sodium nitrate, Chilean saltpeter, and/or soda nitre.  
6 Kavanaugh Dec. ¶ 79. Perchlorate occurs naturally in Chilean nitrate deposits and has  
7 been detected in fertilizer derived from those deposits. *Id.* Chilean nitrate fertilizers are  
8 derived from naturally-occurring caliche deposits that are mined from the Atacama  
9 Desert region of Chile. *Id.*

10           Fertilizers derived partially or completely from Chilean nitrates contain appreciable  
11 amounts of perchlorate. *Id.* The concentrations of perchlorate in Chilean nitrate have  
12 been reported to vary between 0.03 to 6.79% *Id.* It is conservatively estimated that the  
13 average perchlorate concentration of Chilean nitrate fertilizer is approximately 0.2%. *Id.*;  
14 Holub Dep., 821:17-23.

15                   **2. The Application of Fertilizer Makes it Very Susceptible to**  
16                   **Causing Groundwater Contamination**

17           The historical use of Chilean nitrate fertilizer is no longer disregarded by  
18 researchers as a source of perchlorate contamination and can not be categorically  
19 subordinated to the military or industrial operations as a potential source of perchlorate  
20 contamination in groundwater. Kavanaugh Dec. ¶ 81. Unlike most uses of perchlorate,  
21 the perchlorate-containing Chilean nitrate fertilizer is applied directly to the soil.  
22 Kavanaugh Dec., ¶ 81; Holub Dep., p. 818:10-12; Birdsall Dep. pp. 35:20-36:20, 38:19-  
23 39:5. The large quantities of irrigation water continuously applied over significant  
24 periods of time to citrus groves in the Rialto-Colton Basin provide a significant  
25 mechanism to transport perchlorate applied in Chilean nitrate fertilizers through the soil  
26 to groundwater. Kavanaugh Dec., ¶ 86; see also Holub Dep., 818:10-15 (“[I]n the later  
27 years when the irrigation practices progressed, I believe [Chilean nitrate fertilizer] was  
28 applied to the irrigation water itself.”)



1           The existence of numerous, poorly constructed agricultural wells throughout areas  
2 where Chilean nitrate fertilizer has been applied could also result in perchlorate  
3 contamination from such fertilizers reaching the groundwater. Kavanaugh Dec., ¶¶ 85;  
4 Bennett Dec., Ex. E; Holub Dep., 824:5-9. This increases the likelihood that the  
5 perchlorate produced or imported as a component of Chilean nitrate fertilizer contributed  
6 to the pervasive presence of perchlorate in the basin groundwater.

7                           **3.     The Regional Board and Other Agencies Have Recognized**  
8                           **Chilean Nitrate Fertilizer as a Source of Perchlorate**  
9                           **Groundwater Contamination**

10           Federal, state and local regulatory agencies around the nation have recognized  
11 Chilean fertilizer as a potential source of perchlorate groundwater contamination.  
12 Kavanaugh Dec., ¶¶ 87. Moreover, members of the Advocacy Team themselves have  
13 acknowledged that Chilean fertilizer is responsible for widespread perchlorate  
14 contamination in the Santa Ana region.

15           On or about February 27, 2004, Gerard Thibeault, Executive Officer of the  
16 Regional Board, gave a presentation to the California Senate Select Committee on  
17 Perchlorate Contamination, in which he acknowledged that Chilean nitrate is a possible  
18 cause of widespread perchlorate contamination in the Inland Empire. *Id.*, ¶¶ 88. On  
19 March 12, 2004, in a presentation to the members of the Regional Board, Robert Holub  
20 also concluded that the "location of wells containing perchlorate correlate closely with  
21 historic citrus areas." *Id.* In his March 8, 2007 deposition, Holub testified that it is the  
22 Regional Board's belief that some sources of perchlorate contamination in the Santa  
23 Ana region come from the historical use of Chilean fertilizer. Holub Dep., p. 126:18-25,  
24 127:1-6. Specifically, Holub testified that "Based on [his] research [his] opinion is that  
25 the -- many of the low concentrations of perchlorate that are found in wells in the Inland  
26 Empire likely resulted from the historical use of Chilean fertilizer on the citrus groves in  
27 those areas . . . It's been documented through analytical testing done by U.S. EPA and  
28 others that Chilean fertilizer contained low concentrations of -- of perchlorate salts, and  
the Chilean fertilizer was used as a fertilizer on citrus groves historically in the Inland

1 Empire.” Holub Dep., pp. 128:24-129:9. Subsequently, in his March 14, 2007  
2 deposition, Thibeault confirmed his same understanding and testified that where there  
3 have been historic citrus groves and there are low levels of perchlorate detected in the  
4 groundwater, the Regional Board’s position is that such contamination is “probably  
5 related either to Chilean nitrate or Colorado River water.” Thibeault Dep., pp. 76:23-  
6 77:16.

7 Other regulatory agencies within California have also acknowledged Chilean  
8 fertilizer as a possible or potential source of perchlorate contamination in groundwater.  
9 Kavanaugh Dec. ¶ 87. Likewise, federal agencies have done so as well. As early as  
10 June 1999, the U.S. Environmental Protection Agency (the “EPA”) stated that “Chemical  
11 fertilizer also has been reported to be a potential source of perchlorate contamination.”  
12 *Id.* In September 2005, the U.S. Department of Health and Human Services, Agency for  
13 Toxic Substances & Disease Registry wrote: “Perchlorate has been detected in fertilizers  
14 derived from Chilean caliche (citations). . . Fertilizer derived from Chilean saltpeter has  
15 been traditionally applied mainly to tobacco plants, but is also marketed for citrus fruits,  
16 cotton, and some vegetable crops (citations). Perchlorate containing fertilizers would  
17 result in the contamination of soil as a direct result of their intended use.” *Id.* (emphasis  
18 added.)

19 **C. The Historical Uses Of Chilean Fertilizer In The Rialto Area Explain**  
20 **The Presence Of Perchlorate In The Rialto-Colton Basin.**

21 Given the widespread use of fertilizer in early-20th-century citrus growing  
22 activities, the amount of citrus farming that took place in the Rialto area, and the  
23 proximity of wells (agricultural, monitoring and production) to such agricultural activity,  
24 Chilean fertilizer is an obvious source of perchlorate contamination in the Rialto-Colton  
25 Basin’s affected groundwater wells.

26 **1. Chilean Fertilizer Was Widely Used in the Fruit Growing**  
27 **Industry Throughout the U.S. and California in the Early-to-mid**  
28 **20th Century.**

Chilean nitrate was one of the most common nitrate fertilizers in the U.S. during

1 the first half of the 20th century. It is believed that the world's first commercial nitrogen  
2 fertilizer was sodium nitrate mined from natural deposits in Chile. Adams Dec. ¶¶ 13.  
3 During the 1920s, sodium nitrate imports from Chile were a very important source of  
4 nitrogen in the United States with consumption amounting to about 600,000 tons  
5 annually. *Id.*, ¶¶ 14. Indeed, the numerous newspaper articles from agricultural  
6 publications, including the *California Citrograph*, and various advertisements regarding  
7 Chilean nitrate fertilizer was highly regarded as a source of nitrogen for crops and was in  
8 widespread use by citrus growers in early-20th century California and the Inland Empire,  
9 specifically. Ex. 20280.

10 The historical use of Chilean nitrate fertilizer has been reported for fruit trees in  
11 California, with an accepted fertilization rate between 100 and 200 pounds per acre as  
12 nitrogen. Kavanaugh Dec. ¶¶ 82. This translates to application rates ranging between  
13 625 and 1250 pounds per acre of sodium nitrate (which is 16% nitrogen). *Id.* For  
14 simplicity, according to a widely accepted application rate of 1,000 pounds per acre per  
15 year of Chilean nitrate, 2 pounds of perchlorate per acre per year may have potentially  
16 been applied to fruit orchard soils throughout California. *Id.* Furthermore, between 1923  
17 and 1960, 305,614 tons of Chilean Sodium Nitrate fertilizer were reported to have been  
18 used in California according to data compiled by the California Department of Food and  
19 Agriculture. *Id.* Assuming a perchlorate concentration of 0.2%, application of this mass  
20 of Chilean nitrate fertilizer would have resulted in the application of over 1.2 million  
21 pounds of perchlorate to agricultural soils/crops in California during this timeframe. *Id.*

## 22 2. Citrus Farming Was Widespread in the Rialto Area During the 23 Early-to-mid-1900s.

24 The citrus fruit growing industry was an important part of life in early-to-mid-20th  
25 century Rialto. The Rialto area had extensive citrus groves, beginning in the late 1800s  
26 and increasing steadily through the early 1900s. Kavanaugh Dec., ¶¶ 83. These groves  
27 were fertilized, irrigated and cultivated regularly. *Id.*; Birdsall Dep., pp. 27:18-28:16;  
28 Adams Dec., ¶¶ 25, 26.

1 Rialto eventually emerged as an important citrus community. Kavanaugh Dec., ¶  
2 83. In 1917, the San Bernardino County office of the California Fruit Growers Exchange  
3 was established in Rialto because Rialto was considered to be the center of the citrus  
4 industry in the county. *Id.* Citrus was the hub of everything in Rialto in those days. *Id.*  
5 Most of the men worked for the citrus industry in some way. *Id.* Many of the women  
6 worked in the packing houses, washing, sorting, and packing fruit. *Id.* The citrus  
7 industry reached its peak in Rialto in the 1930s, with up to 10,000 acres of citrus crops  
8 planted. *Id.*; Bennett, ¶ 11.

9 **3. Chilean Nitrate Fertilizer Was Commonly Used By Early Citrus**  
10 **Growers in the Rialto Area.**

11 Eyewitness accounts confirm the actual use of Chilean fertilizer by Rialto-area  
12 citrus farmers as late as the 1950s. Birdsall Dep., 56:21-57:1. Roger Birdsall, the  
13 former Agricultural Commissioner for San Bernardino County, testified to his personal  
14 knowledge of the use of Chilean nitrate fertilizer by citrus growers in the Rialto area. *Id.*,  
15 pp. 56:21-57:1. Mr. Birdsall has lived in San Bernardino County since 1926, and moved  
16 to Rialto in 1949 when he became an agricultural inspector for the County of San  
17 Bernardino. *Id.*, 9:23-25, 10:3-4. He later became the Agricultural Commissioner for  
18 San Bernardino County. *Id.*, p. 11:20-22.

19 Early Rialto-area citrus growers, relying on the prevailing science at the time,  
20 liberally applied nitrates to their citrus groves in order to obtain the best crop production.  
21 This likely led to over-application and groundwater contamination. Adams Dec., ¶¶ 8, 9,  
22 11, 12, 26. For instance, A. G. "Albert" Morgan, who owned and operated a 115-acre  
23 citrus grove at the time, was quoted in 1925 as saying that it was his custom to apply  
24 three to five pounds of Chilean nitrate fertilizer to each tree every year. *Id.*, ¶¶ 16, 24,  
25 Ex. A. A significant segment of the citrus farming community in Rialto would have  
26 followed the same practices of Mr. Morgan, the leading citrus grower in Rialto. *Id.*, ¶¶ 19  
27 and 25; Birdsall Dep., pp. 44:7-8, 45:22-23.

28 Any calculation of the quantity of Chilean Nitrate fertilizer, and the perchlorate

1 contained therein, applied in the Rialto-area citrus groves is staggering. With Rialto  
2 farmers applying three to five pounds of Chilean nitrate fertilizer per tree per year with  
3 100 citrus trees planted per acre, 300 to 500 pounds per acre per year of Chilean nitrate  
4 fertilizer would have been applied to soil in the Rialto area. Adams Dec. ¶¶ 16, 17, 25.  
5 By the 1930s, with an average application rate of 1,000 pounds per acre per year of  
6 Chilean nitrate fertilizer being applied to citrus groves in Rialto, 10 million pounds per  
7 year of Chilean nitrate fertilizer would have been applied to the soil. Kavanaugh Dec., ¶  
8 84. This amounts to 20,000 pounds per year of perchlorate being applied directly to the  
9 soil in the Rialto-area. Even if the Rialto-area citrus growers' use of Chilean nitrate  
10 fertilizer during the 1930s was 30% to 50% of this average application rate, as reported  
11 by Al Morgan in 1925 Adams Dec., ¶ 16., 6,000 to 10,000 pounds of perchlorate would  
12 still have been applied directly to the soil in the Rialto-area each year. Again, these  
13 numbers cannot be ignored.

14           4.       **Vast Quantities of Widespread Irrigation Caused Perchlorate to**  
15                   **Reach Groundwater in the Basin.**

16           Agricultural activities invariably require the use of significant amounts of water.  
17 Kavanaugh Dec. ¶ 85. The large quantities of irrigation water applied to citrus groves in  
18 the Rialto-Colton Basin provided a significant mechanism to transport perchlorate  
19 applied in Chilean nitrate fertilizers from soil to groundwater. Kavanaugh Dec. ¶ 85.  
20 Indeed, the Advocacy Team Submission states: "Once applied to soil, perchlorate will be  
21 readily transported to groundwater with any water that percolates into the soil (e.g.  
22 precipitation) and travels to groundwater. This transport would be accelerated by  
23 application of any additional water, such as through discharge of septic tank effluent, fire  
24 suppression water and wash water." Ad. Team P&As, p. 10. Yet, in its submission, the  
25 Advocacy Team ignores the fact that Chilean nitrate fertilizer used in the Rialto area  
26 would have been applied directly to the soil and then washed into groundwater through  
27 the application of irrigation and crop watering.

28           Moreover, as discussed above, and as acknowledged by the Regional Board,

1 whenever wells are located in close proximity to historic citrus groves, perchlorate  
2 contamination found therein is “probably related” to Chilean nitrate fertilizer. Thibeault  
3 Dep., 76:23-77:16. The many wells in the Rialto-Colton Basin have likely acted as a  
4 super-conduit, transporting perchlorate from the nearby and surrounding agricultural  
5 activities that reached them directly into the groundwater. Holub Dep., p. 824:5-9.

6 **5. Historical Agricultural Activities Are Located In Very Close**  
7 **Proximity to Wells Throughout the Area Overlying the Rialto**  
8 **Groundwater Management Zone.**

9 The Advocacy Team incorrectly implies that no agricultural activities were near  
10 enough to the 160-acre Parcel to have caused any of the perchlorate contamination  
11 detected throughout the basin.<sup>101</sup> Amazingly, while it shrugs off levels of perchlorate  
12 found in PW-1 immediately upgradient of the 160-acre parcel as being “negligible,” for  
13 wells many miles away with similar levels of perchlorate, it is seeking to order Goodrich  
14 to provide water replacement. Further, the Advocacy Team conveniently neglects to  
15 address the widespread agricultural activity throughout Rialto-Colton Basin located  
16 between the 160-acre Parcel and many of the alleged wells at issue. Bennett Dec., Ex.  
17 I. However, aerial photographs taken between 1930 and 1986, show orchards very  
18 close to, and even up-gradient of, the 160-acre Parcel. Kavanaugh Dec., ¶ 85; Bennett  
19 Dec., ¶¶ 8, 10, Exs. I, J, K, N, O, P, Q, X, Z, AA, BB, CC, LL. Exhibit J to the Bennett  
20 Dec., an aerial photograph taken in 1930, shows orchards approximately 2.14 miles to  
21 the northwest of the 160-acre Parcel. Bennett Dec., ¶ 10, Ex. J. Exhibit J shows  
22 orchards located directly to the East of the 160-acre Parcel, less than two-thirds of a mile  
23 away. *Id.*, ¶ 11. In addition, Exhibit J shows several orchards to the immediate south of  
24 the 160-acre Parcel, a little more than half a mile away. *Id.*, ¶ 11.

25 More importantly, historical aerial photographs show the widespread presence of  
26 orchards throughout the Rialto-Colton Basin. *Id.*, ¶ 11, Ex. I. These photographs show

27 <sup>101</sup> Page two of the Water Board Submission states, “Aerial photographs from the 1930s  
28 show no evidence of agricultural uses of the Property, or adjacent areas, or any areas  
hydrologically upgradient of the Property overlying the Rialto Groundwater Management  
Zone.”

1 that the Rialto-Colton Basin was inundated with agricultural activities. *Id.* As one would  
2 expect with agricultural operations, water wells throughout the Rialto-Colton Basin are in  
3 very close proximity to the sites of historical citrus groves they served. Kavanaugh Dec.,  
4 ¶ 85; Birdsall Dep. pp. 19:23-20:6; Bennett Dec., ¶¶ 8, 11, Exs. E, I. In fact, the vast  
5 majority of wells in the Rialto Groundwater Management Zone, are within half a mile of  
6 historical agricultural sites. Bennett Dec., ¶ 11; Exs. E, I.

7 Given the large amount of Chilean nitrate fertilizer used in the early-to-mid 20th  
8 century citrus growing activities, the amount of citrus farming and associated irrigation  
9 that took place in the Rialto area, and the proximity of wells of such agricultural activity,  
10 the historical use of Chilean nitrate fertilizer is an obvious source of the perchlorate  
11 contamination found in many of the wells through the Rialto-Colton Basin. The  
12 Advocacy Team's disregarding of Chilean nitrate fertilizer is unsupported and contrary to  
13 the evidence.

#### 14 **XIV. LEGAL ARGUMENTS**

##### 15 **A. The Advocacy Team Bears The Burden Of Proof And Must Prove Its** 16 **Case By A Preponderance Of The Evidence**

17 The Advocacy Team bears the burden of proof and must prove its case by a  
18 preponderance of the evidence (*i.e.*, the "weight of the evidence"). It clearly has not  
19 done so.

20 The Hearing Officer has professed that this matter is purportedly being heard  
21 pursuant to the State Board's own motion under Water Code Section 13320.<sup>102</sup> Any  
22 cleanup and abatement order ultimately issued by the State Board will be subject to  
23 judicial review pursuant to Water Code Section 13330. Water Code Section 13330(d)

24 <sup>102</sup> See Section 13320(a) ("The state board may, on its own motion, at any time, review  
25 the regional board's action or failure to act . . ."). The Notice of Public Hearing, Revised  
26 Notice of Public Hearing, and Second Revised Notice of Public Hearing all provide:

26 The 2005 CAO and proposed amendments are the subject of challenges  
27 in petitions filed by various entities named as responsible parties. In light  
28 of the various objections and appeals, and then need to take action in an  
expeditious manner, the State Water Resources Control Board will  
review this matter *on its own motion*. (emphasis added.)

1 provides:

2 [e]xcept as otherwise provided herein, Section 1094.5 of the Code of Civil  
3 Procedure shall govern proceedings for which petitions are filed pursuant  
4 to this section. For the purposes of subdivision (c) of Section 1094.5 of the  
5 Code of Civil Procedure, the court *shall exercise its independent judgment*  
6 *on the evidence in any case involving the judicial review of a decision or*  
7 *order of the state board issued under Section 13320, or a decision or order*  
8 *of a regional board for which the state board denies review under*  
9 *Section 13320, other than a decision or order issued under Section 13323.*

10 (emphasis added). Under Code of Civil Procedure Section 1094.5(c), "independent  
11 judgment" is defined:

12 "[w]here it is claimed that the findings are not supported by the evidence, in  
13 cases in which the court is authorized by law to exercise its independent  
14 judgment on the evidence, *abuse of discretion is established if the court*  
15 *determines that the findings are not supported by the weight of the*  
16 *evidence*" (emphasis added).

17 Thus, the weight of the evidence must support the Advocacy's Team's case; in  
18 other words, the Advocacy Team must prove its case by a preponderance of the  
19 evidence. *Kapelus v. State Bar*, 44 Cal. 3d 179, 206, fn. 10 (1987) (equating the "weight  
20 of the evidence" standard with the preponderance standard). Because any order  
21 ultimately issued by the State Board based on this proceeding would be issued pursuant  
22 to Section 13320, should this matter be brought before the Superior Court, it will find an  
23 abuse of discretion by the Regional Board if the findings are not supported by the weight  
24 of the evidence. *Strumsky v. San Diego County Employees Retirement Association*, 11  
25 Cal. 3d 28, 32 (1974).

26 **B. Goodrich is not Liable Under Cal. Water Code Section 13304**

27 The Advocacy Team's Memorandum of Points and Authorities and the Proposed  
28 Amended Cleanup and Abatement Order sets forth an incorrect standard of liability with  
respect to Goodrich's operations, and fails to demonstrate with credible evidence that  
Goodrich is liable under any standard of liability. In its charging papers, the 2006 Draft  
CAO, the Advocacy Team improperly seeks to hold Goodrich liable under the existing  
provisions of Section 13304, brushing over any allegation that Goodrich violated laws at  
the time of its operations, which occurred prior to the enactment of and subsequent



1 amendments to the Porter-Cologne Water Quality Control Act (the "Porter-Cologne Act"),  
2 Water Code Sections 13000, *et seq.*<sup>103</sup>

3 It is not until its Points and Authorities, does the Advocacy Team belatedly  
4 address the prospect of enforcing its CAO against parties that ceased operations long  
5 before the advent of the Porter-Cologne Act. This is too little too late. In particular, the  
6 Advocacy Team asserts that the alleged discharges were a violation of the Dickey Water  
7 Pollution Act (Stats. 1949, ch. 1549). Rather than providing any evidentiary support for  
8 its claim, the Advocacy Team merely cites a few State Board decisions, which are not  
9 only inapposite as a matter of law, but do nothing to prove a case against Goodrich. In  
10 proving a case against Goodrich, the Advocacy Team must persuasively and  
11 transparently apply law to the facts. At a minimum, the Advocacy Team must cite *which*  
12 law Goodrich allegedly broke, and usher forth facts which meet the burden of proof. The  
13 Advocacy Team not only falls short of this standard, but also affirms that Goodrich  
14 complied with the laws in effect at the time.

15 Goodrich is not and cannot be held liable under California Water Code  
16 Section 13304 enacted decades after its operations ended in Rialto.<sup>104</sup> First,  
17 Section 13304 is not retroactive and cannot be applied to actions that occurred during  
18 the alleged timeframe of Goodrich's operations from 1957 to 1964, which preceded its  
19 original operative date of January 1, 1970. Second, subsequent modifications to  
20 Section 13304, in 1980, established, albeit inartfully, that no new liability was created for  
21 actions prior to the modification. Third, prior to the 1980 amendments, Section 13304  
22 expressly required proof of intentional or negligent discharges, which has neither been

23 \_\_\_\_\_  
24 <sup>103</sup> As a threshold matter, it is an open legal question whether the Regional Board or  
25 State Board can in fact legally prosecute Goodrich under *any* state statute. As  
26 discussed above (Section III), Goodrich's use of a burn pit at Rialto was mandated by  
27 numerous military Ordnance Manuals and Technical Orders that were issued pursuant to  
28 federal law by military commanders authorized to publish such regulations. As  
discussed below (Section XV), Goodrich's compliance with such military directives  
shields it from prosecution under state law.

<sup>104</sup> All statutory references in this section are to the California Water Code, unless  
otherwise stated.

1 alleged nor proven in this matter. Fourth, the Regional Board has failed to prove  
2 Goodrich is liable even under the current version of the Water Code, as it has failed to  
3 demonstrate that Goodrich has caused or permitted, or threatens to cause or permit, any  
4 waste to be discharged or deposited *where it is, or probably will be discharged into the*  
5 *waters of the state and creates, or threatens to create, a condition of pollution or*  
6 *nuisance.* Water Code Section 13304(a).

7 **1. The Advocacy Team Has Violated The Hearing Notice And**  
8 **Cannot Deviate From Its Charging Papers**

9 The Notice of Public Hearing issued February 23, 2007, required the Advocacy  
10 Team to notify the State Board and the parties by February 27, 2007, as to whether the  
11 2006 Draft CAO constituted the pleadings on which the Advocacy Team intended to  
12 base its case-in-chief or whether it intended to rely on a different document as its  
13 pleading. On February 27, 2007, the Advocacy Team provided notice confirming that it  
14 intended to use the 2006 Draft CAO as its pleading.

15 Nowhere in the 2006 Draft CAO does it allege that Goodrich, which it alleges  
16 operated from 1957 to 1964, is liable under any statutes other than the present versions  
17 of Water Code Sections 13304 and 13267. Only in its Points and Authorities, in a  
18 section addressing another party, does the Advocacy Team first allege that "discharges  
19 [which] occurred long before the present version of the Water Code was adopted" are  
20 actionable, claiming "discharges that were in violation of the Dickey Act, continue to be a  
21 violation of California law." Ad. Team P&As, page 10. Yet despite, these passing  
22 allegations, the Advocacy Staff's charging papers never allege a violation of the Dickey  
23 Act, never articulate the elements of liability under the Dickey Act, never proffer any  
24 evidence that demonstrates Goodrich is liable under the Dickey Act, and never explain  
25 how it authorizes the Regional Board to issue a CAO under the existing provisions of  
26 Water Code against Goodrich.

27 The Advocacy Staff cannot now go outside of its pleading and seek to prove a  
28 violation of the Dickey Act. The Advocacy Team had ample opportunity to amend its

1 allegations and did not do so. Accordingly, any attempt by the Advocacy Team to either  
2 prove a violation of the Dickey Act or enforce it, should be disregarded and stricken.  
3 *See FPI Development, Inc. v. Nakashima*, 231 Cal. App. 3d 367, 382 (1991).<sup>105</sup> As  
4 explained below, the Draft CAO cannot be adopted as the State Board is not authorized  
5 as a matter of law to issue orders under Water Code Sections 13304 and 13267  
6 concerning discharges that predate the Porter-Cologne Act.

7 **2. The Original Section 13304 and Its Successive Amendments**  
8 **Are Not Retroactive and Goodrich's Acts Were Legal At The**  
9 **Time They Occurred**

10 California Water Code Section 13304 expressly provides that it is not retroactive  
11 and was not initially, nor ever subsequently, written or intended to have application to  
12 any acts before it was passed. This interpretation is consistent with decades of case law  
13 from the United States' and California's highest courts, and buttressed by ample  
14 evidence of the Legislature's—and even the State Board's—intent. The Advocacy Team  
15 tellingly fails to allege or brief this issue.

16 Even if the State Board were to improperly permit such a claim and erroneously  
17 interpret the statute as having retroactive application, the burden is still on the Advocacy  
18 Team to prove that Goodrich's actions were contrary to law *at the time they occurred*.  
19 The Advocacy Team has not met and cannot meet this burden because Goodrich's  
20 actions complied with applicable law at the time of its operations.

21 **a. Section 13304 is Not Retroactive**

22 Neither the Advocacy Team nor the State Water Board have jurisdiction to  
23 prosecute or adjudge Goodrich in this matter because the statute sought to be enforced,  
24 California Water Code Section 13304, does not retroactively apply to actions or  
25 discharges that occurred prior to its enactment. Water Code Section 13304 became

26 <sup>105</sup> In *FPI Development, Inc. v. Nakashima*, the Court of Appeal chastised the parties for  
27 using its pleadings “as a ticket to the courtroom which may be discarded after  
28 admission.” 231 Cal. App. 3d at 382. Similarly, the Advocacy Team does not appear  
confined by its pleading, as it raises new allegations of legal violations in its Points and  
Authorities.

1 operative on January 1, 1970.<sup>106</sup> “[T]he first rule of statutory construction is that  
2 legislation must be considered as addressed to the future, not to the past....”  
3 *Evangelatos v. Superior Court*, 44 Cal. 3d 1188, 1207 (1988). Statutes are not to be  
4 given retroactive effect absent a very clear indication that the legislature intended  
5 otherwise. *Evangelatos v. Superior Court*, 44 Cal. 3d at 1207; *See also Californians for*  
6 *Disability Rights v. Mervyn’s, LLC*, 39 Cal. 4th 223, 230 (2006); *Elsner v. Uveges*, 34  
7 Cal. 4th 915, 936 (2004) (*Elsner*); *Myers v. Philip Morris Companies, Inc.*, 28 Cal. 4th  
8 828, 840 (2002) (*Myers*); *Tapia v. Superior Court*, 53 Cal. 3d 282, 287 (1991) (*Tapia*);  
9 *Aetna Cas. & Surety Co. v. Ind. Acc. Com.*, 30 Cal. 2d 388, 393 (1947) (*Aetna*); *Jones v.*  
10 *Union Oil Co.*, 218 Cal. 775, 777 (1933); *In re Cate*, 207 Cal. 443, 448 (1929); *Pignaz v.*  
11 *Burnett*, 119 Cal. 157, 168 (1897).

12 The presumption that a statute is not retroactive is one of the strongest, oldest,  
13 and most unbending principles of statutory construction that exist, and has survived  
14 since this country’s very first statutes were enacted. *See, e.g., United States Fidelity &*  
15 *Guaranty Co. v. Struthers Wells Co.*, 209 U.S. 306, 314 (1908) (“The presumption is

16 \_\_\_\_\_  
17 <sup>106</sup> When originally enacted, Section 13304 read as follows:

18 (a) Any person who discharges waste into the waters of this state in  
19 violation of any waste discharge requirement or other order issued by a  
20 regional board, or who intentionally or negligently causes or permits any  
21 waste to be deposited where it is discharged into the waters of the state  
22 and creates a condition of pollution or nuisance, shall upon order of the  
23 regional board clean up such waste or abate the effects thereof. Upon  
24 failure of any person to comply with such cleanup or abatement order, the  
25 Attorney General, at the request of the board, shall petition the superior  
26 court for that county for the issuance of an injunction requiring such  
27 person to comply therewith. In any such suit, the court shall have  
28 jurisdiction to grant a prohibitory or mandatory injunction, either  
preliminary or permanent, as the facts may warrant.

(b) If such waste is cleaned up or the effects thereof abated by any  
governmental agency after issuance of a regional board cleanup or  
abatement order, such person shall be liable to that governmental agency  
to the extent of the reasonable costs actually incurred in cleaning up such  
waste or abating the effects thereof. The amount of such costs shall be  
recoverable in a civil action by, and paid to, such governmental agency  
and the state board to the extent of the latter’s contribution to the cleanup  
costs from the State Water Pollution Cleanup and Abatement Account.

Ann. Cal. Water Code § 13304 (West 2007).

1 very strong that a statute was not meant to act retrospectively, and it ought never to  
2 receive such a construction if it is susceptible of any other.”); *United States v. The*  
3 *Peggy*, 5 U.S. (1 Cranch) 103, 110 (1801). Beyond judge-made law, this principle has  
4 been codified in various California statutes for over a hundred years. See, e.g., Cal.  
5 Code Civ. Proc., §3; Cal. Pen. Code §3; Cal. Civ. Code §3. California courts apply the  
6 same principles concerning retroactivity as the U.S. Supreme Court. *Evangelatos*, 44  
7 Cal. 3d at 1209. As the U.S. Supreme Court has held:

8           The principle that statutes operate only prospectively, while judicial  
9           decisions operate retrospectively, is familiar to every law student.  
10          [Citations] This Court has often pointed out that the first rule of  
11          construction is that legislation must be considered as addressed to  
12          the future, not to the past.... The rule has been expressed in varying  
13          degrees of strength but always of one import, that a retrospective  
14          operation will not be given to a statute which interferes with  
15          antecedent rights ... unless such be “the unequivocal and inflexible  
16          import of the terms, and the manifest intention of the legislature.”  
17          [Citations.]

18 *United States v. Security Industrial Bank* (1982), 459 U.S. 70, 79.

19           In fact, “a statute that is ambiguous with respect to retroactive application is  
20          construed...to be unambiguously prospective.” *Myers*, 28 Cal. 4th at 841, citing *INS v.*  
21          *St. Cyr*, 533 U.S. 320-321, fn. 45 (2001) and *Lindh v Murphy*, 521 U.S. 320, 328, fn. 4  
22          (1997). Thus, if the statute has **any** ambiguities as to its retroactive application, it must  
23          be construed as prospective only.<sup>107</sup>

24 <sup>107</sup> This high standard is justified because the presumption against retroactive  
25          application is grounded in constitutional concerns:

26           “In a free, dynamic society, creativity in both commercial and artistic  
27          endeavors is fostered by a rule of law that gives people confidence about  
28          the legal consequences of their actions. [¶] It is therefore not surprising  
29          that the antiretroactivity principle finds expression in several provisions of  
30          our Constitution. The *Ex Post Facto* Clause flatly prohibits retroactive  
31          application of penal legislation.... The Fifth Amendment’s Takings Clause[,  
32          and] [t]he Due Process Clause also protect[] the interests in fair notice and  
33          repose that may be compromised by retroactive legislation; a justification  
34          sufficient to validate a statute’s *prospective* application under the [Due  
35          Process] Clause ‘may not suffice’ to warrant its *retroactive* application.”

36 *Myers*, 28 Cal. 4th at 841, citing *Landgraf v. USI Film Products*, 511 U.S. 244, 265-266  
37 (1994) and *St. Cyr*, 533 U.S. at 316 (emphasis added). When retroactive application of  
38 a statute would impose huge costs, as is the case here, these constitutional concerns  
speak even more forcefully. *Myers*, 28 Cal. 4th 828, 845-846. In *Myers v. Philip Morris*,

1 In California, a prerequisite to retroactive application is assessing whether such  
2 application would “change the legal consequences of past conduct by imposing *new or*  
3 *different* liabilities based on such conduct[.]” *Californians for Disability Rights*, 39 Cal.  
4 4th at 231 (emphasis added), quoting *Tapia, supra*, 53 Cal. 3d at 291. If there are no  
5 changed legal consequences, the statute can be applied fairly. However, if there are  
6 changed legal consequences, retroactive application “*is forbidden, absent an express*  
7 *legislative intent to permit such retroactive application.*” *Id.* at 231, quoting *Elsner, supra*,  
8 34 Cal. 4th at 936-937 (emphasis added).<sup>108</sup>

9 Section 13304 cannot be retroactively applied because there would be changed  
10 legal consequences for pre-1969 conduct and the Legislature did not unambiguously  
11 intend (either explicitly or implicitly) the section is to have retroactive application.<sup>109</sup> For  
12 instance, the cleanup and abatement provision of Porter-Cologne was a much  
13 ballyhooed new addition to water quality control law.<sup>110</sup> Prior to its enactment, the  
14 Regional Board did not have authority to issue cleanup and abatement orders.

---

15 the California Supreme Court cited the constitutional implications of imposing huge  
16 monetary damages on a party for conduct that occurred when the party was immune  
17 from liability under a prior statutory regime. 28 Cal. 4th 828, citing *Eastern Enterprises v.*  
18 *Apfel*, 524 U.S. 498 (1998) (plurality opinion invalidating a law retroactively imposing  
19 substantial financial obligations based on due process and takings concerns and  
20 interests of government in protecting expectations and stability in law) and *Landgraf*, 511  
21 U.S. 244.

19 <sup>108</sup> The core principle behind this doctrine is the basic right of parties to “have liability-  
20 creating conduct evaluated under the liability rules in effect at the time the conduct  
21 occurred.” *Californians for Disability Rights*, 39 Cal. 4th at 233, citing *Elsner, Tapia*, and  
22 *Aetna, supra*). Because retroactive application of a statute abrogates this important  
23 right, it is critical that the statutory language speaks with exceptional clarity.

22 <sup>109</sup> There are numerous examples where the courts have found a “changed legal  
23 consequence,” prompting the court to reject retroactive application of the statute in  
24 question. See, e.g., *Elsner, supra*, 34 Cal. 4th at 937-938 (changed legal  
25 consequences in expanded contractors’ tort liability for past conduct); *Myers, supra*, 28  
26 Cal. 4th at 840 (changed legal consequences in broader tort liability imposed on formerly  
27 immune tobacco sellers); *Tapia, supra*, 53 Cal. 3d 282, 297-299 (changed legal  
28 consequences in increased punishment for past criminal conduct); *Aetna, supra*, 30 Cal.  
2d at 393 (changed legal consequences where statute allowed increased damage  
awards to be imposed by administrative agency).

<sup>110</sup> See Final Report of the Study Panel to the California State Resources Control Board,  
Study Project—Water Quality Control Program, p. 22 and App. A, pp. 67-68. (March,  
1969) (“1969 Report”) Ex. 20345; Ronald B. Robie, *Water Pollution: An Affirmative*  
*Response by the California Legislature*, 1 Pac. L. J. 1, 22-23 (1970). Ex. 20335.

1 Moreover, as explained further below, the regional board could not bring an enforcement  
2 action against past discharges let alone order water replacement. No provision existed  
3 before Porter-Cologne that empowered the regional boards to cleanup pollution, recover  
4 costs or order water replacement.

5 Turning to legislative intent, enacted originally in 1969, Section 13304 was entirely  
6 silent on the question of retroactivity.<sup>111</sup> Ann. Cal. Water Code § 13304 (West. 2007). At  
7 the time of its initial consideration, the Legislature did not address the question of  
8 retroactivity. Thus, neither the text nor legislative intent even hint that the statute was  
9 meant to apply retroactively, much less unambiguously indicating so. Thus, the statute  
10 necessarily fails to meet the high bar set by the courts for retroactive application.  
11 Construction of the statute as retroactive would run afoul of the U.S. Constitution's Fifth  
12 Amendment's Takings and Due Process Clauses because of the substantial costs to be  
13 imposed on Goodrich, and would ignore the established canon of statutory construction  
14 that requires avoiding "constitutional infirmities." *U.S. Const. amend. V; Myers*, 28 Cal.  
15 4th at 846-847. Although Section 13304 cannot be given retroactive effect as a matter  
16 of law, the Regional Board now seeks to enforce it against Goodrich for operations that  
17 occurred prior to its enactment thereby changing the legal consequences of its conduct  
18 after the fact.

19 **b. Subsequent Amendments to Cal. Water Code**  
20 **Section 13304 Have Not Made it Retroactive, But Rather**  
21 **Confirm that It Was Not Intended to Apply to Acts Before**  
22 **Its Passage**

23 The express language of Section 13304(j), as well as its legislative history, makes  
24 clear that the amendments made to Section 13304 in 1980 has no retroactive effect. In  
25 1980, through A.B. 2700, the Legislature amended Section 13304(a) as follows:

26 <sup>111</sup> In contrast, when it desires, the Legislature knows how to specify retroactive  
27 application. See, e.g., Civil Code § 1646.5 ("This section applies to contracts,  
28 agreements, and undertakings entered into before, on, or after its effective date; it shall  
be fully retroactive"); Govt. Code § 9355.8 ("This section shall have retroactive  
application..."); Probate Code § 2640.1(d) ("It is the intent of the Legislature for this  
section to have retroactive effect").

1 Any person who *has discharged or discharges* discharges waste  
2 into the waters of this state in violation of any waste discharge  
3 requirement or other order or *prohibition* issued by a regional board  
4 or the state board, or who *has caused or permitted, causes or*  
5 *permits, or threatens to cause or permit* ~~intentionally or negligently~~  
6 ~~causes or permits~~ any waste to be discharged or deposited where it  
7 is, or probably will be, discharged into the waters of the state and  
8 creates, or threatens to create, a condition of pollution or nuisance,  
9 shall upon order of the regional board clean up such waste or abate  
10 the effects thereof or, in the case of threatened pollution or  
11 nuisance, take other necessary remedial action. Upon failure of any  
12 person to comply with such cleanup or abatement order, the  
13 Attorney General, at the request of the board, shall petition the  
14 superior court for that county for the issuance of an injunction  
15 requiring such person to comply therewith. In any such suit, the  
16 court shall have jurisdiction to grant a prohibitory or mandatory  
17 injunction, either preliminary or permanent, as the facts may  
18 warrant.

19 Ex. 20330. This amendment, which added the past tense and omitted language  
20 concerning intentional or negligent behavior, *did not, as a matter of law, make the*  
21 *section retroactive*. As explained above, the mere use of the past tense does not  
22 overcome the presumption against retroactive application. See, e.g., *Myers*, 28 Cal. 4th  
23 at 842-843 (rejecting retroactive application of Civ. Code § 1714.45 as to parties who  
24 “have suffered or incurred injuries” and to claims which “were” brought). Moreover, the  
25 legislative history and lack of clarity in Section 13304(j) make it clear that the statute was  
26 not intended to and cannot have retroactive effect as a matter of law.

27 The legislative history<sup>112</sup> of A.B. 2700 demonstrates that the effect of the  
28 amendment adding the past tense was simply to allow the Regional Boards to issue  
cleanup and abatement orders concerning discharges which had ceased prior to  
discovery, but had occurred after enactment of the statute’s amendment. Ex. 20343.  
The intent was *not* to reach activities that occurred years, or even decades, before its  
enactment. In fact this very concern was raised at the time of the bill’s consideration.  
On June 4, 1980, at the time A.B. 2700 was under consideration, the California  
Manufacturers Association (“CMA”) expressed such a concern. Robert Monogan of

<sup>112</sup> Goodrich respectfully requests that the Hearing Officer take judicial/official notice of the legislative history of the Porter-Cologne Act and specifically of A.B. 2700, Stats. 1980, c. 808, p. 2538, § 3. Evid. Code, §§ 452(c), 459.



1 CMA wrote to Assemblyman McCarthy, with a copy to the State Board and then-Chief  
2 Counsel of the State Board, William Attwater, stating:

3 We are...opposed to the addition of the words "has discharged" and  
4 "has caused or permitted" . . . What these words do is impose  
5 retroactive liability on dischargers covering events in past years  
6 which presumably have already been dealt with.<sup>[113]</sup>

6 Ex. 20327. On that same day, Assemblyman McCarthy, the author of the bill, requested  
7 that the Senate Committee on Health and Welfare postpone consideration of the bill.

8 Ex. 20328. Chief Counsel Attwater responded by letter one week later, on June 11,  
9 1980, addressing CMA's retroactivity concern:

10 Liability for past discharges has been limited by Amendment 6<sup>[114]</sup>  
11 which provides that Section 13304 does not impose any new liability  
12 for acts occurring before the effective date of the Porter-Cologne  
13 Water Quality Act.<sup>115</sup>

13 Ex. 20329. One week later, on June 18, 1980, the Senate Health and Welfare  
14 Committee added new subdivision (f) to section 13304, which read:

16 <sup>113</sup> This exchange is further evidence that the 1969 enactment itself was not retroactive,  
17 as was the California Manufacturers Association's support of the provision in 1969.

18 <sup>114</sup> "Amendment 6" as proposed by the Chief Counsel, provided:

18 "This section does not impose any new liability for acts occurring before the effective  
19 date of this division."

19 <sup>115</sup> This letter clearly explains that the use of the past tense in subdivision (a) was not to  
20 impose retroactive liability but only to address situations after the enactment of the  
21 amendment, where the Regional Board could not be present at the site simultaneously  
22 with the actual discharge as Chief Counsel Attwater explained by example: "During the  
23 dry summer months, the owner of an inoperative mine does not "discharge or deposit"  
24 mine waste in a manner which creates or threatens to create a condition of pollution or  
25 nuisance in an adjacent stream. However, when the rainy season arrives, acid wastes  
26 at the mine will combine with runoff and in fact reach the stream and cause pollution.  
27 Under existing law, the Regional Boards could not issue an order directing the mine  
28 owner to take necessary remedial action to prevent this from occurring. This is false  
economy since avoidance of pollution is less worthy to both the discharger and the  
environment than the cleanup of a problem after the fact. . . With regard to the need for  
clarifying Regional Board cleanup and abatement authority over past discharges, as  
discussed above, Section 113304 is written in the present tense. Since it is impossible  
for our Boards to know of every discharge as it is taking place, we want to make it crystal  
clear that a person who has discharged, either in violation of waste discharge  
requirements or so as to create a condition of pollution or nuisance, can be held  
responsible."

1 This section does not impose any new liability for acts occurring  
2 before January 1, 1981, if the acts were not in violation of existing  
laws or regulations at the time they occurred.<sup>[116]</sup>

3 Ex. 20330. The bill was ultimately enacted with this language and the subdivision has  
4 not been amended since, other than being redesignated as subdivision "j." This  
5 subdivision expressly precludes retroactive application.

6 Any argument that subdivision (j) somehow permits retroactive application is  
7 contrary to its express terms and is clearly an insufficient expression of intent given its  
8 ambiguity. For instance, the universe of laws or regulations that can be alleged to have  
9 been violated for an entity to be brought within the scope of Section 13304 is entirely  
10 undefined. Would a speeding ticket suffice? If not, what are the logical confines of this  
11 clause? Moreover, what exactly does "new liability" mean in this context? Rather than  
12 encouraging a frolic and detour down the historical lane of possible legal violations, the  
13 clause is best read (again, *only if* one demands that the provision actually creates new  
14 liability) to preserve the right of the agency personnel (who were endorsing the changes  
15 in the law) to continue to prosecute the cases on their desks under the laws that existed  
16 when A.B. 2700 was passed.

17 Accordingly, subdivision (j) expressly precludes retroactive application of  
18 Section 13304. Any attempt to read retroactivity into the language of subdivision (j) must  
19 fail given it is not the unambiguous pronouncement of the Legislature's intent that  
20 necessary to impose retroactive liability, and such application is clearly contrary to the  
21 legislative history.

22 **c. Even if the State Board Erroneously Interprets**  
23 **Section 13304(j) as providing Retroactive Effect, the**  
24 **Advocacy Team Bears the Burden of Proving that Acts**  
**Occurring Before 1981 Were Contrary to Laws or**  
**Regulations "At the Time They Occurred."**

25 Even if the State Board was to erroneously render Section 13304(j) as permitting  
26 retroactivity, the Advocacy Team has not proven (and nor are there contemporary

27 <sup>116</sup> Similar clauses appear in Health and Safety Code Sections 25187.6(e) and 25366(a),  
28 but that statutory language has also not yet been interpreted by courts.

1 enforcement proceedings to suggest) that Goodrich's acts were contrary to law at the  
2 time they occurred.<sup>117</sup> The Advocacy Team bears the burden of proving by a  
3 preponderance of the evidence that Goodrich violated laws or regulations<sup>118</sup> applicable  
4 *during its tenure at the site*. The Advocacy Team must do more than simply point to,  
5 without further explanation or even pinpoint citation, recent State Board decisions, as it  
6 has done in its Points and Authorities. The Advocacy Team has not proven this and  
7 cannot do so, as there is no evidence to suggest that Goodrich's acts violated any such  
8 laws or regulations at the time they occurred.

9 To start with, past State Board decisions with respect to the interpretation of  
10 subdivision (j) inadequately address its application and are simply wrong in certain  
11 respects. In particular, the Advocacy Team cites to *County of San Diego*, WQ 96-2  
12 (1996); *Lindsay Oliver Growers*, WQ 93-17 (1993), and *Aluminum Co. of America*, WQ  
13 93-9 (1993), for the proposition "that discharges that were in violation of the Dickey Act,  
14 continue to be a violation of California law." *Tellingly, the Advocacy Team does not cite*  
15 *any provision or the elements of the Dickey Act.*<sup>119</sup> Moreover, the Advocacy Team has  
16 provided no evidence, much less evidence that meets their burden of proof, to prove  
17 that Goodrich's acts between 1957 and 1964, the time of its alleged actions, were  
18 indeed in violation of the Dickey Act at the time they occurred.

19 \_\_\_\_\_  
20 <sup>117</sup> A basic yet important part of due process in this state is for an accused party to be  
21 notified of the laws it has been accused of violating. Thus, Goodrich reserves the right to  
22 respond to such charges outside of the mandated page limit the Hearing Office has  
23 provided in the rebuttal phase of this proceeding.

24 <sup>118</sup> It is a rare legal exercise that requires the trying of a case concerning actions that  
25 occurred more than forty years ago with law that existed at the time. This is further  
26 evidence against a retroactive interpretation of Section 13304(j).

27 <sup>119</sup> Implicit in the Advocacy Team's argument on this topic is that the reforms ushered in  
28 by the Porter-Cologne Act with much pomp and circumstance were illusory, and the  
statutes of the day would have applied to Goodrich's alleged discharge in the identical  
fashion as contemporary law. Obviously, this was not the case. The Advocacy Team  
would benefit from review of the controlling laws at the time and secondary sources.  
Resources might include *Water Pollution: An Affirmative Response by the California  
Legislature*, 1 Pac. L. J. 1, 22-23 (1970); *State Control of Water Pollution*, 1 U.C. Davis  
L. Rev. 1 (1969); *Quality Control and Re-use of Water in California*, 45 Cal. L. Rev. 586  
(1957); and *California's Water Pollution Problem*, 3 Stan. L. Rev. 649 (1950-51). Ex.  
20335.

(1) Goodrich is Not Liable For Continuous or Passive Migration

The Advocacy Team is wrong in its claim that Goodrich is liable under Section 13304 "since the discharged material continues to migrate in the soil and groundwater toward further wells, the discharge constitutes a continuing violation subject to the Porter Cologne Act." Ad. Team P&As. Instead, the Advocacy Team must demonstrate, and it has not, that Goodrich's "acts," such as its alleged handling or disposal of perchlorate and TCE, were in violation of existing laws or regulations at the time they occurred between 1957 and 1964. As described below, it cannot do so.

The Advocacy Team's reliance on *Zeocon Corporation* contradicts the Dickey Act and is contrary to the existing language of Subsection (j), which at best might be argued to impose liability for "acts occurring before January 1, 1981, *if the acts were in violation of existing laws or regulations at the time they occurred.*" WQ 86-2 (emphasis added.) The Regional Board and State Board cannot so conveniently skirt the express provisions set forth by the Legislature in the Water Code by claiming that passive migration of contamination constitutes an "act" by Goodrich and reach back four decades later to impose liability that clearly did not exist at the time. Following the Advocacy Team's assertion that the mere migration of discharged material is actionable against a party, then virtually any discharge of waste prior to the enactment and amendments of Water Code Section 13304 would be actionable under Water Code Section 13304(a), completely eviscerating Water Code Section 13304(j) and at odds with the legislative history.

Rather, *Zeocon* at best is off point as it pertained to liability of an existing landowner for discharges that had occurred prior to its ownership of the property at issue. In fact, the authority relied upon by the State Board in *Zeocon* only lends further support that there is no authority, and never has been, to issue a cleanup and abatement order to the operator of a facility during the era of the Dickey Act, where a regulated discharge is discovered after the cessation of operations. Instead, as *Zeocon*

1 points out, the responsibility for continuing migration would be on the “persons who  
2 presently have legal control over the property from which the harmful materials arises.”  
3 Notably, all of the property owners of the 160-acre area, including Ken Thompson, Inc.  
4 who owns the McLaughlin pit, are inexplicably absent from the proposed CAO. See  
5 Section XVI.

6 The alleged “acts” in question involve an alleged discharge or disposal of waste  
7 by Goodrich in violation of existing laws or regulations at the time they occurred (*i.e.*,  
8 1957 to 1964), not the mere passive migration of contamination decades later from the  
9 alleged act of discharge or disposal. Both federal and state appellate courts have found  
10 passive migration to not be a “discharge.” Sitting *en banc*, the Ninth Circuit held that  
11 passive migration was not a “discharge” or “deposit” under CERCLA. *Carson Harbor*  
12 *Village Ltd. v. Unocal Corp.*, 270 F.3d 863, 879-80 (9th Cir. 2001) (*en banc*), citing 42  
13 U.S.C. § 6903(3) and 42 U.S.C. § 9607(a)(2). In interpreting the term “discharge” in the  
14 context of a Proposition 65 claim, Cal. Health & Safety Code Section 25249.5, *et seq.*,  
15 that passive migration constituted discharge, the California Court of Appeal in *Consumer*  
16 *Advocacy Group, Inc. v. Exxon Mobil Corp.* dismissed the claim stating that “discharge  
17 or release’ as used in [Health and Safety Code Section 25249.5] refers to a movement  
18 of chemicals from a confined space into the land or the water. The subsequent passive  
19 migration of chemicals through the soil or water after having been so discharged or  
20 released by a party does not constitute another discharge or release within the meaning  
21 of section 25249.5.” 104 Cal. App. 4th 438, 449 (2002).

22 (2) Goodrich Did Not Violate the Dickey Water Pollution  
23 Act

24 As the Advocacy Team points out, the Dickey Water Pollution Act (Stats. 1949,  
25 ch. 1549, p. 2782) was in force during the entire period in which Goodrich operated on  
26 the site. Neither the Advocacy Team’s Points and Authorities, however, nor the cited  
27 State Board decisions, explain that the Dickey Act did not prohibit discharges outside of  
28 a waste discharge requirement and did not contain any authority for the Regional Board

1 to order cleanup or abatement or water replacement. Rather, the Dickey Act, under  
2 limited conditions, authorized the regional water pollution control boards to regulate  
3 existing discharges by prescribing waste discharge requirements, which it did not do with  
4 respect to Goodrich's operations. For "discharges" involving industrial waste not into  
5 community sewer systems, the Regional Board initially had to determine that a  
6 "discharge" existed and then *would have had to request that the discharger file a report*  
7 *of discharge*. Cal. Water Code § 13054 (Deerings 1961); Ex. 20398.<sup>120</sup> Thereafter, the  
8 Regional Board, after a hearing, would have had to prescribe waste discharge  
9 requirements. Only then, could the discharger be in violation of the law at the time if  
10 they failed to comply with the prescribed waste discharge requirements. With respect to  
11 the Goodrich operations, *the Regional Board never made the initial request and never*  
12 *issued waste discharge requirements to Goodrich*. Clearly, from 1957 to 1964, no one  
13 would have considered Goodrich's operations to be either regulated by or in violation of  
14 the Dickey Act.

15 (a) **There is No Evidence of a Discharge to**  
16 **Waters at the Time of Goodrich's Operations**

17 There is no evidence that the alleged activities conducted by Goodrich would  
18 have been understood to have caused a discharge or resulted in a "discharge" as  
19 defined by the Dickey Act at the time. Under the Dickey Act, discharges were required  
20 to be constant and directly enter a water of the State:

21 The tests which control whether a discharge of waste under the  
22 jurisdiction of a regional water pollution control board is occurring  
23 are these. First, there must be a *present discharge*, that is, a  
24 *present flowing or issuing out*, of harmful material from the site of a  
particular operation into the waters of the State. 27 Ops. Cal. Atty.  
Gen. 183 (1956); Cal. Water Code § 13054.3 (Deerings 1961.); Ex.  
20399.<sup>121</sup>

25 <sup>120</sup> The pertinent part of Section 13054 stated: "Upon request of the regional board, any  
26 person presently discharging sewage or industrial waste within any region, other than  
27 into a community sewer system, shall file with the regional board of that region a report  
of such discharge." (Deerings 1961). See Discussion regarding "Dixie's Plume," *supra*.

28 <sup>121</sup> This view of existing law is buttressed by State Board Chief Counsel Attwater's view  
of the law at the time as recorded in his letter to the California Manufacturer's

1 In contrast, Goodrich's actions did not constitute discharges because any of Goodrich's  
2 alleged discharges were not a "present flowing or issuing out" into the waters of the  
3 State.<sup>122</sup> Under the Dickey Act, the Regional Board did not have authority to issue waste  
4 discharge requirements to past operators, even where their former operations were later  
5 discovered to be the cause of a discharge. Instead, where there was a "current  
6 drainage, flow or seepage from inactive, abandoned or completed operations into waters  
7 of the State" resulting in a pollution or nuisance, waste discharge requirements  
8 proscribed by the Regional Board were to be "imposed upon the persons who presently  
9 have legal control over the property from which the harmful material arises." 26 Ops.  
10 Cal. Atty. Gen. 88, 90 (1956); *County of San Diego*, WQ 96-2; *Aluminum Co. of America*,  
11 WQ 93-9; see § 13305(f).<sup>123</sup>

12 Given the depth to groundwater being over 400 feet, as further addressed above  
13 in Section III, there is no evidence to support that even if waste containing perchlorate or  
14 TCE was deposited on the ground, that it ever would have reached groundwater during  
15 the time that Goodrich operated. In fact, the evidence shows that any discharge of  
16

---

17 Association. Ex. 20329 (stating "[u]nder existing law, the Regional Boards could not  
18 issue an order directing the mine owner to take necessary remedial action to prevent this  
19 from occurring.").

20 <sup>122</sup> This deficiency of the Dickey Act was known and considered in the months before  
21 adoption of the Porter-Cologne Act. A task force created at the behest of Assemblyman  
22 Porter echoed this interpretation in a study document that is acknowledged as the official  
23 legislative history of the Porter-Cologne Act. Final Report of the Study Panel to the  
24 California State Resources Control Board, Study Project—Water Quality Control  
25 Program, p. 55 (March, 1969) ("1969 Report") Ex. 20331, 20345. These recommended  
26 changes were endorsed by the State Board on March 20, 1969 before transmittal to the  
27 Legislature.

28 <sup>123</sup> This reasoning is also relied upon by the Advocacy Team in citations to SWRCB  
Orders 96-2 and 93-9. Ad. Team P&As, 30. The Legislature has established a clear  
liability policy regarding "nonoperating industrial or business location[s]" under Section  
13305(f), which provides: "The owner of the property on which the condition exists, or is  
created, is liable for all reasonable costs incurred by the regional board or any city,  
county, or public agency in abating the condition." At the very least, these authorities  
further indicate, in addition to the factual adduced above concerning the current owner's  
obvious connection with the property and responsibility for the McLaughlin Pit, that the  
Advocacy Team and State Board *should be pursuing the persons who have legal control  
over the 160-acre property*. In fact, it is negligent and an abuse of discretion for the  
Water Boards to *not prosecute* the current owner.

1 waste by Goodrich still would not have reached the groundwater under the conditions of  
2 the site and its operations. Oxley Dec. ¶¶ 13, 14; Kresic Dec. ¶ 18, 54; Kavanaugh Dec.  
3 ¶ 35.

4 Moreover, there is no evidence that the Regional Board ever required, or ever  
5 would have required, the issuance of any waste discharge requirements for Goodrich's  
6 operations at the time. The evidence shows that Goodrich carefully burned its waste in  
7 compliance with the military standards of the day and that there was no reason to  
8 believe that waste would be discharged to the waters of the State. Oxley Dec. ¶¶ 13, 14;  
9 Merrill Dec. ¶¶ 15, 16, 19, 29; Kresic Dec. ¶¶ 18, 24-25, 52, 54. Instead, the evidence is  
10 to the contrary, that Goodrich's operations were intended to eliminate its waste material  
11 given safety concerns over potential explosions and fires and that the burning of the  
12 waste would never have been thought of at the time as leaving any residual mass of  
13 perchlorate capable of being discharged to groundwater at the 160-acre parcel, let alone  
14 at the time of Goodrich's operations. Merrill Dec. ¶¶ 15; Oxley Dec. ¶¶ 13, 14.

15 (b) There is No Evidence that a Discharge from  
16 Goodrich's Operations caused Pollution or a  
Nuisance at the time.

17 Even if a "discharge" to waters of the State did exist at the time of Goodrich's  
18 operations, it would have also had to had caused "pollution" or a "nuisance" as defined  
19 in the Dickey Act *at the time*, which it did not:

20 [T]he discharge of the sewage or industrial waste must, of course,  
21 cause a "pollution" or a "nuisance" as defined in the Act (Water code  
22 sec. 13005). That is, it must result in either (1) impairment of the  
23 quality of the waters of the State to a degree which adversely and  
*unreasonably* affects such waters for beneficial uses, *i.e.*, pollution;  
24 or (2) damage to any community by odors or unsightliness by virtue  
of the discharge being *unreasonable*, *i.e.*, nuisance. [¶] Whether  
25 harmful material is *currently* draining or seeping or flowing into the  
waters of the State and whether there is a resultant pollution or  
26 nuisance must be ascertained under the facts of each case...  
(emphasis in original) 27 Ops. Cal. Atty. Gen. 184 (1956).<sup>124</sup> See  
also Cal. Water Code § 13005 (Deerings 1961), Ex. 20398.

27 <sup>124</sup> In a 1970 law review article, an original State Board member stated that "The present  
28 definition of nuisance is considered to be practically unenforceable because of its  
requirements of proof of the vague terms "damages" and "unreasonable practices..."



1 In the case at hand, the Advocacy Team has not, and cannot, demonstrate that a  
2 discharge of perchlorate during the late 1950's and early 1960's would have been  
3 considered either pollution or a nuisance. In fact, in its Points and Authorities, the  
4 Advocacy Team asserts that decades later in 1987 "perchlorate was not known at the  
5 time to regulatory agencies, or others, as a threat to the beneficial uses of the  
6 groundwater." Ad. Team P&As, p. 90. Likewise, the Advocacy Team claims that in 1987  
7 "perchlorate was not considered to be a groundwater contaminant of concern in the  
8 Santa Ana Region, or anywhere else. . . . There were no drinking water standards or  
9 drinking water advisory levels for perchlorate. Perchlorate was not known to exist in  
10 groundwater, since an analytical method capable of detecting perchlorate in  
11 groundwater was not developed until 1997." *Id.* As such, the Advocacy Staff cannot  
12 also claim that a discharge of perchlorate would have been recognized as being the  
13 cause of pollution or a nuisance at the time of Goodrich's operations decades earlier.

14 Further, the Advocacy Team has put forth no evidence as to what level of  
15 perchlorate contamination existed in the groundwater or would have constituted  
16 "pollution" or a "nuisance" during the time of Goodrich's operations. Even today, the  
17 evidence demonstrates that the levels of perchlorate detected in the groundwater in the  
18 Rialto-Colton Basin would not cause an adverse health effect. Borak Dec. ¶¶ 37-42. No  
19 one has come forward attesting to the fact that either a condition of pollution or a  
20 nuisance existed at the time of Goodrich's operations.

21 (3) Advocacy Team has Not Proven that Goodrich  
22 Negligently or Intentionally Discharged Waste

23 Even if the State Board erroneously seeks to apply Water Code Section 13304 to  
24 Goodrich's operations, the Advocacy Team would need to demonstrate that Goodrich  
25 would be liable under the initial version of the Water Code Section 13304(a), which was  
26 limited to intentional or negligent discharges. The State Board has previously

27 Ronald B. Robie, *Water Pollution: An Affirmative Response by the California Legislature*,  
28 1 Pac. L. J. 1, 8 (1970). Ex. 20335.

1 acknowledged that strict liability is limited to only acts occurring after January 1, 1981.  
2 *County of San Diego, City of National City, and City of National City Community*  
3 *Development Commission*, WQ 96-2 (1996); *Lindsay Olive Growers*, WQ 93-17 (1993).  
4 Prior to 1981, Water Code Section 13304(a) only applied to persons “who *intentionally or*  
5 *negligently* causes or permits any wastes to be deposited where it is discharged into the  
6 waters of the state and creates a condition of pollution or nuisance.” (emphasis added).  
7 The Advocacy Team has demonstrated neither.

8 The evidence is that Goodrich was fastidious in the running of its operations. See  
9 Section III, *supra*; Merrill Dec. ¶¶ 12-14. Goodrich diligently abided by the safety  
10 procedures prescribed at the time by the United States military, which required Goodrich  
11 to burn its waste. See Section III, *supra*; Merrill Dec. ¶¶ 12-15. One cannot find that  
12 thirty years later, Goodrich intentionally or negligently discharged into the groundwater.

13 In the context of Section 13304, a finding of negligence would need to include,  
14 among other things, proof that Goodrich did not comply with the applicable standard of  
15 care of the day.<sup>125</sup> The Advocacy Team has not adduced any evidence demonstrating  
16 that Goodrich violated any relevant standard of care at the time of its operations or any  
17 other element necessary to prove negligence. The standard of care analysis is an  
18 objective standard. “When the standard of care is not fixed by statute, ordinance,  
19 regulation, safety order or company rule, the settled standard for determining what  
20 ordinary care would have required in particular circumstances is the hypothetical conduct  
21 of a person assumed to be reasonably prudent.” Cal. Jur. 3d Negligence § 25.

22 Translated to the business context, the standard of care is that of a professional, skilled

23 <sup>125</sup> See, e.g., *Raymond v. Paradise Unified School Dist.*, 218 Cal. App. 2d 1, 6 (1963),  
24 citing *McEvoy v. American Pool Corp.*, 32 Cal. 2d 295, 298 (1948) and *Routh v. Quinn*,  
25 20 Cal. 2d 488, 491-492 (1942) (negligence requires the existence of a duty to use care  
26 as to the person bringing the negligence action; proof of a breach of such duty by the  
27 creation of an unreasonable risk of harm; proximate cause; and actual harm. “In  
28 California, harm or injury to the plaintiff is an essential element of a ripe cause of action  
in negligence or strict liability.” *Buttram v. Owens-Corning Fiberglas Corp.*, 16 Cal. 4th  
520, 531, fn. 4 (1997), citing *Sinai Temple v. Kaplan* 54 Cal. App. 3d 1103, 1113 (1976).  
As stated above, the only evidence generally addressing harm proves that there was no  
such harm. Borak Dec. ¶ 37-42.

1 company. See, e.g., *Sea-Land Service, Inc. v. Matson Terminal Co.*, 253 Cal. App. 2d  
2 885, 889 (1967). “Although custom does not fix the standard of care, evidence of  
3 custom is ordinarily admissible for its bearing on the issue of whether particular conduct  
4 was negligent. Such evidence is received . . . to aid the trier of fact in determining  
5 whether the particular conduct of a party did or did not measure up to the care required  
6 in the particular case.” Cal. Jur. 3d Negligence § 31, citing *Gyerman v. United States*  
7 *Lines Co.*, 7 Cal. 3d 488 (1972).

8 The Advocacy Team does not deny that the alleged actions of Goodrich were in  
9 line with the standard of the day. Goodrich diligently abided by the safety procedures  
10 prescribed at the time by the United States military, which required Goodrich to burn its  
11 waste.<sup>126</sup> See Section III, *infra*; Merrill Dec. ¶¶ 13-15. For the same reasons, there is no  
12 evidence that Goodrich intentionally discharged any waste to waters of the state.  
13 Rather, as discussed above in Section III, the military procedures, which Goodrich  
14 abided by, were calculated to eliminate the waste. In addition, no one had the requisite  
15 knowledge at the time to form the necessary intent that Goodrich’s operations would  
16 cause a discharge to the groundwater over 400 feet below the ground surface. See  
17 Section III, *supra*. Forty years later, one simply cannot find that Goodrich intentionally or  
18 negligently discharged into the groundwater.

19 (4) There is No Evidence that Goodrich Violated Any  
20 Other Laws at the Time

21 The Advocacy Team does not alleges that Goodrich violated any other laws at the  
22 time of its operations. The State Board decisions concerning pre-1981 liability under  
23 Water Code Section 13304 relied upon by the Advocacy Team reference certain other  
24 laws that it holds can potential form the basis of liability, including the Health and Safety  
25 Code Sections 5410-5462, Fish and Game Code Section 5650, and nuisance. *County*

26  
27 <sup>126</sup> See, also, Cal. Civ. Code Section 1714.6, *infra*.

1 of San Diego, WQ 96-2 (1996); *Lindsay Oliver Growers*, WQ 93-17 (1993); *Aluminum*  
2 *Co. of America*, WQ 93-9 (1993). The Advocacy Staff has failed to demonstrate that  
3 Goodrich is liable under any of these laws, nor can it.

4 (a) Goodrich did not violate Health and Safety  
5 Code Sections 5410-5462

6 When enacted in 1949, the Dickey Act and related provisions in the Health and  
7 Safety Code defined the terms “contamination” and “pollution” to delineate the mutually  
8 exclusive regulatory responsibilities of the State Water Pollution Control Board and the  
9 State Department of Public Health. 26 Ops. Cal. Atty. Gen. 254. The Regional Boards  
10 had no authority to address contamination. *Id.*; *Quality Control and Re-use of Water in*  
11 *California*, 45 Cal. L. Rev. 586, 587-88. Instead, the State Department of Public Health  
12 and local health officers enforced provisions related to public health under the Health  
13 and Safety Code. See Cal. Health & Safety Code § 5410-5462 (Deerings 1961).

14 “Contamination” was defined as an “impairment of the quality of the waters of the  
15 State by sewage or industrial waste to a degree which creates an *actual hazard* to the  
16 public health through poisoning or through the spread of disease.” § 13005 (Deerings  
17 1961); Cal. Health & Safety Code § 5410 (Deerings 1961). (emphasis added.) The  
18 Advocacy Team has not demonstrated that *any* impairment of the quality of the  
19 groundwater occurred during Goodrich’s operations or from Goodrich’s alleged  
20 discharge, let alone that Goodrich created an actual hazard to public health. As the  
21 definition clearly states, contamination must create an *actual hazard* to the public health  
22 *through poisoning or spread of disease*. The Advocacy Staff has presented no evidence  
23 to demonstrate that “contamination” existed at the time of Goodrich’s operations, or as  
24 explained below, that any alleged discharge caused by Goodrich was of such a degree  
25 that it created an actual hazard to public health. See Section III, *infra*. On the other  
26 hand, the only evidence advanced in this proceeding weighs against a finding of actual  
27 harm to any person’s health, either forty years ago or today. See Section III, *infra.*;  
28 Borak Dec. ¶ 37-42.

1 Further, there can be no contamination if the public is effectively excluded from  
2 any contaminant. 26 Ops. Cal. Atty. Gen. 256, Ex. 20399.<sup>127</sup> The Advocacy Team has  
3 not adduced evidence to suggest that Goodrich created any such hazard that  
4 manifested at the time of its operations on the property. In addition, there is no evidence  
5 that an investigation or enforcement order was ever issued against Goodrich at the time  
6 of its operations. The Advocacy Team has not proven that Goodrich violated the Health  
7 and Safety Code at the time of its operations.

8 (b) Goodrich did not Violate Fish and Game Code  
9 Section 5650

10 To no surprise, the Advocacy has not attempted to demonstrate that Goodrich  
11 violated the Fish and Game Code, nor can it. In fact, the Fish and Game Code clearly  
12 could not even have applied to the allegations at hand.

13 Enacted roughly at the time when Goodrich began operating on the property,  
14 Section 5650 remained unchanged for almost forty years. Over the duration that  
15 Goodrich inhabited the property, Section 5650 provided:

16 It is unlawful to deposit in, permit to pass into, or place where it can  
17 pass into the *waters of this State* any of the following:

- 18 (a) Any petroleum, acid, coal or oil tar, lampblack, aniline, asphalt,  
19 bitumen, or residuary product of petroleum, or carbonaceous  
20 material or substance.
- 21 (b) Any refuse, liquid or solid, from any refinery, gas house, tannery,  
22 distillery, chemical works, mill or factory of any kind.
- 23 (c) Any sawdust, shavings, slabs, or edgings.
- 24 (d) Any factory refuse, lime, or slag.
- 25 (e) Any cocculus indicus.
- 26 (f) Any substance or materials deleterious to fish, plant life, or bird life.

27 Stats. 1957, c. 456, p. 1394 § 5650 (emphasis added).

28 The Advocacy Team has not proven that Goodrich “deposited” or “permitted to

<sup>127</sup> This Opinion of the Attorney General cited a 1949 Assembly Interim Fact-Finding Committee on Water Pollution for further support of this proposition.

1 pass” any of the substances in subdivisions (a) through (f) into “waters of this State.”  
2 Equally important, under the Fish and Game Code, “waters of this State” does not  
3 include groundwater.

4 Section 5650 was enacted to protect fish and any interpretation must remain true  
5 to that purpose. The Attorney General, in a 1966 opinion, interpreted Section 5650 in  
6 the context of pesticide deposition to artificially constructed irrigation canals. The  
7 opinion concluded that “in constructed channels *where fish would not occur naturally,*  
8 *there would be no violation of section 5650 if fish have been excluded from the sections*  
9 *where the deleterious material or substances retain their harmful effects.”* 48 Ops. Atty.  
10 Gen. 23, 24, 30 (1966) (emphasis added). To comport with the purpose of the statute,  
11 to protect fish life, “waters of this state” *must be defined as waters that contain fish.*  
12 Because the Attorney General did not conceive of the statute as protecting groundwater,  
13 it would not have been enforced against Goodrich.<sup>128</sup> It follows that because the  
14 groundwater at issue in this matter have no “fish therein,” such waters are not “waters of  
15 this state” for purposes of the Fish and Game Code and would have been considered by  
16 the State to be “waters of this state” at the time of Goodrich’s operations. Thus,  
17 Goodrich could not have violated Section 5650 during its operations on the property.

#### 18 (5) Goodrich Did Not Commit A Public Nuisance

19 As explained above, given the Advocacy Team’s own allegations as to the state  
20 of knowledge with respect to perchlorate in not only the 1950’s and 1960’s but decades  
21 later, they cannot legitimately claim that Goodrich would have been found to have  
22

23 <sup>128</sup> See, also, *People v. Miles*, 143 Cal. 636, 641-42 (1904) (Addressing Penal Code §  
24 636, a companion statute to Penal Code Section 635, which was the predecessor of  
25 Section 5650, and holding: “The dominion of the state for the purpose of protecting its  
26 sovereign rights to the fish within its waters, and their preservation . . . extends to *all*  
27 *waters within the state, public or private, wherein these animals are habited or*  
28 *accustomed to resort for spawning or other purposes, and through which they have*  
*freedom of passage to and from the public fishing-grounds of the state. To the extent*  
*that the waters are the common passageway for fish . . . they are deemed for such*  
*purposes public waters, and subject to all laws of the state regulating the right of*  
*fishing.”*) (emphasis added) (quoting *People v. Truckee Lumber Co.*, 116 Cal. 397  
(1897)).



1 caused a public nuisance during the time of its operations in Rialto. Moreover, to prove  
2 a public nuisance claim, the Advocacy Team has to (1) identify a public right (2) where  
3 Goodrich's actions were unprivileged and substantially interfered with that right and that  
4 (3) Goodrich's conduct was negligent. *Lussier v. San Lorenzo Water District*, 206 Cal.  
5 App. 3d 92, 104-106 (1988). The Advocacy Team cannot meet this legal standard.

6 Civil Code section 3479 codifies the acts constituting nuisance as

7 "[a]nything which is injurious to health [...] or an obstruction to the  
8 free use of property, so as to interfere with the comfortable  
9 enjoyment of life or property, or unlawfully obstructs the free  
10 passage or use, in the customary manner, of any navigable lake, or  
river, bay, stream, canal, or basin, or any public park, square, street,  
or highway[.]"

11 A public nuisance differs from a private nuisance in that it affects "at the same time an  
12 entire community or neighborhood, or any considerable number of person..." Civ. Code  
13 § 3480. There is no record and the Advocacy Team has provided no evidence to  
14 demonstrate that Goodrich did anything injurious to health or caused an obstruction to  
15 the free use of property, so as to interfere with the comfortable enjoyment of life or  
16 property at the time of its operations, let alone an entire community. If fact, as  
17 demonstrated in aerial photographs, Goodrich's operations back in the 1950's and early  
18 1960's, were separated and far from the public. Plus, the evidence suggests that the  
19 existing perchlorate concentrations are not "injurious to health." Borak Dec. ¶¶ 37-42.

20 Further, nuisance actions are designed to redress a substantial and unreasonable  
21 invasion of one's interest in the free use and enjoyment of property. *Lussier v. San*  
22 *Lorenzo Water District*, 206 Cal. App. 3d at 100. While the central focus is the alleged  
23 unreasonable invasion, liability depends on conduct that directly and unreasonably  
24 interferes with the interest or creates a condition that does so. *Ibid* (citing numerous  
25 treatises). Liability may result from an invasion that is intentional and unreasonable,  
26 unintentional but caused by negligent or reckless conduct, or result from an abnormally  
27 dangerous activity for which there is strict liability. *Ibid*. Liability will not arise when the  
28 invasion is intentional but reasonable, entirely accidental, or not within the categories

1 listed above. *Ibid.* Citing cases from the era when Goodrich operated on the site, the  
2 court concluded that the law in California required negligent conduct for the imposition of  
3 nuisance liability. *Ibid.* (citing *Spaulding v. Cameron*, 38 Cal. 2d 265, 266 (1952);  
4 *Granone v. County of Los Angeles*, 231 Cal. App. 2d 629, 649-651 (1965); citing also  
5 *Sturges v. Charles L. Harney, Inc.*, 165 Cal. App. 2d 306, 317-318 (1958); *Calder v. City*  
6 *etc. of San Francisco*, 50 Cal. App. 2d 837, 839-840 (1942)).<sup>129</sup>

7 Because Goodrich's operations did not interfere with any public (or even private)  
8 right, Goodrich could not have committed a nuisance. There is no evidence that there  
9 was any interference of anyone's right at the time of Goodrich's operations. At the time  
10 the alleged acts occurred in the late 1950's to the early 1960's, perchlorate was not  
11 recognized as a health issue. See discussion, *infra*. Moreover, as further addressed  
12 below, Goodrich's actions were not negligent. Its acts, if anything, were on a par with or  
13 exceeded the standards of the day, as required by its contracts with the military. See  
14 Section XV, *supra*.

### 15 3. Goodrich Is Not Liable Under Section 13304 Even If Existing 16 Standards Apply

17 Even if Section 13304 is erroneously applied to Goodrich, the Advocacy Team  
18 has failed to meet its burden of proof with respect to Goodrich under the required  
19 elements of the statute. In particular, Section 13304(a) requires that the Advocacy Team  
20 prove that Goodrich (1) caused or permitted, causes or permits, or threatens to cause or  
21 permit any waste to be discharged or deposited; (2) where it is, or probably will be  
22 discharged into the waters of the state; and (3) creates or threatens to create, a

23 <sup>129</sup> *Lussier* distinguished early holdings where a rule of strict liability prevailed, stating  
24 that "[i]n course of time the law came to take into consideration not only the harm  
25 inflicted but also the type of conduct that caused it, in determining liability. This change  
26 came later in the law of private nuisance than in other fields. Private nuisance was  
27 remediable by an action on the case irrespective of the type of conduct involved. Thus  
28 the form of action did not call attention to the change from strict liability to liability based  
on conduct. *But the change has occurred*, and an actor is no longer liable for accidental  
interferences with the use and enjoyment of land but only for such interferences as are  
intentional and unreasonable or result from negligent, reckless or abnormally dangerous  
conduct." *Lussier*, 206 Cal. App. 3d at 101 (emphasis added).



1 condition of pollution or nuisance.

2 **a. Goodrich Did Not Cause or Permit Waste to be**  
3 **Discharged or Deposited Into Waters of the State**

4 The Advocacy Team has not proven the first two elements of Water Code  
5 Section 13304(a). It has not demonstrated that Goodrich “caused or permitted . . . or  
6 threatens to cause or permit any waste to be discharged or deposited where it is, or  
7 probably will be discharged into the waters of the state.” Section 13304(a). While the  
8 charging papers (the Draft CAO) and the Advocacy Team’s Points and Authorities allege  
9 that Goodrich used perchlorate and TCE, both documents conspicuously lack any actual  
10 evidence that any waste allegedly discharged or deposited by Goodrich either reached  
11 waters of the state, or that there is any probability of such. In fact, under oath in  
12 deposition the Advocacy Team readily admitted that they do not have any evidence to  
13 demonstrate that any discharge by Goodrich reached the groundwater or that it probably  
14 will. Saremi Dep., 656:19-24; Sturdivant Dep., 717:15-24; Holub Dep., 933:8-23,  
15 934:10-20. 935:2-5, 93:10-15, 984:25-985:4, 985:18-21, 988:20-23. Rather, the  
16 Advocacy Team concedes that the only confirmed discharges to groundwater in the  
17 Rialto area are from the McLaughlin pit on the 160-acre parcel, which was constructed  
18 years after Goodrich operated on the property and from the Robertson Ready Mix water  
19 operations. Saremi Dep., 264:3-7, 391:12-17; Thibeault Dep., 378:19-379:5.

20 Nor has the Advocacy Team demonstrated that Goodrich is a person that  
21 threatens to cause or permit any waste to be discharged or deposited to the waters of  
22 the state. Goodrich’s operations ended decades ago. It cannot be construed to be  
23 threatening to permit any waste to be discharged or deposited to the waters of the state.

24 **b. There is No Proof that Any Discharge by Goodrich Has**  
25 **Caused or Threatens to Create “Nuisance” or “Pollution”**

26 The Advocacy Team must further demonstrate that Goodrich “has caused . . .  
27 waste to be discharged or deposited where it is, or probably will be discharged or  
28 deposited into the waters of the state *and* creates, or threatens to create, a condition of

1 pollution or nuisance.” Section 13304(c). (emphasis added). The Advocacy Team has  
2 not proven that any discharge by Goodrich that reached waters of the state created or  
3 threatens to create a condition of “nuisance” or “pollution.” Any and each alleged  
4 discharge from Goodrich’s operations must be of a sufficient magnitude to create or  
5 threaten to create a condition of “pollution” or “nuisance.”

6 “Pollution” is defined in section 13350(l) as “an alteration of the quality of the  
7 waters of the state by waste to a degree which unreasonably affects . . . [t]he waters for  
8 beneficial uses.” Section 13050(m) defines “nuisance” to mean anything which meets *all*  
9 of the following requirements: (1) is injurious to health, or is indecent or offensive to the  
10 senses, or an obstruction to the free use of property, so as to interfere with the  
11 comfortable enjoyment of life or property; (2) affects at the same time an entire  
12 community or neighborhood, or any considerable number of persons, although the  
13 extent of the annoyance or damage inflicted upon individuals may be unequal; (3) occurs  
14 during, or as a result of, the treatment or disposal of wastes.

15 To support its allegations, the Advocacy Team attempts to string together a daisy  
16 chain of facts by citing to certain levels of shallow soil contamination and potentially  
17 down gradient groundwater data, but utterly fails to sustain its burden of proof that there  
18 was any amount of waste actually discharged to the groundwater by Goodrich that would  
19 constitute either pollution or a nuisance. It is clearly insufficient to allege that  
20 contamination as a whole can be found in the groundwater that would be considered as  
21 pollution or a nuisance. The Advocacy Team must demonstrate that *Goodrich*  
22 discharged waste in an amount that would constitute pollution or a nuisance. It has not  
23 done so.

24 Moreover, the Advocacy Team has not proven that any of the alleged Goodrich  
25 discharges were in amounts that caused “pollution” that altered the quality of the waters  
26 of the state to a degree which unreasonably affects its beneficial uses. Kresic Dec.  
27 ¶¶ 24-25, 52-53. An impairment of a water’s beneficial uses must be determined by  
28 reference to an exceedance of an applicable water quality objective. Water Code

1 Section 13241. The Advocacy Team has not even specified which water quality  
2 objectives in the Santa Ana River Basin Plan have been exceeded, nor by how much the  
3 objectives have been exceeded.

4 Regarding nuisance, the Advocacy Team has not proven that Goodrich's alleged  
5 discharge caused, or threatens to cause, a condition that is injurious to health or any  
6 other elements of nuisance as defined by Section 13050(m). The Advocacy Team has  
7 not presented any evidence of the particular levels of perchlorate or TCE caused by any  
8 alleged discharge by Goodrich to the groundwater, nor has presented any evidence that  
9 that such particular levels are injurious to health, are is indecent or offensive to the  
10 senses, are obstructed the free use of property, so as to interfere with the comfortable  
11 enjoyment of life or property. See, e.g., Borak Dec. ¶¶ 37-42.

12 The Advocacy Team has also not shown that any waste allegedly disposed of by  
13 Goodrich threatens to be discharged to the groundwater and it cannot. Section 13304(e)  
14 defines "threaten" in the context of cleanup and abatement orders as "a condition  
15 creating a substantial probability of harm, when the probability and potential extent of  
16 harm make it reasonably necessary to take immediate action to prevent, reduce, or  
17 mitigate damages to persons, property, or natural resources." The alleged areas of  
18 disposal are now capped under vast areas of concrete at the Rialto Concrete plant.  
19 Bennett Dec. ¶¶ 16. This barrier has formed an effective cap since the late 1980's.  
20 Kavanaugh Dec. ¶¶ 28. With this cap, there is no evidence that any contaminants can be  
21 mobilized and that no immediate action is necessary to prevent, reduce or mitigate  
22 damages to anyone. Kavanaugh Dec. ¶¶ 29, 91.

23 Accordingly, the Advocacy Team has not met its burden. It has proven that  
24 Goodrich discharged waste directly into waters of the state or in a manner where the  
25 discharge would have a probability of entering waters of the state. Critically, the  
26 Advocacy Team has not proven that Goodrich's discharge actually migrated to the  
27 groundwater in amounts that indeed caused pollution or nuisance or to a location and in  
28 an amount where there is a substantial probability of pollution or nuisance.

1           **C.     The State Board Has No Authority To Order Goodrich To Reimburse**  
2           **Water Purveyors For Past Or Ongoing Costs Or To Order Water**  
3           **Replacement**

4                   **1.     Water Code Section 13304(c)(1) only permits recovery of**  
5                   **Government Agency Cleanup Costs Pursuant to a Civil Action**

6           Water Code Section 13304(c)(1) only permits the recovery of cleanup costs by  
7           government agencies pursuant to a “*civil action*”, not through the issuance of a cleanup  
8           and abatement order as sought by the Advocacy Team. The Advocacy Team is barred  
9           from seeking such costs in the subject proceedings.

10           In the Draft CAO, the Advocacy Team seeks to order Goodrich to “reimburse [the  
11           water purveyors] for past and ongoing reasonable costs incurred in cleaning up the  
12           waste, abating the effects of the waste, supervising cleanup or abatement activities, or  
13           taking other remedial action, in accordance with Section 13304(c)(1) of the California  
14           Water Code.” Draft CAO, ¶13. It goes on to provide that the Executive Officer will be  
15           the arbiter of awarding the costs. *Id.* Remarkably, the Advocacy Team’s points and  
16           authorities as to this issue are even more vague than the proposed CAO and lacks any  
17           support for the Draft CAO.

18           Regardless, the proposed order is clearly outside the authority of Water Code  
19           Section 13304(c)(1), which provides that “the amount of the costs is recoverable in a *civil*  
20           *action* by, and paid to, the government agency and the state board . . . .” (emphasis  
21           added.) Accordingly, neither the Regional Board, its Executive Officer, nor the State  
22           Board are authorized to award such costs.

23           Not only does the Advocacy Team’s assertion run contrary to the express  
24           language of Section 13304(c)(1), but the Advocacy Team has put forth no evidence of  
25           demonstrating that any costs were actually incurred by “government agencies” to  
26           cleanup or abate the effects of Goodrich’s waste or that any such costs were  
27           “reasonable.” There is absolutely no evidence submitted documenting either the amount  
28           of the “costs actually incurred,” what was done, who incurred the costs, who was paid,  
              that the costs were incurred by “government agencies,” or how the costs were

1 “reasonable.” Nor is there any support that these phantom costs pertained to cleaning  
2 up or abating the effects of *Goodrich’s* alleged discharges.

3 Rather, in a clear instance of the “fox guarding the hen house,” the Draft 2006  
4 CAO astonishingly seeks to authorize the Executive Officer, the lead prosecutor in this  
5 matter, to be the arbitrator for awarding such costs in the future. Certainly, no court  
6 would ever provide the prosecutor or the plaintiff with the authority to determine the  
7 amount of such an award.

8 **2. Section 13304 Impermissibly Affords Water Replacement**

9 The State Board cannot issue water replacement orders pursuant to Water Code  
10 Section 13304. The water replacement provisions do not retroactively apply to Goodrich  
11 and are federally preempted.

12 **a. The Water Replacement and Reimbursement Provisions  
13 Are Not Retroactive**

14 The amendments from 2003 to Section 13304 regarding water replacement did  
15 not make the law retroactive. As explained above, Goodrich’s actions occurred many  
16 years prior to the amendments and there is no clear legislative intent to make the  
17 provisions retroactive. Although the Legislature has had many opportunities to make  
18 Section 13304 retroactive, it has repeatedly not done so.

19 Further, subdivision (l), at best, can be interpreted to provide authority for water  
20 replacement back to the effective date of the Porter-Cologne in 1970, but certainly not  
21 prior to its existence:

22 The Legislature declares that the amendments made to subdivision  
23 (a) of this section by Senate Bill 1004 of the 2003-04 Regular  
24 Session [regarding water replacement] do not constitute a change  
in, but are declaratory of, existing law.

25 Section 13304(l). Moreover, there is no support that Section 13304 actually did  
26 authorize the Regional Board to issue orders for water replacement prior to the 2003  
27 amendments. The evidence and the law is actually to the contrary and cannot be so  
28 easily whitewashed.

1 The legislative intent is clear that Water Code Section 13304 did not previously  
2 authorize the Regional Board to issue cleanup and abatement orders requiring water  
3 replacement or reimbursement prior to the 2003 amendments. "The evolution of a  
4 proposed statute after its original introduction in the Senate or Assembly can offer  
5 considerable enlightenment as to legislative intent . . . Generally the Legislature's  
6 rejection of a specific provision which appeared in the original version of an act supports  
7 the conclusion that the act should not be construed to include the omitted provision."  
8 *People v. Hunt*, 74 Cal. App. 4th 939, 947-948 (1999), citing *People v. Gooloe*, 37 Cal.  
9 App. 4th 485, 491 (1995) (citations omitted); *Central Delta Water Agency v. State Water*  
10 *Resources Control Bd.*, 17 Cal. App. 4th 621, 634-635 (1993) (citations omitted).  
11 "Accordingly, '[t]he sweep of [a] statute should not be enlarged by insertion of language  
12 which the Legislature has overtly left out.'" *Id.*, citing *People v. Brannon*, 32 Cal. App. 3d  
13 971, 977 (1973); *Traverso v. People ex rel. Department of Transportation* 46 Cal. App.  
14 4th 1197, 1207 (1996).

15 In the California Legislative session of 2000, Assembly Member Calderon  
16 introduced Assembly Bill 2646 ("AB 2646"), sponsored by the California Water  
17 Association, to make certain amendments to Water Code § 13304. Ex. 20339, 20340.  
18 The legislative history of AB 2646 makes it clear that, at that time, the Legislature  
19 specifically contemplated and decided against granting the Regional Board authority to  
20 mandate replacement water or reimbursement for water treatment. In particular, on  
21 August 7, 2000, AB 2646, was amended in the Senate proposing to modify Water Code  
22 § 13304(a) as depicted in the following underlined text:

23 Any person who has discharged or discharges waste into the waters  
24 of this state . . . shall upon order of the regional board, clean up the  
25 waste or abate the effects of the waste, including, but not limited to,  
26 the provision of replacement water or reimbursement for water  
treatment facilities for public water systems whose wells have been  
contaminated by the waste, rendering the wells otherwise unavailable  
for use by the public water system . . .

27 Ex. 20341. On August 30, 2000, the Senate specifically removed this proposed  
28 provision while the bill remained pending. Ex. 20342. Accordingly, the Legislature



1 consciously chose not to grant the Regional Board authority to require water  
2 replacement and/or reimbursement to water purveyors for water treatment.

3 Moreover, similar attempts by the Legislature to “declare what the law was”, as  
4 with the 2003 amendments to Section 13304, have been met with doubt by the judiciary.  
5 For example, the California Supreme Court in *McClung v. Employment Development*  
6 *Dept.*, recently rejected such a statutory declaration as a legislative invasion of the  
7 judiciary:

8 The legislative power rests with the Legislature. Subject to  
9 constitutional constraints, the Legislature may enact legislation. But  
10 the judicial branch interprets that legislation. Ultimately, the  
11 interpretation of a statute is an exercise of the judicial power the  
12 Constitution assigns to the courts. Accordingly, it is the duty of this  
13 court, when ... a question of law is properly presented, to state the  
14 true meaning of the statute finally and conclusively.... It is true that if  
15 the courts have not yet finally and conclusively interpreted a statute  
16 and are in the process of doing so, a declaration of a later  
17 Legislature as to what an earlier Legislature intended is entitled to  
18 consideration. But even then, a legislative declaration of an existing  
19 statute’s meaning is but a factor for a court to consider and is  
20 neither binding nor conclusive in construing the statute. This is  
21 because the “Legislature has no authority to interpret a statute.  
22 That is a judicial task. The Legislature may define the meaning of  
23 statutory language by a present legislative enactment which, subject  
24 to constitutional restraints, it may deem retroactive. But it has no  
25 legislative authority simply to say what it did mean.

26 34 Cal. 4th 467, 472-73 (2004) (citations and quotation marks omitted).

27 What is undisputable is that the 2003 amendments and Section 13304(l) do not  
28 provide for retroactive application back to Goodrich’s operations in the 1950’s and  
29 1960’s, before which Section 13304 was first enacted. As the California judicial  
30 decisions were explicated above, any application of the water replacement provisions to  
31 Goodrich in this matter would clearly “change the legal consequences of past conduct by  
32 imposing *new or different* liabilities based on such conduct[.]” *Californians for Disability*  
33 *Rights*, 39 Cal. 4th at 230. At the time of Goodrich’s conduct, the Water Code did not  
34 provide authority to the Regional Board, or any other right, for water replacement. With  
35 such a change in legal consequences, the Legislature would need to speak in certain  
36 terms for the statute to be retroactively applied.

b. **The Water Replacement and Reimbursement Provisions Are Preempted by CERCLA and the City of Rialto Is Collaterally Estopped from Advancing Related Claims**

The U.S. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), 42 U.S.C. § 101, *et seq.*, preempts the water replacement provisions of Section 13304. In addition, the City of Rialto is collaterally estopped from seeking relief under these provisions as a result of the U.S. District Court's Order finding that its state law claims were preempted and their subsequent dismissal. Order Granting In Part and Denying In Part Defendants' Motion to Strike, *City of Rialto, et al. v. U.S. Department of Defense, et al.*, Case No. ED CV 04-00079 VAP (SGLx) (filed April 15, 2004) ("*Rialto Dismissal*"). Ex. 20332.

(1) **Water Code Section 13304's Water Replacement Provisions Conflict with the NCP and are Preempted by CERCLA**

The 2003 amendments providing for water replacement are distinctly different and unlike other authority set forth in Section 13304. While the Regional Board's authority for the cleanup and abatement of waste pertain to cleaning up and abating the effects of discharges to the "waters of the state," the water replacement provisions inserted into Section 13304 oddly leap into new and different territory for the Regional Board by purporting to authorize it to order an alleged discharger to replace another party's well water. In essence, the 2003 amendments purport to make the Regional Board the arbiter of a dispute as between other parties, rather than being responsible for the safeguarding of the state's groundwater. This is the function of courts, which are well-situated to make such determinations, not the Regional Board. The task of proving up damages before a court, in matters similar to this one, proceeds under the full rigor of the Evidence Code and due process afforded.

The National Contingency Plan ("NCP"), 40 C.F.R. Part 300, *et seq.*, is a detailed set of regulations promulgated by the U.S. Environmental Protection Agency ("U.S. EPA") that set forth standards under which contaminated properties are to be characterized and cleaned up. *See, e.g., Carson Harbor Village Ltd. v. Unocal Corp.*,



1 287 F. Supp. 2d 1118, 1152 (C.D. Cal. 2003). Totalling approximately 275 pages of  
2 regulatory text, the NCP extensively details the roles of federal, state, and local  
3 governments in responding to contaminated sites, and establishes the procedures for  
4 making cleanup decisions. 40 C.F.R. Part 300; See *U.S. v. City of Denver*, 100 F.3d  
5 1509, 1511 (10th Cir. 1996).

6 The chief goal of the NCP is to achieve a “CERCLA-quality cleanup.” 40 C.F.R.  
7 § 300.700(c)(3)(i). The basic elements of CERCLA require that a remedy be protective  
8 of human health and the environment, utilize permanent solutions and alternative  
9 treatment technologies to the maximum extent practicable, and be cost effective. 42  
10 U.S.C. § 9621(b)(1). An important component of the NCP is requiring community  
11 involvement and public comment. 40 C.F.R. § 300.415(n).

12 “Under the Supremacy Clause of the United States Constitution, state laws that  
13 “interfere with, or are contrary to the laws of Congress” are preempted and are therefore  
14 invalid.” *Fireman’s Fund Ins. Co. v. City of Lodi*, 302 F. 3d 928, 941 (9th Cir. 2002)  
15 (“*Fireman’s Fund*”), citing *Gibbons v. Ogden*, 22 U.S. (9 Wheat) 1, 211 (1824).  
16 “Congressional intent governs our determination of whether federal law preempts state  
17 law. If Congress so intends, “[p]re-emption ... is compelled whether Congress’ command  
18 is explicitly stated in the statute’s language or implicitly contained in its structure and  
19 purpose. [Citations]” *Fireman’s Fund*, 302 F. 3d at 941. When a state law stands as  
20 “an obstacle to the accomplishment and execution of the full purposes and objectives of  
21 Congress,” the state law is preempted. *Fireman’s Fund*, 302 F. 3d at 943, citing  
22 *California Fed. Sav. and Loan Ass’n v. Guerra*, 479 U.S. 272, 281 (1987). In finding that  
23 CERCLA preempted certain nonfederal legal provisions, the Ninth Circuit in *Fireman’s*  
24 *Fund* warned plaintiffs that, while state statutes may provide an apparent “escape route”  
25 from the constraints of the NCP, “litigants may not invoke state statutes in order to  
26 escape the application of CERCLA’s provisions in the midst of hazardous waste  
27  
28

1 *litigation.*" 302 F. 3d at 947, fn. 15 (emphasis added).<sup>130</sup>

2 A remedy afforded by state law that is not consistent with the NCP necessarily  
3 constitutes an obstacle to the accomplishment and execution of the full purposes and  
4 objectives of Congress. Obligations sought to be imposed on parties that are not  
5 consistent with, or necessary under, the requirements of the NCP impermissibly conflict  
6 with CERCLA.<sup>131</sup> Without NCP consistency, the state provisions conflict with the goal of  
7 timely and cost-effective cleanup of hazardous waste sites because of additional cost,  
8 complication, and interference with congressional priorities and order of operations  
9 established by statute and extensive regulation. See *Stanton Road Assoc, v. Lohrey*  
10 *Enter.*, 984 F.2d 1015, 1019 (9th Cir. 1993). The requirements also run afoul of  
11 constituting an "overly strict regulatory demand," which is disfavored in this federal  
12 circuit. *Fireman's Fund*, 302 F.3d at 947-48 (citing reports by the U.S. Senate, U.S.  
13 EPA, National Governors Association, and the U.S. Conference of Mayors).<sup>132</sup>

14 <sup>130</sup> The Ninth Circuit's holding is consistent with cases from the Second, Third, Seventh,  
15 and Tenth Circuits and numerous District Court rulings. Twice, the Second Circuit has  
16 held CERCLA to preempt state law claims that would have allowed recovery without  
17 NCP compliance. In *Bedford Affiliates v. Sills*, the court found the state law remedies of  
18 restitution and indemnification to potentially interfere with a CERCLA policy. 156 F. 3d  
19 416 (2d Cir 1998). This holding was later reaffirmed in *Goldman, Sachs & Co. v. Esso*  
20 *Virgin Is., Inc. (In re Duplan Corp.)*. 212 F. 3d 144, 150 fn. 7 (2d Cir. 2000). In deciding  
21 *In re Reading Company*, the Third Circuit found a conflict between CERCLA's settlement  
22 scheme and the state law remedies of contribution and restitution. 115 F. 3d 1111 (3d  
23 Cir 1997). The court reasoned that "[p]ermitting independent common law remedies  
24 would create a path around the statutory settlement scheme, raising an obstacle to the  
25 intent of Congress." *Id.* at 1117. In *PMC, Inc. v. Sherwin Williams Company*, the  
26 Seventh Circuit refused to allow a claim under Illinois law that could have allowed a  
27 contribution claim inconsistent with the NCP. 151 F.3d 610, 618 (7th Cir. 1998). The  
28 court found that, unlike the state law causes, the federal law encourages CERCLA-  
quality cleanups through consistency with the NCP. *Ibid.* Several years earlier, the  
Tenth Circuit noted that it "would be incongruous for federal law to bar private recovery  
unless there has been substantial compliance with the NCP, but then permit recovery  
under a contribution theory through mere compliance with less demanding state  
regulations." *County Line Investment Co. v. Tinney*, 933 F. 2d 1508, 1517, fn. 13 (10th  
Cir. 1991). Together, these cases constitute a significant body of law discouraging state  
law claims except in compliance with the NCP.

<sup>131</sup> While CERCLA's savings clauses allow some room for state regulation (and thus  
CERCLA does not preempt *the field* of hazardous waste cleanup), the basic rules of  
conflict preemption still remain. See *Fireman's Fund Ins. Co. v. City of Lodi*, 302 F.3d  
928, 952, fn. 26 (9th Cir. 2002).

<sup>132</sup> Section 13304's water replacement provisions' inconsistency with the NCP also  
conflicts with the incentives for settlements imposed by CERCLA. Courts have found

1 (2) The federal District Court has twice ruled that the  
2 Water Purveyors may not evade the NCP

3 In adjudicating the City of Rialto's lawsuit, the court dismissed the City's state law  
4 claims finding that they were preempted by CERCLA and the NCP. *Rialto Dismissal*, 24.  
5 The court reasoned, "[i]f Plaintiffs' are allowed to pursue their state law tort claims, they  
6 *may be allowed to recover damages* without compliance with the National Contingency  
7 Plan." *Id.* (emphasis added.) Citing *Fireman's Fund*, the court concluded that the state  
8 law claims stood as an obstacle to the accomplishment and the execution of the full  
9 purposes and objectives of Congress. *Id.* Whether this ruling is applied to  
10 reimbursement for water already provided, reimbursement for groundwater investigation,  
11 or an order to provide water or wellhead treatment, the outcome is the same. All three  
12 types of relief constitute the same kind of cost recovery that concerned the court in the  
13 City of Rialto's federal case; if the State Board accords such relief, it would frustrate the  
14 goal of the NCP to achieve a timely and effective cleanup. Thus, the Advocacy Team's  
15 claims concerning water replacement must similarly be dismissed.

16 The federal district court also dismissed a lawsuit brought by the City of Colton  
17 finding the city had not complied with the NCP. Order Granting Defendants' Motion for  
18 Summary Judgment, or in the Alternative, for Partial Summary Judgment, *City of Colton*  
19 *v. American Promotional Events, Inc. – West, et al.*, Case No. CV 05-1479-JFW (SSx)  
20 (filed October 31, 2006) ("*Colton Dismissal*") Ex. 20333. In that case, the court  
21 dismissed the claims for water replacement because the City had not performed a  
22 number of actions that were required by the NCP. *Id.* at 1-10. The City should have  
23 (1) properly initiated a removal site evaluation, (2) reviewed the removal site evaluation,  
24 (3) properly determined a threat to public health or welfare as a result of actual or  
25 potential contamination of drinking water supplies, (4) conducted an engineering  
26 evaluation/ cost analysis, (5) developed a sampling and analysis plan, (6) conducted  
27 CERCLA to preempt other laws where settlements would be prejudiced by application of  
28 state law. *See, e.g., In re Reading Company*, 115 F.3d 1111, 1117 (3d Cir. 1997).

1 community relations planning, (7) determined the adequacy of community relations  
2 through outreach to specified persons, (8) formulated a formal community relations plan,  
3 and (9) solicited comments from the public concerning the engineering evaluation/ cost  
4 analysis, among other requirements. *Colton Dismissal*, 7-9 (citing various provisions at  
5 40 C.F.R. § 300.415). *Id.* The court also noted that an additional precondition to valid  
6 claim for water replacement under the NCP was proof of the legal requirement to stop  
7 serving water from the impacted wells. *Colton Dismissal*, 9, fn. 12. Again, there is no  
8 evidentiary basis for making that finding in this proceeding.

9 (3) The City of Rialto is Collaterally Estopped from  
10 Advancing Claims Related to Water Replacement and  
Reimbursement

11 The City of Rialto, a designated party to these proceedings, is precluded by the  
12 doctrine of collateral estoppel from seeking the same claims that were defeated in the  
13 federal litigation. *City of Rialto v. U.S. Department of Defense, supra*. The City of Rialto  
14 cannot now attempt to avoid the NCP and “back door” its recovery for alleged water  
15 replacement costs under state law in direct contravention of the District Court’s ruling  
16 dismissing its state claims. In other words, the City is not allowed a second bite at the  
17 apple, and the Hearing Officer should not endorse the City’s transparent forum  
18 shopping.

19 The City makes no secret of its attempt get relief through the State Board  
20 proceedings for which it have been unsuccessful in federal district court. The City of  
21 Rialto and the Advocacy Staff have confirmed that they have a joint prosecution  
22 agreement. See, e.g., Transcript of Proceedings, March 15, 2007, *City of Rialto, et al.,*  
23 *v. United States Department of Defense, et al.*, No. CV-00079 PSG (SSx), 24:17-25:3.  
24 Ex. 20357. Utilizing the State Board proceedings to get relief is a key element of the City  
25 of Rialto’s strategy:

26 The second prong of Rialto’s plan is to provide evidence gathered  
27 from discovery in the litigation to the Santa Ana Regional Water  
28 Quality Control Board for its use in Administrative Proceedings  
against the potentially responsible parties to compel them to  
investigate and clean up the perchlorate in the Rialto Basin. Rialto

1 is working cooperatively with the Water Quality Board to support its  
2 issuance of "Clean Up and Abatement Orders" or CAOs. . . the  
3 benefits of the lawsuit have just begun. The City is currently  
4 cooperating with the Regional Water Quality Control Board in its  
5 upcoming proceedings to issue Clean Up and Abatement Orders  
6 against other corporate polluters, including Black & Decker, Inc.,  
7 Emhart Industries, Inc., B.F. Goodrich and Pyro Spectaculars, Inc.  
8 On October 13, 2006, the Regional Water Quality Control Board  
9 adopted a resolution appointing a hearing officer, and ordering the  
10 commencement of the proceedings against these very parties. The  
11 City of Rialto has joined the proceeding to assist in the prosecution  
12 of the polluters. "The City's Perchlorate Clean-Up Plan," City of  
13 Rialto Website, [http://www.rialto.ca.gov/perchlorate/water\\_rialto-perchlorate-plan.php](http://www.rialto.ca.gov/perchlorate/water_rialto-perchlorate-plan.php)

9 However, "Collateral estoppel precludes a party to an action from re-litigating in a  
10 second proceeding matters litigated and determined in a prior proceeding." *People v.*  
11 *Sims*, 32 Cal. 3d 468, 477 (1982). The first judgment operates as a conclusive  
12 adjudication as to such issues in the second action as were actually litigated and  
13 determined in the first action. *Clark v. Leshner*, 46 Cal. 2d 874, 880 (1956). When an  
14 issue was decided in prior litigation, collateral estoppel applies to conclusively determine  
15 those issues against the party in a subsequent lawsuit on a *different* cause of action.  
16 *Vandenberg v. Superior Court*, 21 Cal. 4th 815 (1999), citing *Teitelbaum Furs v.*  
17 *Dominion Insurance Co.*, 58 Cal. 2d 601,604. Because the City of Rialto is bound by the  
18 federal determination, it necessarily is bound by that determination in this forum. See  
19 *Vandenberg*, 21 Cal. 4th at 828, citing *Lucido v. Superior Court*, 51 Cal. 3d 335, 341  
20 (1990). Collateral estoppel may be applied nonmutually, and thus it is not necessary for  
21 this proceeding to include parties identical to the federal action for the City of Rialto to be  
22 precluded from raising these issues before the State Board. See *Vandenberg*, 21 Cal.  
23 4th at 828.<sup>133</sup>

24  
25  
26 <sup>133</sup> Additionally, as here, where the City of Rialto sits as a prosecutor, use of collateral  
27 estoppel vindicates the policy behind the doctrine, which is to promote judicial economy  
28 and protect litigants from harassment by vexatious litigation. *Vandenberg*, 21 Cal. 4th at  
829. Allowing the City of Rialto to relitigate their claims in this forum is contrary to this  
policy.



1 c. **The Advocacy Team Has Not Proven That Wells are**  
2 **“Affected” by Goodrich**

3 Section 13304(a) provides that a “cleanup and abatement order issued by the  
4 state board or a regional board may require the provision of, or payment for,  
5 uninterrupted replacement water service, which may include wellhead treatment, to each  
6 affected public water supplier or private well owner.” In the proposed CAO and in their  
7 Points and Authorities, the Advocacy Team has not proven that any well owner has been  
8 “affected” by a discharge caused by Goodrich.

9 The Advocacy Team nebulously claims that a condition of pollution or nuisance  
10 exists because there has been an interference with municipal and beneficial uses  
11 (“MUN”) of the groundwater. Ad. Team P&As, p. 12. However, not only must the  
12 Advocacy Team prove the elements of a Cleanup and Abatement Order, as discussed  
13 above, but it must (and has not) further demonstrated that *Goodrich’s discharge* has  
14 affected the drinking water well(s), including that Goodrich’s discharge has contaminated  
15 the well to a degree constituting “pollution” or “nuisance.”

16 Nor does the Advocacy Team point to any violation of the Basin Plan. While the  
17 Advocacy Team points to the bounds of Regional Board regulatory authority as the  
18 reasonable protection of beneficial uses through establishment and enforcement of  
19 water quality objectives adopted in regional water quality control plans (Water Code  
20 §§ 13240-13247, 13263), it fails to specify which applicable water quality objectives have  
21 been violated Goodrich, or how the asserted beneficial use has been specifically  
22 impaired by Goodrich.<sup>134</sup>

23 d. **Water Replacement Cannot be Ordered Where No Water**  
24 **Standards Are Exceeded**

25 Citing *Olin Corp. and Standard Fusee Corp.* WQ 05-07 (2005), the Advocacy

26 <sup>134</sup> The MUN beneficial use dictates that groundwater in the Rialto and Colton subbasins  
27 meet certain narrative and numeric objectives. *Santa Ana River Basin Water Quality*  
28 *Control Plan*, pp. 4-13, 4-14, 4-39, available at  
[http://www.waterboards.ca.gov/santaana/html/basin\\_plan.html](http://www.waterboards.ca.gov/santaana/html/basin_plan.html) (“Basin Plan”).

1 Team seeks to order Goodrich to provide water replacement for water that contains  
2 perchlorate above the unenforceable Public Health Goal (PHG) of 6 ppb established by  
3 the California Office of Environmental Health Hazard Assessment (OEHHA). Ad. Team  
4 P&A's, 106; Draft CAO, ¶¶ 65 and 66. However, both the *Olin* Order and the Advocacy  
5 Team are wrong as a matter of law.<sup>135</sup> No water replacement order may be issued for  
6 perchlorate without an enforceable standard (*i.e.*, an MCL). The Advocacy Team further  
7 concedes that only one well subject to the Proposed CAO contains TCE above its MCL.  
8 Draft CAO, ¶ 56. Until an MCL is issued for perchlorate, there is no authority for water  
9 replacement orders under Water Code Section 13304.

10 As the State Board recognized in *Olin*, "there is currently no enforceable state or  
11 federal standard for perchlorate in drinking water for use in determining when a well is  
12 affected such that the use should be entitled to replacement water service." *Olin Corp.*  
13 *and Standard Fusee Corp.* WQ 05-07 (2005) at 3. To date, no MCL for perchlorate has  
14 been developed by either DHS or the U.S. EPA.<sup>136</sup> DHS is responsible for adopting  
15 these legally binding and enforceable standards and has been specifically charged with  
16 developing an MCL for perchlorate. Health & Safety Code § 116293(b). An MCL is  
17 defined as the "primary drinking water standard for contaminants in drinking water."  
18 While the MCL is to be set at a "level that is as close as feasible to the corresponding  
19 PHG, placing primary emphasis on the protection of public health," it by no means will  
20 necessarily be at the same level of the PHG. *Id.* § 116365(a). The MCL constitutes "the  
21 level of contaminants that, in the judgment of the department, may have an adverse  
22 effect on the health of persons" and is the maximum permissible level of a contaminant

23 \_\_\_\_\_  
24 <sup>135</sup> A reviewing court would not accord deference to the State Board because it is  
25 exercising regulatory control out of its jurisdiction. *Chevron U.S.A., Inc. v. Natural*  
26 *Resources Defense Council, Inc.*, 467 U.S. 837, 844 (1984) (establishing that deference  
27 is given to an agency construing a statute that *it administers*).

28 <sup>136</sup> However, in January 2006, EPA promulgated guidance for the assessment of  
perchlorate as part of NCP activities that identified the "to be considered" level as the  
drinking water equivalent level of 24.5 micrograms per liter (24.5 parts per billion or  
"ppb"). "Memorandum: Assessment Guidance for Perchlorate," U.S. EPA, January 26,  
2006.

1 in water. *Id.* § 116275 subd. (c), (f).

2 Reliance on the PHG instead of an MCL, which is not a standard, runs contrary to  
3 Water Code Section 13304(f) and Health & Safety Code § 116365(c)(2), which prohibits  
4 both OEHHA and the California Department of Health Services (DHS) from imposing a  
5 mandate on a public water system based on a PHG. In fact, the State Board, the  
6 Regional Board, and OEHHA are not authorized to regulate drinking water, which is the  
7 exclusive realm of DHS. Health and Safety Code Section 116350(a) mandates that *DHS*  
8 “shall administer the provisions of this chapter and *all other provisions relating to the*  
9 *regulation of drinking water to protect public health*” (emphasis added).

10 Additionally, the use of the PHG runs contrary to the express guidance of  
11 OEHHA, which provides:

12 A PHG represents a health-protective level for a contaminant that  
13 DHS and California’s public water systems should strive to achieve  
14 if it is feasible to do so. However, a PHG is not a boundary line  
15 between a “safe” and “dangerous” level of a contaminant, and  
16 drinking water can still be considered acceptable for public  
17 consumption even if it contains contaminants at levels exceeding  
18 the PHG. As long as drinking water complies with all MCLs, it is  
19 considered safe to drink, even if some contaminants exceed PHG  
20 levels. *Frequently Asked Questions (FAQs) About the Public Health*  
21 *Goal for Perchlorate*, OEHHA, March 11, 2004.

22 Likewise, the DHS “notification level” for perchlorate of 6 ug/L in drinking water  
23 cannot be relied upon as a standard for issuance of water replacement order. DHS’ own  
24 recommendations with respect to its notification levels runs contrary to using the  
25 equivalent notification level for perchlorate as the “standard” for water replacement.  
26 When exceeded, notification levels only require a drinking water system to notify the  
27 governing body of the local agency in which users of the drinking water reside. Health  
28 and Safety Code § 116455. Notification levels are advisory levels and not enforceable  
standards.<sup>137</sup>

137 See, e.g.,  
<http://www.dhs.ca.gov/ps/ddwem/chemicals/al/default.htm#REQUIREMENTS%20AND%20RECOMMENDATIONS>.



1 Rather, DHS recommends that if a chemical is present in drinking water that is  
2 provided to consumers at concentrations considerably greater than the notification level,  
3 that the drinking water system take the source out of service depending upon the  
4 toxicological endpoint that is the basis for the notification level, ranging from 10 to 100  
5 times the notification level.<sup>138</sup> *Id.* This DHS response level for perchlorate is ten times  
6 the notification level, or 60 micrograms (µg) per liter. *Drinking Water Notification Levels*  
7 *and Response Levels: An Overview*, California Department of Health Services—Drinking  
8 Water Program, p. 2, available at  
9 <http://www.dhs.ca.gov/ps/ddwem/chemicals/AL/PDFs/notificationoverview.pdf>. Further,  
10 neither the Advocacy Team nor the State Board have proffered any evidence to  
11 demonstrate that 6 ug/L is an appropriate standard. The evidence is to the contrary.  
12 Borak Dec. ¶ 37-42.

13 Finally, none of the parties have adduced evidence concerning the background  
14 condition of the drinking water prior to the alleged discharges. Water Code § 13304(f).  
15 The Advocacy Team has failed to demonstrate whether any of the levels of perchlorate  
16 found in the wells at issue are over and above the background levels for the basin or  
17 what levels existed prior to the time of the alleged discharges.

18 **D. An Order Pursuant To Water Code Section 13267 Is Inappropriate**

19 The Advocacy has neither properly plead nor demonstrated that an order  
20 pursuant to Water Code Section 13267 is appropriate. After years of voluntary  
21 investigation and expending millions of dollars, Goodrich has exceeded any conceivable  
22 obligation it could have as a suspected discharger in light of the associated burden.

23 Pursuant to Water Code Section 13267(a):  
24

25 <sup>138</sup> For chemicals with a non-cancer toxicological endpoint, the recommendation occurs  
26 at 10 times the notification level. For chemicals considered to pose a cancer risk, the  
27 recommendation occurs at 100 times the notification level. Department of Health  
28 Services Website, available at  
<http://www.dhs.ca.gov/ps/ddwem/chemicals/al/default.htm#REQUIREMENTS%20AND%20RECOMMENDATIONS> (last visited April 10, 2007).

1 "the regional board may require that any person who has  
2 discharged, discharges, or is suspected of having discharged or  
3 discharging . . . to furnish, under penalty of perjury, technical or  
4 monitoring program reports which the regional board requires. *The*  
5 *burden, including costs, of these reports shall bear a reasonable*  
6 *relationship to the need for the report and the benefits to be*  
7 *obtained from the reports.* In requiring those reports, the regional  
8 board shall provide the person with a written explanation with regard  
9 to the need for the reports, and shall identify the evidence that  
10 supports requiring that person to provide the reports." Water Code  
11 § 13267(b)(1). (emphasis added.)

12 Before Section 13267 can never be applied to this matter, several statutory prerequisites  
13 must yet be satisfied. First, the Advocacy Team or State Board must overcome the  
14 presumption against retroactive application of the statute. For the same arguments  
15 advanced regarding the retroactive application of Section 13304 to Goodrich's acts,  
16 Section 13267 similarly does not, and cannot, operate retroactively. See Section  
17 XIV(B)(2), *supra*. Each of the parties to this proceeding have the right to "have liability-  
18 creating conduct evaluated under the liability rules in effect at the time the conduct  
19 occurred," unless the Legislature has specifically abrogated that right. *Californians for*  
20 *Disability Rights*, 39 Cal. 4th at 233, citing *Elsner, Tapia, and Aetna, supra*.  
21 Section 13267 was enacted in 1969, whereas Goodrich operated on the subject property  
22 from 1957 to early 1964. In the absence of an express indication that Section 13267  
23 was to have retroactive effect, the statute cannot survive the presumption against it.  
24 Similarly, any prior manifestations of Section 13267 do not authorize the Regional Board  
25 to order Goodrich to do anything decades after.

26 As with Section 13304, imposition of the statute retroactively implicates the same  
27 constitutional takings and due process concerns when huge financial burdens are  
28 imposed on entities that were in full compliance with the law actually in force at the time.  
*Myers*, 28 Cal. 4th 828, 845-846. Also similar to Section 13304, there is no indication in  
Section 13267 that it can be used jointly and severally in a manner that asks one  
discharger to investigate the discharges of others. See Section XIV(E). Concerning the  
same matter as this proceeding, when reviewing a prior challenge to the Water Boards'

1 Section 13267 authority by the Emhart Parties, where it rejected the Regional Board's  
2 order, the Riverside Superior Court stated:

3 The far more difficult question is whether or not the statute as  
4 applied in this particular case afforded Petitioner [Emhart] both  
5 substantive and procedural due process....the more onerous the  
6 burden created by the § 13267 order, the greater the procedural due  
7 process requirements.... The requirements of Due Process will  
8 depend on the circumstances of each case. Factors might include:  
9 (1) the size of the burden in producing the requested reports; (2) the  
10 scope of the danger to public health if the reports are not produced;  
11 (3) the immediacy of the danger to public health if the reports are  
12 not produced; whether the required testing is to be performed solely  
13 on the property owned by the entity being ordered to do the testing,  
14 or whether the § 13267 order seeks testing on other property.<sup>[139]</sup>

15 Statement of Decision, *Emhart Industries, Inc. vs. California Regional Water Quality*  
16 *Control Board*, Riverside County Superior Court, Case No. RIC 397528 (filed  
17 November 8, 2004).

18 In addition, the Advocacy Team must identify the "plan or requirement" to which  
19 the Advocacy Team is responding under Section 13267(a). There is also no authority  
20 that Section 13267 orders are appropriate in this context. The CAO does not pertain to  
21 a *water quality control plan and waste discharge requirements* as set forth in  
22 Section 13267(a).<sup>140</sup> See, e.g., *City of Arcadia v. State Water Resources Control Bd.*,  
23 135 Cal. App. 4th 1392, 1413-14 (2006) (finding that Water Code Section 13267 did not  
24 apply to the Los Angeles Regional Board's adoption of a program designed to cleanup  
25 trash in the Los Angeles River and embodied in an *amendment to the water quality*  
26 *control plan*).

27 <sup>139</sup> The court noted in a footnote that "[a]n order that someone pay for testing on other  
28 people's property, however, can only be justified by a finding that the entity paying for  
the testing is somehow responsible for the need for the testing."

<sup>140</sup> In addition, any ultimate order relying on Section 13267 authority must be consistent  
with being a "technical or monitoring program report." § 13267(b)(1). The Advocacy  
Team's Points and Authorities appear to require the parties to conduct further  
*investigations*. Ad. Team P&As, pp. 106-108. Logically, "technical or monitoring  
program reports" are data that help inform an "investigation." Instead, the Advocacy  
Team seeks to have the parties conduct the entire investigation that is authorized by  
Section 13267(a), as opposed to providing simple reports that would aid the State in  
investigating. The term "technical or monitoring program report" more aptly refers to the  
compilation of already-existing data, rather than the task of completing full studies in the  
place of the state.

1 The Advocacy Staff has also failed to meet, and cannot do so, the balancing test  
2 set forth in Section 13267. Significantly, the Advocacy Team has not performed any  
3 transparent balancing of burden and benefit as required under Section 13267(b)(1).  
4 Goodrich has conducted extensive soil and groundwater investigation on the 160-acre  
5 parcel and throughout the Rialto basin and has expended millions of dollars doing so.  
6 Yet, even after these extensive studies pursuant to work plans reviewed and approved  
7 by the Regional Board and the U.S. EPA, the Advocacy Team admits that (1) there is  
8 still no proof of a discharge to water from Goodrich (Saremi Dep., 656:19-24; Sturdivant  
9 Dep., 717:15-24; Holub Dep., 933:8-23, 934:10-20. 935:2-5, 93:10-15, 984:25-985:4,  
10 985:18-21, 988:20-23), and (2) the Advocacy Team does not know what future steps to  
11 take to identify the causes or sources. See Holub Dep., 933:8-23, 934:10-20. 935:2-5,  
12 93:10-15, 984:25-985:4, 985:18-21, 988:20-23.

13 Goodrich's efforts to date far exceed what the Boards can reasonably request of  
14 it. The burden imposed upon Goodrich has already vastly exceeded that permitted  
15 under any reading of Section 13267. As a "suspected discharger" only, Goodrich has  
16 already more than met any and all purported obligations under Section 13267 and there  
17 is no authority to order it to do anything more pursuant to Section 13267.

#### 18 **E. Goodrich Is Not Subject To Joint And Several Liability**

19 On the second to last page of their written submission, and without citation to  
20 legal authority, the Advocacy Team suggests that any potential order should impose a  
21 joint and several obligation on the alleged dischargers. Ad. Team P&As, 108-109.  
22 There is no authority for this proposition. To start with, the text itself of Section 13304  
23 imposes a several obligation. Second, "severable" liability is appropriate when any  
24 injury is divisible, as is the case here if there are violations of Section 13304. Finally, as  
25 entities that contributed the perchlorate contamination, the Regional Boards is estopped  
26 from imposing joint and several liability.

#### 27 **1. Section 13304 Imposes a Several Obligation Only**

28 California law provides for three types of legal obligations: joint, several, and joint

1 and several. Civ. Code § 1430. California law imposes a general presumption against  
2 joint and several obligations unless there are express words to the contrary. Civ. Code  
3 § 1431. The interpretation of a several obligation, rather than a joint and several one, is  
4 consistent with the policy adopted by the People of California, as codified at Civil Code  
5 § 1431.1, viewing the imposition of joint and several liability as frequently inequitable and  
6 unjust.

7 Section 13304 imposes only a several obligation. The text of Section 13304  
8 clearly requires the Regional Board to demonstrate that *each* discharge of waste causes  
9 or permits, or threatens to cause of permit, the waste to be discharged or deposited  
10 where it is, or probably will be, discharged into waters of the state and creates, or  
11 threatens to create, a condition of pollution or nuisance. Section 13304(a) further  
12 provides that such person “shall upon order of the regional board, clean up *the waste or*  
13 *abate the effects of the waste . . .*” The language of the statute does not state that each  
14 proven discharger shall be responsible for cleaning up and abating the waste caused by  
15 all other discharges that ever occurred on the site.

16 The creation of a several obligation is further evidenced by the conspicuous lack  
17 of text in section 13304 making reference to or intention to impose a “joint and several”  
18 obligation. In fact, the statute is devoid of any mention of a joint and several obligation  
19 which would be an obvious and necessary requirement for the imposition of such liability.

20 **2. Severable Liability Is Further Appropriate Because the Injury**  
21 **Imposed is Divisible**

22 The evidence demonstrates, and Regional Board staff concede, that the  
23 appearance of perchlorate in the Rialto area’s groundwater is likely to have come from a  
24 number of separate actions taken over decades by operators of various industries in  
25 different places in the greater Rialto area.

26 **a. Traditional Tort Principles Dictate that Liability Is**  
27 **Severable In This Proceeding**

28 Where an injury is *distinct* or *divisible*, the liability of a defendant is severable and



1 the defendant is responsible for remedying only that portion of the injury. Restatement  
2 (Second) of Torts § 433A.<sup>141</sup> “Comment b” of section 433A of the Restatement  
3 addresses “distinct harms”:

4 There are other results which, by their nature, are more capable of  
5 apportionment. If two defendants independently shoot the plaintiff at  
6 the same time, and one wounds him in the arm and the other in the  
7 leg, the ultimate result may be a badly damaged plaintiff in the  
8 hospital, but it is still possible, as a logical, reasonable, and practical  
9 matter, to regard the two wounds as separate injuries, and as  
10 distinct wrongs. The mere coincidence in time does not make the  
11 two wounds a single harm, or the conduct of the two defendants one  
12 tort. There may be difficulty in the apportionment of some elements  
13 of damages, such as the pain and suffering resulting from the two  
14 wounds, or the medical expenses, but this does not mean that one  
15 defendant must be liable for the distinct harm inflicted by the other.

16 “Comment d” of section 433A of the Restatement addresses “divisible harms:”

17 There are other kinds of harm which, while not so clearly marked out  
18 as severable into distinct parts, are still capable of division upon a  
19 reasonable and rational basis, and of fair apportionment among the  
20 causes responsible. Thus where the cattle of two or more owners  
21 trespass upon the plaintiff’s land and destroy his crop, the aggregate  
22 harm is a lost crop, but it may nevertheless be apportioned among  
23 the owners of the cattle, on the basis of the number owned by each,  
24 and the reasonable assumption that the respective harm done is  
25 proportionate to that number. Where such apportionment can be  
26 made without injustice to any of the parties, the court may require it  
27 to be made.

28 The Advocacy Staff has not put forth any evidence in this proceeding demonstrating the  
Goodrich has caused an indivisible harm in the first place. Moreover, the facts show that  
any perchlorate contamination that could be conceivably attributed to Goodrich’s  
operations would be at best limited to shallow soil contamination and easily capable of  
apportionment under the rationales of the Restatement, and thus that liability is

---

<sup>141</sup> It is well-documented that courts during the era when Goodrich operated relied on the Restatement (Second) of Torts. *Carlotto, Ltd. v. County of Ventura*, 47 Cal. App. 3d 931 (1975) (embracing the Restatement (Second)’s Section 433A and stating that it is in accord with the law as enunciated in *Fibreboard Paper Products Corp. v. East Bay Union of Machinists*, 227 Cal. App. 2d 675 (1964)); *Cronin v. J.B.E. Olson Corp.*, 8 Cal. 3d 121 (1972) (embracing Restatement (Second) of Torts Section 402A regarding product liability); *Van Arsdale v. Hollinger*, 68 Cal. 2d 245 (1968) (finding support in the Restatement (Second) for ruling on nonliability of independent contractors). While the Restatement (Second) was not published until 1965, it would have accounted for the developments in law during the period in which Goodrich operated in Rialto.

1 severable from liability for other areas on the 160-acre site or for the groundwater.

2 **b. Liability Under California's Principal Hazardous Waste**  
3 **Remediation Law is Apportioned According to Fault**

4 The policy of the State is clearly set forth by the Legislature in the Carpenter-  
5 Presley-Tanner Hazardous Substance Account Act ("HSAA"), California's principal law  
6 for the remediation of hazardous waste sites: Health and Safety Code §§ 25300-  
7 25395.45. Liability under the HSAA is apportioned according to fault:

8 (a) Except as provided in subdivision (f), any party found liable for  
9 any costs or expenditures recoverable under this chapter who  
10 establishes by a preponderance of the evidence that *only a portion*  
11 *of those costs or expenditures are attributable to that party's actions,*  
12 *shall be required to pay only for that portion.*

11 b) Except as provided in subdivision (f), if the trier of fact finds the  
12 evidence insufficient to establish each party's portion of costs or  
13 expenditures under subdivision (a), the *court shall apportion those*  
14 *costs or expenditures, to the extent practicable, according to*  
15 *equitable principles, among the defendants.*

14 \* \* \*

15 (f) Notwithstanding this chapter, any response action contractor  
16 who is found liable for any costs or expenditures recoverable under  
17 this chapter and who establishes by a preponderance of the  
18 evidence that *only a portion of those costs or expenditures are*  
19 *attributable to the response action contractor's actions, shall be*  
20 *required to pay only that portion of the costs or expenditures*  
21 *attributable to the response action contractor's actions.*

19 Health and Safety Code § 25363 (emphasis added). There is no valid reason for the  
20 State Board to diverge from the State's approach to hazardous waste sites that are  
21 remediated under the Health and Safety Code.

22 **3. The State Board Is Estopped from Imposing Joint and Several**  
23 **Liability**

24 The State is estopped from imposing joint and several liability on the parties in  
25 this matter because of its contribution to perchlorate in the groundwater. *See also*  
26 *Section XVI, supra.* Both the doctrine of unclean hands and the principles behind joint  
27 and several liability compel this conclusion. The State's actions in exacerbating  
28 perchlorate contamination preclude it from seeking full payment from other entities. The

1 parties to this proceeding cannot be found to be subject to Section 13304, without the  
2 State also being found to be subject the section and having liability.

3 a. **The State's Actions Concerning the McLaughlin Pit and**  
4 **Robertson's Ready-Mix**

5 As further discussed below (See Section XV, *infra*), the evidence demonstrates  
6 that the Regional Board permitted discharges to occur from the McLaughlin Pit and was  
7 instrumental in permitting a gravel washing operation ("Robertson's Ready-Mix")  
8 involving unlined settling ponds located directly over historical bunkers known to contain  
9 perchlorate.

10 (1) McLaughlin Pit

11 The evidence brought forth in this proceeding demonstrates that the McLaughlin  
12 Pit is the only confirmed source to reach groundwater on the 160-acre parcel. See  
13 Section IV, *supra*. As further addressed below, the McLaughlin Pit was a Class I  
14 hazardous waste disposal pit located on the 160-Acre Site, into which Regional Board  
15 staff negligently permitted fireworks manufacturers to dump many thousands of pounds  
16 of perchlorate waste flooded with tens of thousands of gallons of water annually for 16  
17 years (approximately 1971-1987) in violation of Regional Board's own waste discharge  
18 requirements. *Id.* In or about 1987, the Regional Board failed to ensure that the  
19 McLaughlin Pit was closed in accordance with the law. *Id.*

20 On November 14, 1971, the Regional Board issued Waste Discharge  
21 Requirements ("WDRs"), which authorized the construction and operation of the  
22 proposed waste disposal pit. The disposal pit, constructed by a swimming pool  
23 contractor, was 20' x 20' x 4' and had a 12,000 gallon capacity. Although the WDRs  
24 required it to have an impervious lining, the "pit" installed was simply a plastered gunite  
25 swimming pool without any liner. *Id.*, Exs. 3543, 3545. The WDRs expressly prohibited  
26 "all discharge of waste to surface waters, surface water drainage courses or areas which  
27 would allow percolation of waste" and also required the owner to file quarterly monitoring  
28 reports which were to contain monthly daily averages of waste flows to the pit and to



1 record of the depth of the waste in the pit. The WDRs were initially issued with the  
2 understanding that 150 gallons of manufacturing waste would be discharged to the pit  
3 per day. *Id.* By 1978, however, Apollo reported that its discharge had increased to  
4 3,000 gallons per day, which the Regional Board approved when it reissued the WDR.  
5 Ex. 10365.

6 During their depositions, neither Mr. Thibeault nor Mr. Berchtold could explain  
7 where all the waste water, laden with perchlorate, went, given that in 1978 Apollo had  
8 reported and staff confirmed that 3,000 gallons of waste materials per day were being  
9 discharged to the 12,000 gallon swimming pool pit. Thibeault Dep., 138:22-139:3;  
10 Berchtold Dep. 143:9:147:7. The Regional Board's records reveal numerous, repeated  
11 monitoring report violations. Ex. 20006; Ex. 20007; Ex. 20018; Ex. 20019; Ex. 20020.  
12 The records also contain a number of reported Regional Board staff observations of  
13 violation of the freeboard requirement. *Id.*, Ex. 20020. Despite these facts, *the Regional*  
14 *Board files on the McLaughlin Pit contain no record of any enforcement action taken as*  
15 *a result of any of the numerous violations of the WDRs.* The WDRs were rescinded  
16 without any action in 1991.

17 Perhaps most egregious, in a further act of gross negligence, the Regional Board  
18 did not require the Pit to be properly closed as mandated by Subchapter 15 of the State  
19 Water Board's regulations, which required testing of groundwater for potassium  
20 perchlorate prior to closure. See Section IVC3, *supra*. The Regional Board also  
21 permitted the Pit to operate illegally for two years after the then-owner claimed the pit  
22 was closed. See Section IVC3, *supra*.

23 (2) Robertson's Ready-Mix

24 The second confirmed source of perchlorate contamination in Rialto, is the  
25 Robertson's Read-Mix operations. In 1999, two years after the discovery of perchlorate  
26 in the Rialto-Colton Groundwater Basin, the Regional Board staff approved a soil  
27 washing operation proposed by the County of San Bernardino and its contractor  
28 Robertson's in connection with its expansion of the County's landfill, which permitted

1 millions of gallons of water to mobilize perchlorate and to be discharged to the  
2 groundwater. The County, through Robertson's, proposed a massive excavation project  
3 which included soil washing and the installation of four unlined settling ponds, each 200'  
4 x 250' to 350' x 10' with a capacity of 13 million gallons. Ex. 20083. The direct causal  
5 connection between the mobilization of massive release of perchlorate to the  
6 groundwater by the millions of gallons of water discharged to the settling ponds was  
7 confirmed by Advocacy Team member Thibeault during his March 16, 2007 deposition.  
8 Thibeault Dep., 53 ("I believe that the wash water from the aggregate operation  
9 mobilized perchlorate in the sub surface and pushed it down towards the groundwater.").  
10 On March 16, 2001, less than two years after Regional Board staff authorized the  
11 construction of four unlined settling ponds, and four years after discovery of perchlorate  
12 in the Basin, the County wrote the Regional Board a letter which advised that  
13 perchlorate was being detected in increasing numbers in a monitoring well immediately  
14 down gradient of the ponds. Ex. 20349. In that letter, the county reported increasing  
15 perchlorate concentrations, starting with 1.9 ppb in April 2000 and ending with 250 ppb  
16 in January 2001. One month later, on April 17, 2001, the County again wrote the  
17 Regional Board a letter which restated its concern about the rising perchlorate  
18 concentrations. This letter added the following critical information: the rising perchlorate  
19 concentrations had been detected in a monitoring well down gradient of Robertson's  
20 settling ponds and urged prompt action. Ex. 20101. Mr. Thibeault finally ordered the  
21 County to investigate releases of perchlorate to the groundwater (then at a concentration  
22 of 800 ppb) mobilized by Robertson's settling ponds. By January 2003, the monitoring  
23 well down gradient of the settling ponds reported a concentration of 1,000 ppb of  
24 perchlorate. Ex. 20325, CAO R8-2003-0013, Finding 9.

25 **b. The State Has Violated Section 13304 and Must Share**  
26 **Liability**

27 Under Section 13304, the State must share liability with all found to be  
28 responsible in this proceeding. Water Code Section 13304(a) provides in pertinent part,

1 that “[a]ny person who . . . has caused or permitted . . . any waste to be discharged or  
2 deposited where it is, or probably will be, discharged into the waters of the state and  
3 creates, or threatens to create, a condition of pollution or nuisance, shall upon order of  
4 the regional board, clean up the waste or abate the effects of the waste. . . .” The word  
5 “person” is defined at Section 13050(c) to include “the state.” The words “permit” or  
6 “permitted” are not defined in the statute. Thus, they must be given their ordinary  
7 dictionary meaning. Black’s Law Dictionary defines “permit” in its verb form to mean: “To  
8 suffer, allow, consent, let; to give leave or license; to acquiesce, by failure to prevent, or  
9 to expressly assent or agree to the doing of an act.” *Black’s Law Dictionary*, p. 789  
10 (Abridged 6<sup>th</sup> ed. 1991). Separately, Government Code § 815.6 provides:

11         Where a public entity is under a mandatory duty imposed by an enactment that is  
12 designed to protect against the risk of a particular kind of injury, the public entity is liable  
13 for an injury of that kind proximately caused by its failure to discharge the duty unless the  
14 public entity establishes that it exercised reasonable diligence to discharge the duty.  
15 Thus, because the State is a “person” under Section 13304, and can “permit” discharges  
16 within the meaning of the statute, the State too must be held liable if the other parties to  
17 this proceeding are found to have violated the statute.

18                                 **c.         The State Is Now Estopped from Seeking and Imposing**  
19   **Joint and Several Liability**

20         The doctrine of unclean hands is invoked when a plaintiff or prosecutor “has  
21 violated conscience, or good faith, or other equitable principle, in his prior conduct.”  
22 *General Electric Co. v. Superior Court of Alameda County*, 45 Cal. 2d 897 (1955), citing  
23 *DeGarmo v. Goldman*, 19 Cal. 2d 755, 765 (1942), quoting from Pomeroy’s Equity  
24 Jurisprudence, § 397. The doctrine can only be invoked when the prosecutor’s  
25 misconduct relates directly to the subject of the complaint. *Lynn v. Duckel*, 46 Cal. 2d  
26 845 (1956). Here, one of the prosecutors in these proceedings, the Advocacy Team,  
27 has contributed to the very same wrong it now accuses Goodrich and others of having  
28 performed. The wrongs committed by the Advocacy Team must be imputed to the State.

1 The doctrine of unclean hands thus applies to limit the ability of the State to prosecute  
2 Goodrich under joint and several liability. Adopting similar principles, in *Fireman's Fund*,  
3 the Ninth Circuit held that the City of Lodi could not imposed joint and several liability on  
4 parties found liable under it's municipal hazardous waste ordinance (i.e., MERLO). The  
5 Court of Appeals held that, if the City could be considered a potentially responsible  
6 party, it was prohibited from bringing a cost recovery action that would impose joint and  
7 several liability on other parties pursued by the City. *Fireman's Fund*, 302 F. 3d at 947,  
8 citing *Pinal Creek Group v. Newmont Mining Corp.*, 118 F. 3d 1298, 1301 (9<sup>th</sup> Cir. 1997).  
9 The court reasoned that allowing a party responsible for part of the contamination to  
10 impose joint and several liability on others would result in unfair cost shifting, inefficiency,  
11 and prolonged litigation. *Id.* Under these principles, the State must also be prohibited  
12 from imposing joint and several liability. Like the City of Lodi, the State should be  
13 prohibited from imposing joint and several liability where such enforcement results in  
14 unfair cost shifting and prolonged litigation. Because the State is responsible for the  
15 well-documented discharges to groundwater from the McLaughlin Pit, as well as the  
16 discharges from Robertson's Ready-Mix, the State must shoulder its fair share of  
17 responsibility and not be allowed to shift all costs in this proceeding.

18 **F. The Statute Of Limitations Precludes This Action And The Equitable**  
19 **Doctrine Of Laches Estops The State Board From Issuing A Cleanup**  
20 **And Abatement Order**

21 The applicable statute of limitations and the doctrine of laches bar the State Board  
22 from enforcing Sections 13304 and 13267 against Goodrich. Of course, the Regional  
23 Board has known about Goodrich's operations in Rialto for over three years – its "star  
24 witness," Mr. Polzien, was first deposed in 2003. The State Board's actions in this  
25 proceeding have begun nearly a decade after discovery of this information. Moreover,  
26 information received since initial discovery only tends to exculpate Goodrich from  
27 liability.

28 California Code of Civil Procedure Section 338(i) provides a three-year statute of  
limitations for:

1 An action commenced under the Porter-Cologne Water Quality  
2 Control Act (Division 7 (commencing with Section 13000) of the  
3 Water Code). The cause of action in that case shall not be deemed  
4 to have accrued until the discovery by the State Water Resources  
5 Control Board or a regional water quality control board of the facts  
6 constituting grounds for commencing actions under their  
7 jurisdiction.<sup>142</sup>

8 By its own admission, the Regional Board and Advocacy Team became aware in  
9 1997 of the perchlorate contamination and discovered in 1998 that Goodrich had  
10 operated a solid propellant facility on the Site. Thibeault Dep., 11:1-14:25; Holub Dep.,  
11 16:23-17:8; Saremi Dep., 393:6-10, 488:6-24. Yet, nearly a decade later, the Regional  
12 Board now seeks to take action against Goodrich.<sup>143</sup>

13 Further, the Regional Board is barred from acting by the doctrine of laches.  
14 *Fountain Valley Regional Hospital and Medical Center v. Bonta*, 75 Cal. App. 4th 316,  
15 323-325 (1999) (In cases in which a party asserts doctrine of laches as a bar to a claim  
16 by a public agency, and no statute of limitations directly applies but there is a statute of

17 <sup>142</sup> At least one of the State Board's previous interpretations of this provision claims that  
18 Code of Civil Procedure Section 338 does not apply to cleanup and abatement orders  
19 because subdivision (i) only applies to "civil actions" which are actions in court and that  
20 there is no statute of limitations applicable to State and Regional Board enforcement  
21 orders. *In the Matter of the Petition of Trans-Tech Resources, Inc.*, Order No. WQ 89-14  
22 (1989). The interpretation of "action" in Section 338 to be a "civil action" is unsatisfactory  
23 for a number of reasons, including that it is inconsistent with the use of the term "action"  
24 under the Porter-Cologne Water Quality Control Act, such as the mandate that parties  
25 must petition the State Board to review a "regional board's action." Water Code §  
26 13320. As importantly, the State Board's interpretation ignores the Legislature's  
27 purpose and intent in enacting statutes of limitation (for example, encouraging diligent  
28 and timely prosecution and providing finality and predictability in legal affairs). *See also*  
Footnote 141. The State Board's interpretation is nonsensical in that it would subject  
entities to agency power and process in cases where the agency would be powerless to  
enforce the order in court.

<sup>143</sup> *See, e.g., Wilshire Westwood Assoc. v. Atl. Richfield Co.*, 20 Cal. App. 4th 732, 740  
(1993) ("A plaintiff is charged with 'presumptive' knowledge so as to commence the  
running of the statute once he or she has notice or information of circumstances to put a  
reasonable person on inquiry, or has the opportunity to obtain knowledge from sources  
open to his investigation." [Citations omitted.]) *See, also, Kaiser Foundation Hospitals*  
*v. Workers' Compensation Appeals Board*, 39 Cal. 3d 57, 62 (1985) ("The purpose of  
any limitations statute is to require diligent prosecution of known claims thereby  
providing necessary finality and predictability in legal affairs . . ."); *Douglas v. Douglas*  
(1951) 103 Cal. App. 2d 29, 34 35 (The policy of the law is to prevent stale claims from  
springing up after the lapse of long periods of time and pursuant to this policy, statutes of  
limitations are enacted on the presumption that one having a well-founded claim will not  
delay enforcing it beyond a reasonable time. [citations omitted])



1 limitations governing an analogous action at law, the period may be borrowed as a  
2 measure of the outer limit of reasonable delay in determining laches; whether or not  
3 such a borrowing should occur depends upon the strength of the analogy.) At this time,  
4 now almost a decade after discovery of perchlorate, the Water Boards have  
5 unreasonably delayed in issuing an order.

6 **G. Res Judicata And Collateral Estoppel Preclude The State Board From**  
7 **Issuing A New Cleanup And Abatement Order**

8 The Advocacy Team and State Board are barred by the doctrines of res judicata  
9 and collateral estoppel from imposing a new Cleanup and Abatement Order in this  
10 proceeding. On June 6, 2002, the Regional Board issued a Cleanup and Abatement  
11 order to Goodrich. CAO No. R8-2002-0051. The 2002 CAO alleged perchlorate  
12 discharges from Goodrich and required investigation and cleanup. On September 13,  
13 2002, the matter was heard before the Regional Board. Prior to the hearing, the parties  
14 submitted hearing briefs and advance written testimony. At the hearing, the Regional  
15 Board presented its case, primarily through the testimony of its Executive Officer,  
16 Assistant Executive Officer, and two staff members. The staff members were cross-  
17 examined. Goodrich also presented the testimony of expert witnesses. After  
18 presentation of the evidence was concluded, the Regional Board rescinded the CAO.

19 It has long been settled that the doctrine of *res judicata* can be applied in the  
20 administrative context provided certain elements are met. *U.S. v. Utah Construction*  
21 *Mining Co.*, 384 U.S. 394, 421-22 (1966); *Brosterhous v. State Bar*, 12 Cal. 4th 315, 325  
22 (1995); *People v. Sims*, 32 Cal. 3d 468, 485 (1982). First, the administrative agency  
23 must be acting in a judicial capacity. *Id.* Next, the agency must resolve disputed issues  
24 before it and render a final decision. *Id.* Finally, the parties must have had an adequate  
25 opportunity to litigate the matter. *U.S. v. Utah Construction Mining Co.*, 384 U.S. 394,  
26 421-22 (1966); *Brosterhous v. State Bar*, 12 Cal. 4th 315, 325 (1995); *People v. Sims*,  
27 32 Cal. 3d 468, 479 (1982).

28 For purposes of these administrative proceedings, res judicata effect must be

1 given to the 2002 cleanup and abatement proceeding as *against* the Regional Board and  
2 State Board sitting in its stead. The Regional Board and now State Board are obviously  
3 pursuing the very same claim today under the Water Code as in 2002. The formal  
4 nature of the proceeding in 2002 provided a forum where the issue was "litigated," as  
5 that term is recognized in California's doctrine of res judicata and collateral estoppel.  
6 The Regional Board's decision to rescind the 2002 CAO was a judgment on the merits.  
7 Today, the Regional Board is asserting the *same claims* against Goodrich. Finally, all  
8 parties were given a fair opportunity to be heard on this issue in 2002. Thus, res  
9 judicata effect must be given to the Regional Board's 2002 decision.

10 **XV. GOODRICH WAS COMPLYING WITH FEDERAL GOVERNMENT**  
11 **REQUIREMENTS AND IS NOT LIABLE UNDER CONFLICTING STATE LAWS**

12 The Advocacy Team's allegations against Goodrich must also be rejected  
13 because, as a former contractor with the United States military, Goodrich's actions were  
14 governed by applicable federal standards and obligations that controlled the disposal of  
15 ammonium perchlorate and solvents contaminated with solid-rocket propellant. The  
16 evidence conclusively shows that Goodrich was required to incinerate waste  
17 PERCHLORATE and solvents contaminated with explosive propellants in a burn pit.  
18 And to the extent releases of PERCHLORATE and solvents occurred at Rialto, they  
19 resulted from Goodrich's compliance with these requirements that were imposed upon it  
20 by the federal government. Goodrich therefore cannot be held liable now under the  
21 conflicting state laws upon which the Advocacy Team relies, as both the Supremacy  
22 Clause of the United States Constitution and the modern-day government contractor  
23 defense shield Goodrich from liability in these proceedings.

24 First, because military disposal regulations were issued under federal statutes,  
25 they carry the force of law. In the event of a direct conflict between state law and federal  
26 regulations, the Supremacy Clause of the United States Constitution directs that state  
27 law must recede. Courts have long recognized that federal military manuals and  
28 regulations promulgated under federal law must trump conflicting state laws. Second,

1 the modern-day government contractor defense permits government contractors who  
2 have complied with government specifications to cloak themselves with the  
3 government's immunity from state liability. Because Goodrich simply complied with  
4 federal government disposal regulations, it has a valid defense to the Advocacy Team's  
5 allegations by virtue of its status as a government contractor.

6 Goodrich's use and disposal of perchlorate and solvent contaminated with  
7 propellant were carried out in strict compliance with government specifications. As such,  
8 the Supremacy Clause acts to pre-empt state law when, as here, it interferes directly  
9 with federally regulated activities. Moreover, Goodrich is shielded from liability in this  
10 case under the express provisions of the California Civil Code and the government  
11 contractor defense.

12 **A. Goodrich Was Required to Burn Waste in Accordance with Federally**  
13 **Imposed Standards**

14 The primary allegation asserted by the Advocacy Team is that Goodrich's use of a  
15 burn pit to dispose of waste perchlorate resulted in its release into the groundwater. The  
16 Draft CAO states that ammonium perchlorate was "dried and ground at the Property,  
17 before it was mixed with a polymer fuel-binder. . . ." Draft CAO at 12. As part of the  
18 production process, washout waste, including perchlorate and solvent contaminated with  
19 perchlorate and propellant, "was disposed of in Goodrich's on-site burn pits." *Id.* at 13.  
20 The Draft CAO identifies several process wastes that were burned in the on-site pit,  
21 including residual (unburned) scrap propellant from various rocket types and from  
22 Sidewinder salvage operations, see *Id.* at 13-15, "[a]ll [of which] was disposed of in  
23 Goodrich's burn pits located on the property." *Id.* at 15.<sup>144</sup> Likewise, the Advocacy  
24 Team's Memorandum of Points and Authorities identifies several additional process  
25 wastes that were allegedly incinerated in the on-site burn pit: perchlorate powder swept  
26

27 <sup>144</sup> Although the Advocacy Team refers to "Goodrich's burn pits" in the Draft CAO and its  
28 Memorandum of Points and Authorities, the evidence plainly demonstrates that Goodrich  
only operated a single burn pit at Rialto. See Section III, *supra*.



1 up after grinding, Ad. Team P&A at 65; “TCE” and propellant slurry from mixing  
2 operations, *Id.* at 66;<sup>145</sup> test propellant that “*likely* contained perchlorate,” *Id.* at 67  
3 (emphasis added); excess propellant trimmed from the rocket motors, *Id.* at 68; and  
4 residual (unburned) scrap propellant resulting from failure of rocket motors, *Id.* at 75.

5 At paragraph 33(j), the Draft CAO provides some explanation of how the  
6 Advocacy Team believes the burn pit pathway caused groundwater contamination:

7 Burns usually occurred at least once a week and sometimes three to  
8 four times per week. The ammonium perchlorate and TCE dumped  
9 into the pit was sometimes left for two or more days before it was  
10 ignited and burned . . . . Ash and residue were left in the open pits,  
11 exposed to precipitation. *Because the pits were earthen* and open  
to the elements, rain that fell into these pits would necessarily mix  
with the chemical residue and infiltrate into the gravelly soils and to  
the groundwater table.

12 *Id.* at 15 (emphasis added).<sup>146</sup> The Advocacy Team’s Memorandum of Points and  
13 Authorities also purports to describe the process by which materials were disposed of in

14 <sup>145</sup> The Advocacy Team alleges that Goodrich used the solvent trichloroethylene (“TCE”) to clean equipment contaminated with AP and propellants during the production process at Rialto. But the evidence does not support this conclusion. Although Goodrich did use some solvents in its production processes, including acetone and cyclohexanone, it did not use TCE. See Section III, *supra*. Even if Goodrich had used TCE at Rialto – and, again, the evidence proves that it did not – it is protected from any liability because the federal government required that any solvent contaminated with AP or explosive materials be incinerated in a burn pit.

18 <sup>146</sup> The allegations in the Draft CAO also suggest that very small quantities of propellant residue might have been rinsed onto bare ground. See *Id.* at 13 ¶ 33 (b) (“Small quantities of the washout waste were also disposed of directly to the bare ground outside of the mixer buildings.”); *Id.* ¶ 33(m) (“*On some occasions*, the residue and unburned propellant were rinsed from the concrete test bay with a water hose, onto the bare ground.”) (emphasis added). The Advocacy Team’s Memorandum of Points and Authorities echoes these allegations. See Ad. Team P&A at 65 (“After sweeping, *some amount* of perchlorate remained on the grinding room floor.”); *Id.* at 75-76 (“*On some occasions*, residue and unburned propellant was rinsed from the concrete test bay onto the bare ground using a water hose.”) (emphasis added). Goodrich disputes these unsubstantiated allegations as there is no admissible evidence submitted to the Hearing Officer to support them. But even if there was some de minimis releases to the ground at the 160-Acre parcel as a result of Goodrich’s former operations, those releases have not impacted groundwater nor do they threaten groundwater. The unrefuted evidence is that small quantities of perchlorate and solvent discharged to the ground will not migrate to a depth anywhere near the groundwater at the site (over 400 feet below ground surface) unless large quantities of free water are placed on top for extended periods of time. Therefore, Goodrich will focus this discussion on the mechanism of release on which the Draft CAO and the Advocacy Team’s Memorandum of Points and Authorities primarily focus – the Goodrich burn pit.

1 the burn pit, see Ad. Team P&A, 76-77, claiming only in generalized terms that “[b]ased  
2 on the physical characteristics of the burn pits and the manner in which the burn pits  
3 were operated, the discharge of wastes containing perchlorate to Goodrich’s burn pits  
4 would have resulted in the discharge of perchlorate and TCE to groundwater.” *Id.* at 78.

5 Even if releases somehow did occur through the burn pit, Goodrich cannot be  
6 held liable under state law because it was *required* to utilize a burn pit pursuant to validly  
7 promulgated federal regulations that carry the force of law. For instance, the Draft CAO  
8 and the Advocacy Team’s Memorandum of Points and Authorities condemn Goodrich for  
9 burning excess propellant in a pit that was earthen and open to the environment – yet  
10 burning on bare ground was *explicitly required* by applicable government ordinance  
11 regulations. The government mandated disposal specifications in an exercise of  
12 discretion that reflected the balancing of military effectiveness and safety, in effect  
13 establishing the standard of care to which Goodrich must be held. Goodrich is therefore  
14 protected from the Advocacy Team’s claims because there is no evidence that releases  
15 of ammonium perchlorate and any solvent used in the production process occurred as a  
16 result of Goodrich’s failure to follow the standard of care imposed upon it by federal law.

17 **1. Goodrich Was Required to Burn Waste Ammonium Perchlorate**

18 **a. Goodrich Was Drafted Into the Cold-War Effort to**  
19 **Produce Solid-Rocket Boosters to Compete with the**  
20 **Soviet Union**

21 The construction of solid-rocket motors for the military received heightened  
22 attention from the government during the Cold War because they were considered vital  
23 to the national defense strategy. In the late 1950s, the United States embarked on a  
24 massive development effort to advance the state of rocket and missile technology. This  
25 initiative received the highest priority among all national efforts, civilian as well as  
26 military, to close the perceived “missile gap” with the Soviet Union and to beat the  
27 Soviets to the moon. See Merrill Dec. ¶ 12. As part of this national effort, the  
28 government encouraged Goodrich to enter into the field to assist in the design, testing,  
and production of rocket motor propulsion systems at the Rialto site. See Wever Dec.

1 ¶ 4 (stating that the Goodrich participation in the solid-rocket business began as a part of  
2 President Eisenhower's missile initiative). Goodrich contracted with the United States  
3 military to construct specific, smaller, solid-rocket motors from 1957 through 1964. See,  
4 e.g., Ustan Dec. ¶ 14; Sachara Dec. ¶ 14. These solid-rocket motors included LOKI,  
5 ASP, and Sidewinder missiles. See Willis Dec. ¶¶ 14-16, Exs. 1, 2, & 24.

6 **b. Ammonium Perchlorate Is a Vital Ingredient in Solid-**  
7 **Rocket Propellant**

8 All solid-rocket motors use an oxidizer, which is a critical component of the  
9 propellant formulation because it provides the oxygen for combustion of the fuel. Wever  
10 Dec. ¶ 17. Ammonium perchlorate quickly gained acceptance as the best and most  
11 reliable oxidizer – a critical component of any solid-rocket propellant – to achieve the  
12 breakthroughs necessary to defeat the Soviets. See Merrill Dec. ¶ 12. In 1958, the U.S.  
13 Industry and Government Ad Hoc Panel convened and offered recommendations on  
14 developing solid-rocket technology using ammonium perchlorate and utilizing central  
15 coordination of the nationwide development effort, stating that propellants containing  
16 ammonium perchlorate “are now in the final stages of development and are suitable for  
17 long-range missiles.” See Ex. 38 (stating that “[t]he high percentage of ammonium  
18 perchlorate is necessary to provide enough oxygen for high performance”). Some, but  
19 not all, of the propellant formulations produced by Goodrich at Rialto used ammonium  
20 perchlorate as the primary oxidizer. See Sachara Dec. ¶ 4; Wever Dec. ¶ 17.

21 The method of how ammonium perchlorate is ground and how it is handled during  
22 the production process has a significant impact on how a rocket motor will perform  
23 during flight. See Wever Dec. ¶ 22 (discussing how particle size impacts burn rate and  
24 rocket performance). Ammonium perchlorate made up approximately 70% of some  
25 rocket propellants produced by Goodrich. See Ex. 106. The solid-rocket propellants,  
26 and the details of how they were formulated, were considered classified information, and  
27 the contractor was required to take steps to protect this material and information. See  
28 Ex. 120. In this Cold War environment, the government certainly took a hard look at

1 activities that could affect the success of these vital weapon programs, such as the use  
2 of a “high percentage” of ammonium perchlorate in solid-rocket motors and the proper  
3 disposal of waste ammonium perchlorate generated as part of these activities.

4 **c. The United States Military Carefully Controlled How**  
5 **Ammonium Perchlorate Was Handled and Destroyed**

6 Because ammonium perchlorate was a central ingredient in the rocket propellant  
7 produced by Goodrich, both the military and Goodrich carefully monitored how it was  
8 handled and how it was destroyed. Military manuals and ordnance regulations  
9 instructed Goodrich to incinerate waste ammonium perchlorate at Rialto, and Goodrich  
10 complied with these federally mandated disposal standards.

11 Witness testimony confirms that ammonium perchlorate was handled very  
12 carefully during the grinding and mixing process because of the danger of explosions  
13 and fire. See Wever Dec. ¶¶ 21, 31 (discussing the use of non-sparking materials and  
14 conductive-soled shoes and flame-retardant overalls as safety precautions). Since  
15 ammonium perchlorate is an explosive, the military regulated ammonium perchlorate  
16 handling and disposal practices of its contractors through several manuals – with which  
17 Goodrich, as one of those contractors, was required to comply. See Merrill Dec. at ¶¶  
18 12, 14. These manuals included the Department of the Army Ordnance Corps,  
19 Ordnance Safety Manual – ORD-M 7-224, § 27 (1951), Ex. 118 (“Ordnance Manual”);  
20 the Departments of the Army & Air Force, Military Explosives Technical Manual – TM 9-  
21 1910/TO 11A-1-34 (Apr. 1955), Ex. 117 (“Explosives Manual”); the Department of the  
22 Army, Care, Handling, Preservation, and Destruction of Ammunition Technical Manual –  
23 TM9-1903 (Oct. 1956), Ex. 50 (“Destruction Manual”); and the Department of the Air  
24 Force, General Safety Procedures for Chemical Guided Missile Propellants – TO 11C-1-  
25 6 (Dec. 1956), Ex. 110 (“Safety Procedures”).

26 In addition, the government could control the disposition of waste propellant and  
27 scrap because it owned these materials under the terms of its contracts with Goodrich.  
28 The contracts that Goodrich performed were typically cost-reimbursement contracts,

1 meaning that the government paid the contractor for all of its reasonable costs of  
2 performance – including the costs of purchasing ammonium perchlorate, solvents, or  
3 other raw materials necessary for the production of rocket propellant. For example,  
4 Contract NOrd-18966 was a cost-reimbursement contract for the production of Loki I  
5 propulsion units that was executed on June 4, 1959. See Ex. 119. In contract  
6 negotiations, Goodrich estimated that it would purchase up to 7,850 lbs of ammonium  
7 perchlorate to perform this contract. See *Id.*

8 Under the terms of the Allowable Cost, Fixed Fee and Payment clause, the  
9 government took ownership of any materials or products for which it paid the contractor  
10 – therefore, any ammonium perchlorate purchased or propellant made during the  
11 contract became government property as soon as it paid Goodrich for its costs in  
12 procuring them. Under the terms of the Government Property clause, the contract  
13 provided that:

14 [u]pon completion of this contract, or at such earlier dates as may be  
15 fixed by the Contracting Officer, the Contractor shall submit to the  
16 Contracting Officer in a form acceptable to him, inventory schedules  
17 covering all items of Government Property not consumed in the  
18 performance of this contract, or not theretofore delivered to the  
19 Government, and shall deliver to make such other disposal of such  
20 Government Property as may be directed or authorized by the  
21 Contracting Officer. . . . The foregoing provisions shall apply to  
22 scrap from Government Property provided, however, that the  
23 Contracting Officer may authorize or direct the Contractor to omit  
24 from such inventory schedules any scrap consisting of cutting and  
25 processing waste, such as chips, cuttings, borings, turnings, short  
26 ends, circles, trimmings, clippings, and remnants, and to dispose of  
27 such scrap in accordance with the Contractor's normal practice.

28 *Id.* The government therefore maintained the right to direct the disposal of scrap  
propellant because it actually owned the material in question. Any disposal of scrap  
propellant under these contracts that was directed by the government would have been  
conducted in compliance with government explosive and ordnance manuals.

(1) Military Manuals Directed Contractors to Burn Waste  
Propellant

The Army Ordnance Manual specifically covers management and disposal of



1 "fuels and oxidizers" that are used in testing and production of "long range rockets and  
2 guided missiles." See Ordnance Manual at 15-1. The Manual describes the proper  
3 operation of "static test stands," such as those used at Rialto to test solid-rocket motors,  
4 stating that they "should be located at a minimum of intraline distance, not only from  
5 ready storage facilities but also at such distance from other test stands and the  
6 observation building." *Id.* at 15-6. The Manual specifies, in great detail, how the military  
7 and its contractors should dispose of excess explosives – including oxidizers and  
8 propellants. After discussing where to locate the destruction site, it instructs that:

9 Dry leaves, and other extraneous combustible material shall be  
10 removed within a radius of 200 feet from the point of destruction.  
11 The grounds should be of well packed earth and shall be free from  
12 large stones and deep cracks in which explosives might lodge.  
13 Explosive materials *shall not be burned or detonated on concrete  
14 mats.*

15 *Id.* at 27-9 (emphasis added). The Manual also provides details on how to handle  
16 material awaiting destruction, personnel protection, training in running burn pits, and how  
17 to transport waste explosives. See *Id.* at 27-10 to 27-13.

18 The Army's Destruction Manual similarly directs contractors to incinerate excess  
19 propellant on bare ground in burn pits. Section 126(c) of the Manual specifies:

20 Solid Propellant: Quantities of solid propellant may be destroyed  
21 safely if the propellant is removed from the containers and spread  
22 out on *bare ground* in a train 1 to 2 feet wide and not more than 3  
23 inches thick.

24 Destruction Manual at 179-80, Ex 50 (emphasis added).

25 The Army and Air Force Explosives Manual directs that "[e]xplosives and  
26 propellants are burned in layers not more than 3 inches thick, . . . Loose, dry explosives  
27 may be burned in layers in direct contact with the ground. . . ." Explosives Manual at  
28 315, Ex. 117. It further specifies that the:

destruction of explosives by detonation should be carried out in a pit  
not less than 4 feet deep, the explosive being covered with not less  
than 2 feet of earth. Where space permits, the use of a pit may be  
dispensed with. . . . The destruction of explosives and propellants  
by burning or detonation is an operation to be carried out only with  
extreme care, because of the hazards involved in preparing the  
material for burning or detonation as well as the actual destruction.

Careful attention should be given to the provisions of the Ordnance Safety Manual, ORDM 7-224, in carrying out such operations.

*Id.* at 316-317. The Explosives Manual also instructs that burning should be initiated by “blasting caps,” *Id.*, the exact method used by Lou Staton at the Goodrich burn pit. See Staton Dep., 22:5-25:11.

Lastly, the Secretary of the Air Force promulgated “safety measures, safety standards, procedures, instructions, and precautions” with respect to the use of “highly reactive chemicals and products currently in use or that may be put in use for the propulsion of guided missiles or similar applications.” Safety Procedures at 1, Ex. 110. The Safety Procedures require that “waste propellants shall be transferred at least daily to the waste propellant disposal area for destruction.” *Id.* at 23. The Safety Procedures set forth requirements for burning of waste propellant, stating explicitly that burn areas must be “dug into the surface of the ground to contain the liquids to be disposed of by burning.” *Id.*<sup>147</sup> These government manuals governed Goodrich’s production of solid-rocket propellant at Rialto, mandating that it burn excess and waste ammonium perchlorate and propellant made with ammonium perchlorate as an oxidizer in its on-site burn pit.

#### (2) Goodrich Complied with These Manuals

It is also clear from testimony in this matter that Goodrich complied with these military manuals, and operated its burn pit in accordance with them. Goodrich monitored its own processes to ensure that it complied with the government’s production and disposal requirements. See Willis Dec. ¶ 17 (“As the quality control inspector, I inspected the Loki and Sidewinder rockets in the finishing room to ensure that the

<sup>147</sup> In 1968, the Department of Defense restated many of these requirements in an omnibus manual directed solely at government contractors, entitled DoD Contractors’ Safety Manual for Ammunition, Explosives and Related Dangerous Materials, DOD 4145.26M (Oct. 1968). See Ex. 91. This manual again required contractors to burn excess and waste propellants on “well packed earth . . . free from large stones and deep cracks in which explosives might lodge. Explosive materials *shall not* be burned or detonated on concrete mats.” *Id.* at 15-5 (emphasis added).

1 rockets met *government-approved specifications.*”) (emphasis added); Beach Dec. ¶ 7  
2 (testifying that as an employee in quality control, he verified that “the mixed solid rocket  
3 fuel met specifications”). Moreover, Goodrich’s performance and its compliance with  
4 applicable government specifications were subject to inspection by the military. See  
5 Willis Dec. ¶ 17 (“After I was finished, government inspectors would come to the Rialto  
6 facility to verify that Goodrich complied with those specifications.”); Beach Dec. ¶ 10  
7 (stating that “government inspectors would come to the Goodrich facility to approve the  
8 rockets for delivery”).

9 Goodrich’s compliance with these disposal regulations also is confirmed by Lou  
10 Staton, the Goodrich employee who oversaw operation of the facility’s burn pit. Mr.  
11 Staton testified that the Goodrich burn pit was located about 150 feet from the Rialto  
12 facilities, and that it was at least six feet deep. See Staton Dep., 22:3-23:3 (describing  
13 the location of the burn pit, the procedures for burning, and the frequency of burning of  
14 waste propellant); see also Wever Dec. ¶¶ 53-60 (addressing burn pit procedures and  
15 stating that the burn pit complied with the “industry standard and government standards  
16 for disposing of such waste”); Ustan Dec. ¶ 8 (confirming that “I never saw a buildup of  
17 waste-like material in the burn pit”). Indeed, even the allegations in the Draft CAO, if  
18 taken as true, support the notion that Goodrich complied with relevant military  
19 requirements to burn excess ammonium perchlorate and propellant on *bare ground*.

20 **2. Goodrich Was Required to Burn Waste Solvent That Had Been**  
21 **Contaminated with Ammonium Perchlorate and Propellants**

22 Pursuant to these regulations, Goodrich also was required to burn any solvent  
23 contaminated with explosives such as ammonium perchlorate or propellant. As alleged  
24 by the Draft CAO, any solvent used by Goodrich was incinerated in the burn pit *only* after  
25 it had been used to clean ammonium perchlorate or propellant, and was therefore  
26 contaminated with the explosive substance. See Draft CAO at ¶ 33(b) (washout waste  
27 containing solvent and residue ammonium perchlorate placed in the burn pit); *Id.* at 33(k)  
28 (solvent used to salvage Sidewinder casing placed into the burn pit). Because solvents



1 used to clean explosives residues become highly unstable, Goodrich was required to  
2 incinerate any such mixture as an explosive. Indeed, subsequent government manuals  
3 explicitly recognized that solvents used in propellant cleaning activities needed to be  
4 discarded as an explosive. See Air Force Manual AFM 161-30, Solid  
5 Rockets/Propellants (Apr. 10, 1973), Ex. 102. The 1973 manual provides that:

6 Waste [solvent], contaminated with propellant residue either in  
7 solution or suspension, is generated at mix stations, degreasers,  
8 mold cleaning stations, or any facility where propellant is cleaned  
9 from metal parts. Accident history has shown that spillage and  
10 evaporation of these residues can result in extremely sensitive  
11 material, more so than the parent propellant. . . . Destruction should  
be accomplished in the collection container, preferably a non-  
metallic one. . . . At the destruction site, the [non-metallic  
containers] are burned, pallet and all, by means of added waste  
propellant. Ignition of the propellant is accomplished by means of a  
black powder squib.

12 *Id.* at 7-3.3. Although the explicit requirement to treat contaminated solvent as an  
13 explosive did not appear until 1973, it is clear from this manual that Goodrich's decision  
14 to burn any solvent used in the production process to clean equipment containing  
15 propellant or ammonium perchlorate was correct and in full compliance with then-  
16 applicable military manuals. Once the solvent was contaminated with perchlorate or  
17 propellant residue, it took on the characteristics of the propellant. Goodrich therefore  
18 was required to dispose of it accordingly – by burning it on bare ground.

19 **B. Goodrich Was Complying With Valid Legal Regulations Created**  
20 **Pursuant to Federal Law: Conflicting State Laws Are Preempted**

21 As discussed above, Section XIV(B), *supra*, the Board's authority to determine  
22 liability for groundwater contamination is based primarily upon California Water Code  
23 Section 13304(a), which the Draft CAO cites as its primary basis for jurisdiction. See  
24 Draft CAO at 1-2. As discussed above, even if Water Code Section 13304(a) is  
25 erroneously applied, since the Goodrich activities in question occurred prior to the law's  
26 enactment, the Advocacy Team must prove a violation of preexisting state law  
27 requirements, which were in effect at the time, for Goodrich to be found responsible for  
28

1 the alleged discharges.<sup>148</sup> Goodrich, though, cannot be found to be in violation of any  
2 existing law or regulation during its operation of Rialto because it was in full compliance  
3 with applicable technical manuals and requirements issued by the U.S. military that  
4 directed it to undertake the very activities about which the Advocacy Team is  
5 complaining.

6 **1. The Military Has Statutory Authority to Promulgate Regulations**  
7 **Applicable to Its Procurement Activities**

8 In 1831, the Supreme Court confirmed that the federal government has inherent  
9 power to contract. See *United States v. Tingey*, 30 U.S. 115 (1831). The head of the  
10 Department of Defense, as an executive department of the United States, and the  
11 separate heads of the Department of the Army, the Department of the Navy, and the  
12 Department of the Air Force, have been granted plenary authority by Congress to  
13 prescribe regulations governing the conduct of their various organizations, including the  
14 power to contract for goods and services. See 5 U.S.C. § 301 (2000) (“The head of an  
15 Executive department or military department may prescribe regulations for the  
16 government of his department, the conduct of its employees, the distribution and  
17 performance of its business . . .”). The Secretary of Defense also has been provided  
18 broad authority by Congress to “prescribe regulations governing the performance within  
19 the Department of Defense of the procurement, production, warehousing, and supply  
20 distribution functions, and related functions, of the Department of Defense.” 10 U.S.C.  
21 § 2202 (2000). Congress also provided the heads of the various military departments  
22 with the power to issue regulations to regulate their various functions, including  
23 procurement. See *Id.* § 3013(g) (providing that “[t]he Secretary of the Army . . . may  
24 prescribe regulations to carry out his functions, powers, and duties under this title”); see  
25 also *Id.* § 6011 (Navy); *Id.* § 8013(g) (Air Force). Faced with a host of methods of  
26

27 <sup>148</sup> See, Section XIV; Calif. Water Code § 13304(j) (stating that the “section does not  
28 impose any new liability for acts occurring before [its passage], if the acts were not in  
violation of *existing* laws or regulations at the time they occurred”) (emphasis added).

1 contracting throughout the Department of Defense following World War II, Congress  
2 passed the Armed Services Procurement Act of 1947, 62 Stat. 21, 10 U.S.C. §§ 2301 *et*  
3 *seq.*, to standardize the military procurement process. Under this Act, the Department of  
4 Defense was instructed to promulgate the Armed Services Procurement Regulations  
5 (“ASPR”), which were intended to “establish for the Department of Defense uniform  
6 policies and procedures relating to the procurement of supplies and services. . .” 32  
7 C.F.R. § 1.101 (1963).<sup>149</sup>

8 Under the authority granted by these laws and regulations, the various military  
9 departments are empowered to promulgate specifications, technical manuals, orders,  
10 and directives to govern how they conduct business, including the power to impose  
11 these requirements upon their government contractors. The Supreme Court has  
12 confirmed that these military department regulations “have the force of law.” *See Pub.*  
13 *Util. Comm’n of Cal. v. United States*, 355 U.S. 534, 542-43 (1958) (citing to the general  
14 statutory power to issue regulations and finding that various military manuals, guides,  
15 and regulations trumped California’s right to impose any restraint or control on federal  
16 transportation procurements).

17 **2. Under the Supremacy Clause, Conflicting California Laws and**  
18 **Regulations Are Preempted by Valid Federal Regulations**  
19 **Governing the Operation of the Burn Pit**

20 Even if the California state laws and regulations that were in place from 1957  
21 through 1964 are found applicable to Goodrich’s operation of its burn pit – again, a  
22 conclusion that Goodrich disputes – Goodrich cannot be found to be in violation of these

23 <sup>149</sup> The ASPR was designed to be modified on a regular basis as contracting practices  
24 were identified requiring uniform application across the military departments. *See* 32  
25 C.F.R. § 1.106(b) (1963). In 1968, the ASPR was revised to include a provision that  
26 required the insertion of a specific clause in all military contracts that mandated  
27 compliance with the newly promulgated “DOD Contractor’s Safety Manual for  
28 Ammunition, Explosives and Related Dangerous Material.” 32 C.F.R. § 7.104-79(a)  
(1968). The DoD Contractor’s Safety Manual, Ex. 91, was drafted by the Department of  
Defense to combine all requirements and standards regarding explosive handling that  
had been previously found in numerous technical orders and manuals issued by the  
various military departments into a single document that would be imposed upon every  
government contractor. *See id.* §§ 100, 106.

1 state obligations because it complied with valid and contrary federal specifications that  
2 carry the force of federal law. Based on the Supremacy Clause, U.S. CONST. Art. VI, cl.  
3 2, the Supreme Court has held that in the face of any conflict between federal law and  
4 state law, federal law prevails under the principle of “congressional pre-emption.” See  
5 *North Dakota v. United States*, 495 U.S. 423, 435 (1990).

6 In *Public Utilities Commission of California*, the Supreme Court invalidated  
7 California’s state policy regulating negotiated rates because it conflicted with federal  
8 government procurement regulations that also governed the use of negotiated rates.  
9 355 U.S. 534. The government regulations at issue were found in military manuals and  
10 regulations similar to the disposal manuals here. See *Id.* at 542. The Court explained  
11 that:

[t]he conflict is as plain as it was in *Arizona v. California*, 283 U.S.  
423, 451, where a State sought authority over plans and  
specifications for a federal dam, in *Leslie Miller, Inc. v. Arkansas*,  
*supra*, where state standards regulating contractors conflicted with  
federal standards for those contractors, and in *Johnson v. Maryland*,  
254 U.S. 51, where a State sought to exact a license requirement  
from a federal employee driving a mail truck. The conflict seems to  
us to be as clear as any that the Supremacy Clause, Art. VI, cl. 2, of  
the Constitution was designed to resolve.

17 *Id.* at 544.

18 In *Leslie Miller, Inc. v. Arkansas*, for example, the Court considered whether a  
19 state regulation that required a state license to do business conflicted with the ASPR  
20 regulation that governed which contractors were sufficiently “responsible” to bid on  
21 federal contracts. 352 U.S. 187, 188 (1956). The Court invalidated the state regulation  
22 because “[m]ere enumeration of the similar grounds for licensing under the state statute  
23 and for finding ‘responsibility’ under the federal statute and regulations is sufficient to  
24 indicate conflict between this license requirement which Arkansas places on a federal  
25 contractor and the action which Congress and the Department of Defense have taken to  
26 insure the reliability of persons and companies contracting with the Federal  
27 Government.” *Id.* at 189-90. Citing *Johnson v. Maryland*, the Court concluded that the  
28 imposition of additional requirements by the state:

1 does not merely touch the Government servants remotely by a  
2 general rule of conduct; it lays hold of them in their specific attempt  
3 to obey orders and requires qualifications in addition to *those that*  
4 *the Government has pronounced sufficient*. It is the duty of the  
5 Department to employ persons competent for their work and that  
6 duty it must be presumed has been performed . . . .

7 *Id.* at 190 (quoting *Johnson*, 254 U.S. 51, 57 (1920)) (emphasis added).

8 Here, the conflict is as clear as it was in *Leslie Miller* and the other cases cited  
9 above. The federal government promulgated regulations governing the disposal of  
10 explosives that the military considered sufficient. The Board is now attempting to impose  
11 additional state law requirements by holding Goodrich in violation of state law for  
12 compliance with these very regulations. The Supremacy Clause, and the Supreme  
13 Court's application of that clause's principles to cases like Goodrich's, require the state  
14 to yield to the federal government's regulations regarding the burn pit at the Rialto site.

### 15 3. California Civil Code Section 1714.6 Prohibits Enforcement 16 Against Goodrich

17 In fact, California law recognizes this basic principle of federal preemption by  
18 expressly granting immunity from state statutes for persons who are obeying military  
19 orders:

20 [n]o person shall be prosecuted for a violation of any statute or  
21 ordinance when violation of such statute or ordinance is required in  
22 order to comply with an order or proclamation of any military  
23 commander who is authorized to issue such orders or  
24 proclamations; nor shall any person be prosecuted for a violation of  
25 any statute or ordinance when violation of such statute or ordinance  
26 is required in order to comply with any regulation, directive, or order  
27 of the Governor promulgated under the California Emergency  
28 Services Act. The provisions of this section shall apply to such acts  
or omissions whether occurring prior to or after the effective date of  
this section

Calif. Civil Code § 1714.6 (2007).

Accordingly, under this California statute, no person can be held liable under any  
statute or ordinance when it is merely following authorized military orders. As discussed  
above, Goodrich's use of a burn pit at Rialto was mandated by numerous military



1 ordnance manuals and technical orders that were issued pursuant to federal law by  
2 military commanders authorized to publish such regulations. These valid regulations  
3 directed Goodrich to dispose of explosive wastes – such as scrap ammonium  
4 perchlorate – by incineration in a burn pit. The State Board therefore cannot prosecute  
5 Goodrich for these very same disposal practices, nor find Goodrich in violation of any  
6 applicable statute or ordinance that conflicts with Goodrich’s obligation to obey such  
7 orders.

8 **C. The Government Contractor Defense Operates to Shield Goodrich**  
9 **from Liability Under Competing State Law Requirements**

10 In a similar application of federal supremacy, the potential conflict here between  
11 state law and federal contract specifications demands the invocation of the government  
12 contractor defense, which operates to extend the government’s own sovereign immunity  
13 to private contractors who operate at the behest of the government. The defense  
14 requires a contractor to prove that: 1) the government approved reasonably precise  
15 specifications; 2) the product or services conformed to the specifications; and, 3) the  
16 contractor warned the United States about the dangers that were known to the  
17 contractor but not known to the government. *See Boyle v. United Techs. Corp.*, 487  
18 U.S. 500, 512 (1988). Goodrich is entitled to dismissal of the Draft CAO because the  
19 undisputed facts show: 1) that Goodrich was subject to various government regulations  
20 and specifications that governed its use and disposal of ammonium perchlorate and  
21 contaminated solvents at its Rialto facility; 2) that it followed these specifications; and, 3)  
22 that neither Goodrich nor the government knew that the use or disposal of ammonium  
23 perchlorate or solvents containing explosive materials could potentially result in the  
24 alleged groundwater contamination that lies at the heart of the Advocacy Team’s  
25 allegations.

26 **1. The Government Contractor Defense Applies Whenever a**  
27 **Conflict Exists Between Federal Law and State Law With**  
28 **Regard to a Government Contractor’s Activities**

Although the defense generally has been applied in product liability and

1 procurement cases, it is applicable in all government contract situations involving a  
2 significant conflict between an identifiable federal policy and the operation of state law.  
3 Such a conflict exists when, as here, the federal government exercised its discretion and  
4 imposed requirements on a contractor, the contractor acted pursuant to that discretion,  
5 and state law conflicted with the federal policy.

6 In *Boyle*, the Supreme Court first explained that there are certain areas of law that  
7 involve “uniquely federal interests.” *Id.* at 504-05. It concluded that “the imposition of  
8 liability on Government contractors will directly affect the terms of Government contracts:  
9 either the contractor will decline to manufacture the design specified by the Government,  
10 or it will raise its price. Either way, the interests of the United States will be directly  
11 affected.” *Id.* at 507; *Id.* at 511 (noting that military procurement “often involves not  
12 merely engineering analysis but judgment as to the balancing of many technical, military,  
13 and even social considerations, including specifically the trade-off between greater  
14 safety and greater combat effectiveness”). The Court, however, felt that extending  
15 sovereign immunity to government contractors *in every situation* was unwarranted. *Id.*  
16 at 510.<sup>150</sup> It decided instead that pre-emption of state law would be permitted only in  
17 circumstances in which a “significant conflict exists between an identifiable federal policy  
18 or interest and the operation of state law.” *Id.* at 507 (internal quotations omitted).

19 In trying to determine when a conflict would be sufficiently “significant” to justify

20 <sup>150</sup> The United States has not waived its sovereign immunity with respect to state laws  
21 that would subject it to liability for investigation and clean up of past contamination at  
22 sites that it no longer owns. The waiver of sovereign immunity in the Comprehensive  
23 Environmental Response, Compensation and Liability Act (“CERCLA”), 42 U.S.C. §  
24 9620(a)(4), waives immunity with respect to state law only for facilities currently owned  
25 or operated by the United States. “[T]he CERCLA waiver of sovereign immunity does  
26 not allow state law claims against the government for liability based on past ownership or  
27 operation of facilities involved in releasing or depositing hazardous wastes.” *Gen.*  
28 *Motors Corp. v. Hirschfield Steel Serv. Ctr.*, 402 F. Supp. 2d 800, 804 (E.D. Mich. 2005).  
Similarly, the limited waiver of sovereign immunity in the Resources Conservation and  
Recovery Act, 42 U.S.C. § 6961(a), does not subject the United States to actions that  
“seek contribution for the costs of responding to past pollution at sites that are not  
currently owned or operated by a federal agency.” *Id.* at 807 (reasoning that “[i]t would  
be unusual indeed for Congress to embed a waiver of governmental immunity for a  
species of damages in legislation that does not even allow those same damages as a  
remedy against non-governmental defendants”).

1 extending preemption to contractors, the Court adopted the discretionary function  
2 exemption from the Federal Tort Claims Act ("FTCA"). *Id.* at 510. The Court  
3 emphasized that while Congress had waived sovereign immunity for the wrongful  
4 behavior of Government employees, it had exempted from this waiver claims involving  
5 the performance of a discretionary function. *Id.* In borrowing from the FTCA, the  
6 Supreme Court was not limiting the application of the government contractor defense to  
7 particular claims. It was, instead, highlighting the importance that Congress ascribes to  
8 federal discretion in any context. And it was using the notion of the discretionary  
9 function as a limiting principle "to ensure that the defense would not interfere unduly with  
10 the operation of state law." *Hudgens v. Bell Helicopters/Textron*, 328 F.3d 1329, 1333-  
11 34 (11th Cir. 2003). Therefore, because Congress places such a high value on federal  
12 discretion, government contractors who act according to federal discretion should share  
13 in the federal immunity available to government agents. See *Boyle*, 487 U.S. at 511;  
14 *Hudgens*, 328 F.3d at 1334. To hold otherwise would diminish the value of federal  
15 discretion and would create a significant conflict between the will of the federal  
16 government and the will of the state.

17 The government contractor defense "protects a government contractor from  
18 liability for acts done by him while complying with government specifications during  
19 execution of performance of a contract with the United States." *McKay v. Rockwell Int'l*  
20 *Corp.*, 704 F.2d 444, 448 (9th Cir. 1983).<sup>151</sup> Courts have explained that the availability

21 <sup>151</sup> California courts follow the government contractor defense as set forth in *Boyle*. See  
22 *Jackson v. Deft, Inc.*, 223 Cal. App. 3d 1305, 1313-1319 (Cal. Ct. App. 1990). The Ninth  
23 Circuit has characterized the government contractor defense as the "military contractor  
24 defense," so termed because the Ninth Circuit has interpreted *Boyle* as applying  
25 exclusively to military contractors. See *In re Haw. Fed. Asbestos Cases*, 960 F.2d 806,  
26 810-11 (9th Cir. 1992). The circuits are split on whether the government contractor  
27 defense applies to military as well as non-military contractors, although the prevailing  
28 view is that *Boyle's* rationale extends to non-military contractors as well. See, e.g.,  
*Carley v. Wheeled Coach*, 991 F.2d 1117, 1119-23 (3d Cir. 1993); *Yeroshefsky v.*  
*Unisys Corp.*, 962 F. Supp. 710, 715-17 (D. Md. 1997). The State of California appears  
to have implicitly adopted the Ninth Circuit's "military contractor defense." *Jackson*, 223  
Cal. App. 3d 1305. But see 6 Witkin, Torts § 1313A (Supp. 2002) (adopting the  
"government contractor defense"). The denomination of the defense is not an issue  
here, however, since Goodrich was clearly a military contractor at its Rialto facility.



1 of the government contractor defense “cannot be determined by the label attached to the  
2 claim. Strict adherence to the three *Boyle* conditions specifically tailored for the purpose  
3 will ensure that the defense is limited to appropriate claims.” *Snell v. Bell Helicopter*  
4 *Textron, Inc.*, 107 F.3d 744, 749 (9th Cir. 1997) (quotations omitted) (holding that the  
5 government contractor defense can apply to a manufacturing defect). “[T]he question is”  
6 not whether the defense is asserted against a claim with a particular label but “whether  
7 subjecting a contractor to liability under state tort law would create a significant conflict  
8 with a unique federal interest.” *Hudgens*, 328 F.3d at 1334 (applying the defense to a  
9 military maintenance contract because the *Boyle* analysis was not designed to create all-  
10 or-nothing rules regarding the type of contract to which the government contractor  
11 defense might apply); *see also McMahon v. Presidential Airways*, 410 F. Supp. 2d 1189,  
12 1197-98 (M.D. Fla. 2006) (holding that the defendant had a colorable federal defense  
13 when it claimed the government contractor defense for its transportation of servicemen  
14 and ammunition).

15 The factors articulated by the Court in *Boyle* ensure that such a conflict with state  
16 law exists by requiring that federal discretion was employed and followed. The first two  
17 prongs ensure that “the suit is within the area where the policy of the discretionary  
18 function would be frustrated.” *Boyle*, 48 U.S. at 512. The last prong is necessary to  
19 eliminate any incentive the contractor might have to withhold from the government  
20 information regarding risks. *Id.* at 512-13. Although the prongs in *Boyle* were created in  
21 terms applicable to a products liability case, they are equally applicable to the conflict  
22 created here by the Advocacy Team’s attempt to impose liability on Goodrich for its  
23 operation of the burn pit at Rialto.

## 24 2. The Government Contractor Defense Protects Contractors 25 When Hazardous Materials Are Released as the Result of the 26 Federal Government’s Discretionary Decisions

26 The government contractor defense specifically applies in circumstances of  
27 environmental contamination. In *Miller v. Diamond Shamrock Co.*, 275 F.3d 414 (5th  
28 Cir. 2001), the appeals court affirmed summary judgment based on the government

1 contractor defense in a large tort action brought by civilian employees against seven  
2 chemical companies involved in the manufacture of Agent Orange during the Vietnam  
3 War. The chemical companies were not liable for claims based on exposure to dioxin in  
4 Agent Orange because dioxin was specified by the government as a necessary  
5 component of the final product, just as the proper disposal of ammonium perchlorate and  
6 solvents contaminated with explosives were specified as necessary here. *Id.* at 419-21.

7 The government contractor defense unquestionably applies when, as here, the  
8 military directs and controls the exact methods of disposal. Federal courts have  
9 dismissed similar claims by third parties directly against the United States, finding that  
10 military decisions regarding waste disposal involve an element of judgment or choice,  
11 and, therefore, are subject to the discretionary function exception to the FTCA. See,  
12 e.g., *OSI, Inc. v. United States*, 285 F.3d 947, 953 (11th Cir. 2002) (finding that the Air  
13 Force was immune from suit for soil and groundwater contamination caused by landfills  
14 both on and near Maxwell Air Force Base and holding that disposal of waste on a  
15 military base “involves policy choices of the most basic kind . . . [and] requires that [the  
16 military] be free to weigh environmental policies against security and military concerns”)  
17 (internal quotations omitted); *Aragon v. United States*, 146 F.3d 819, 826 (10th Cir.  
18 1998) (finding that the Air Force’s decisions with respect to the treatment of solvent  
19 waste water were “operational decisions . . . subject to defense and security  
20 considerations” that fell within the discretionary function exception). *Boyle* requires the  
21 same outcome when the military has directed the manner in which a government  
22 contractor must dispose of certain wastes, because “it makes little sense” to protect the  
23 government against financial liability for waste disposal decisions when the government  
24 performs the disposal itself but not when it contracts for that disposal with private parties.  
25 *Boyle*, 487 U.S. at 512.

26 The United States District Court for the Central District of California has in fact  
27 addressed the applicability of the government contractor defense to waste disposal in the  
28 context of a removal proceeding. See *Arness v. Boeing N. Am., Inc.*, 997 F. Supp. 1268,

1 1274 (C.D. Cal. 1998). In *Arness*, plaintiffs sued defendant Boeing based on the alleged  
2 release of trichloroethylene, and Boeing sought to remove the case to federal court. The  
3 court found that Boeing *had alleged a colorable federal defense under Boyle* because  
4 “the government’s requirement that [Boeing] use TCE *could* invoke the government’s  
5 need to exercise its discretion regarding the military equipment tested by [Boeing] for the  
6 government.” *Id.* at 1272 (emphasis added). The court concluded, however, that  
7 Boeing was not entitled to removal because “none of the specifications proffered by  
8 [Boeing] require [Boeing] to dispose of TCE in a particular manner, which disposal is at  
9 the center of Plaintiffs’ Complaint.” *Id.* at 1274. The motion was therefore denied only  
10 because the defendant failed to show, based upon the facts before the court, that the  
11 government directed the method of disposal for the solvent in question. *See also N.J.*  
12 *Dep’t of Env’tl. Prot. v. Exxon Mobil Corp.*, 381 F. Supp. 2d 398, 404 (D.N.J. 2005)  
13 (finding that defendants had raised a “colorable federal defense” in asserting the  
14 government contractor defense in a suit brought by the State of New Jersey alleging  
15 violations of the New Jersey Spill Act).

16 The element that was missing in *Arness* – government direction – is certainly  
17 present in *this* case with respect to ammonium perchlorate, making the defense fully  
18 applicable to this highly-regulated material that was vital to the United States’ Cold War  
19 efforts. As discussed above, the government imposed detailed requirements that  
20 directed Goodrich to incinerate ammonium perchlorate in a burn pit. Moreover, there is  
21 ample evidence that these military specifications required Goodrich to burn any solvents  
22 *contaminated* with explosives like ammonium perchlorate. Goodrich has demonstrated  
23 that it complied with the government-issued regulations – which governed disposal of the  
24 ammonium perchlorate at Rialto – and the Draft CAO contains no evidence to the  
25 contrary.<sup>152</sup> Accordingly, the government contractor defense applies to the facts before

26 <sup>152</sup> The third prong of the government contractor defense, that the contractor “warned the  
27 United States about the dangers in the use of the [product] that were *known* to the  
28 [contractor] but not to the United States,” *Boyle*, 487 U.S. at 512 (emphasis added), is  
also met here because the government supplied the specifications directing disposal.  
Moreover, as the Fifth Circuit found in *Miller*, there was no duty to inform the government

1 the Board.

2 Further, the Advocacy Team cannot defeat the defense by arguing that additional  
3 precautions at the burn pit should have been taken beyond those required by the  
4 government. See *Yearsley v. W.A. Ross Constr. Co.*, 309 U.S. 18, 21 (1940) (holding  
5 that a claim by landowners for water damage caused by a private contractor while  
6 widening the Missouri River for the United States Government was barred because  
7 “there is no liability on the part of the contractor for executing [the government’s] will”).  
8 The principle announced in *Yearsley* was applied in *Dolphin Gardens, Inc. v. United*  
9 *States*, 243 F. Supp. 824 (D. Conn. 1965), where a Navy contractor hired to dredge and  
10 improve a river was sued by a neighboring landowner for property damage allegedly  
11 caused by fumes that escaped as a result of the dredging. The decision to deposit the  
12 dredging in the vicinity of the plaintiff’s property was made by the government based on  
13 time constraints and “the high priority given to the project by the Secretary of the Navy.”  
14 *Id.* at 826. The court granted summary judgment for the contractor, holding that

15 [t]he question of foreseeability of harm and the possible need to  
16 protect against it arose when the Government framed its terms.  
17 There is no charge that what the contractor did was not what it was  
18 required to do. Rather, it is that it was negligent in failing to provide  
19 some safeguard against the subsequent escape of the fumes. Yet,  
20 as stated above, this was a decision which rested with the  
21 Government. The Government did not provide for such additional  
22 precautions in the plans, and [the contractor] is not to be held liable  
23 for this omission.

24 *Id.* at 827 (citations omitted).

25 Goodrich thus cannot be liable for the performance of its contracts at the Rialto

26 of the potential hazards of AP because of “the paucity of scientific evidence” that it “was  
27 in fact hazardous.” 275 F.3d at 421. Neither party in this case was aware that the  
28 disposal practices at Rialto could lead to the groundwater contamination at issue today.  
As with the dioxin in Agent Orange, and perhaps more so, no party knew during the time  
of Goodrich’s operations at Rialto that AP was a groundwater contaminant of concern.  
See Holub Dep. 16:23-17:8 (testifying that nobody suspected that perchlorate had  
contaminated the groundwater until 1997) and 685:8-14 (stating that there was no  
requirement under state law in 1987 to test for perchlorate). See also Thibeault Dep.  
482:16-483:17 (testifying that perchlorate was not a pollutant of concern in 1987). To  
the extent that there were known risks surrounding AP, the government’s knowledge of  
these risks was equal to, if not greater than, Goodrich’s knowledge.

1 facility. It was merely complying with government-imposed directives, which reflected  
2 the government's own balancing of various factors such as safety, national security, and  
3 cost to the taxpayer. Under the reasoning of *Yearsley* and *Dolphin Gardens*, Goodrich is  
4 further shielded by the government's sovereign immunity against any claim by Plaintiffs  
5 that it should have done more than what was required by the government to prevent the  
6 contamination. See *OSI, Inc.*, 285 F.3d at 947 (finding the government immune from  
7 liability because chemical waste disposal "involves policy choices of the most basic  
8 kind"). Accordingly, unless the Board receives supportable evidence that the ammonium  
9 perchlorate contamination occurred because Goodrich failed to comply with government  
10 specifications, it should dismiss the Advocacy Team's claims.

11 The undisputed evidence in this case demonstrates that the federal government  
12 validly promulgated specific directions for Goodrich's use, handling, and disposal of  
13 ammonium perchlorate and any solvent contaminated with ammonium perchlorate or  
14 propellant at the Rialto site and that Goodrich followed those directions to the letter in its  
15 role as a government contractor. Both the Supremacy Clause, which dictates that  
16 federal regulations trump conflicting state laws in cases such as this, and the  
17 government contractor defense, which has shielded contractors in cases where – as  
18 here – the three *Boyle* factors were satisfied, preclude the Board from imposing liability  
19 upon Goodrich for cleanup of the Rialto site. Goodrich is therefore entitled to a dismissal  
20 of all allegations levied by the Advocacy Team relating to the releases alleged in the  
21 Draft CAO.

22 **XVI. OTHER POTENTIALLY LIABLE PARTIES WERE NOT NAMED IN THE CAO**  
23 **AND HAVE BEEN BLATANTLY IGNORED**

24 The only alleged dischargers named in the CAO by the Advocacy Team, and  
25 joined in by their co-prosecutor, the City of Rialto, are Goodrich, the Emhart parties, and  
26 Pyro Spectaculars. But this, at best, is a gross error of prosecutorial discretion, and, at  
27 worst, a clear demonstration of prosecutorial bias and conflict of interest combined with a  
28 "rush to judgment." As discussed above, a wealth of evidence overwhelmingly



1 demonstrates that Pyrotronics Corporation (aka "Apollo Manufacturing"), and Ken  
2 Thompson are responsible for the confirmed discharge of perchlorate to the  
3 groundwater. The record also demonstrates that the State of California, through the  
4 Regional Board, the City of Rialto, through its planning and fire departments, and the  
5 County of San Bernardino, through the operation and expansion of its Mid-Valley  
6 Landfill, bear culpability for the perchlorate contamination in Rialto that is the subject of  
7 the instant proceedings.

8 Given Water Code Section 13304(a) specifically contemplates that governmental  
9 entities can be liable "persons" and the credible evidence of their culpability, these  
10 parties cannot be ignored in these proceedings. The fact that they have been makes  
11 clear that the Advocacy Team and the City have deliberately abused this process to  
12 blame others for the perchlorate contamination that clearly has resulted from their own  
13 acts and omissions.

14 **A. Pyrotronics' Operations Cannot be Overlooked**

15 Amazingly, the Advocacy Staff inexplicably leaves out Pyrotronics Corporation  
16 and its two decades of operations from this matter -- even though evidence against  
17 Goodrich amounts to nothing when compared to that against Pyrotronics. The Advocacy  
18 Staff does not dispute that Pyrotronic's operations resulted in the only confirmed  
19 perchlorate discharge on the 160-acre parcel.

20 As detailed above, Pyrotronics handled significant quantities of raw perchlorate as  
21 part of its manufacturing operations. Floor sweepings, which contained perchlorate,  
22 were collected from the mixing and press rooms and transported for disposal to the  
23 Fireworks Burn Pit located on Pyrotronics' property. Damaged or defective fireworks  
24 and other production waste were also disposed of in the burn pit and later on a concrete  
25 pad where burns were also conducted at the facility. The mixing and press rooms were  
26 hosed down with water at the end of each day, and the wash water flowed into sumps  
27 outside the rooms and occasionally overflowed onto the bare ground.

28 Notably, Pyrotronics also built the McLaughlin Pit at the direction and with the

1 approval of various public agencies including the Regional Board, which it operated for  
2 nearly sixteen years and used to dispose of the floor sweepings mentioned above and  
3 damaged or defective fireworks. The McLaughlin Pit was intentionally flooded with  
4 thousands of gallons of water on a regular basis in order to prevent the perchlorate and  
5 other chemicals in the pit from auto-igniting. Pyrotronics routinely and repeatedly  
6 violated the WDRs governing the operation of the McLaughlin Pit – failing to prepare  
7 monitoring reports or adhere to the freeboard requirements – and overflows onto the  
8 bare ground were reported by witnesses including Mr. Berchtold. In addition to  
9 overflows, perchlorate-laced water penetrated the exterior gunite of the pool and  
10 escaped into the surrounding soil materials due to a combination of factors that  
11 diminished the integrity of the plaster membrane that coated the gunite reservoir of the  
12 pit.<sup>153</sup> English Dec. ¶¶ 37-54. Almost completely absent from the record is  
13 documentation of where liquid waste from the McLaughlin Pit was transported for  
14 ultimate disposal leaving open the possibility that it was merely dumped on the property.

15 Pyrotronics' display fireworks division, California Fireworks Display Company,  
16 routinely tested aerial fireworks on the property, resulting in duds, "stars", and other  
17 debris specifically containing perchlorate falling back down to the bare ground at the  
18 facility. Pyrotronics' sloppy operations also led to numerous fires and explosions (some  
19 involving fatalities and serious injuries), including major explosions in mixing and press  
20 rooms where fireworks composition was handled, causing still further perchlorate  
21 releases across large portions of the property.

22 Based on these and other well-documented releases caused by Pyrotronics over  
23 its twenty years as an owner/operator on the 160-acre parcel, Pyrotronics cannot be  
24 taken out of the equation in these proceedings. The fact that Pyrotronics declared

25 \_\_\_\_\_  
26 <sup>153</sup> These factors included exposure to high temperatures, the lack of fluid contact at  
27 certain points in time, the chemical composition of the material disposed in the pool, lack  
28 of filtration or circulation within the pool structure, hydrostatic pressure changes, earth or  
ground movements and/or contacts with solid objects and the level of abrasion and/or  
degradation from such objects. English Dec. ¶¶ 18-25, 37-54.

1 bankruptcy provides no excuse for the Regional Board. The Regional Board had  
2 knowledge of Pyrotronics' bankruptcy filing by at least July 1986, well before the  
3 "closure" of the McLaughlin Pit, yet simply chose not to make a claim in bankruptcy  
4 against Pyrotronics. Goodrich Ex. 10376; Berchtold Dep., 233:17-234:22; 234:24-235:2;  
5 235:4-237:3; 250:14-19. The Regional Board has made no effort to determine if  
6 Pyrotronics Corporation can respond to the Section 13304 order, nor if any of its  
7 successors, like APE or Ken Thompson, are now legally responsible for Pyrotronics'  
8 liabilities.

9 **B. Ken Thompson is Liable For Groundwater Contamination Because He**  
10 **Accepted Responsibility to Close the McLaughlin Pit; Improperly**  
11 **Closed the Pit; and Still Owns the Pit Today**

12 As explained above, Ken Thompson purchased the southern portion of the 160-  
13 acre parcel (where the McLaughlin Pit was located and before it was closed) from  
14 Pyrotronics in May 1987 for use in a concrete pipe manufacturing business. He has  
15 owned that property, and the McLaughlin Pit site, ever since. As a condition of the  
16 property sale, Mr. Thompson agreed to fully close the McLaughlin Pit and perform any  
17 necessary, related cleanup and to release Pyrotronics from any liability for the  
18 McLaughlin Pit and its closure. Ex. 11116, 11215. Mr. Thompson hired Mr. McLaughlin  
19 to close the pit, although Mr. McLaughlin was neither a registered civil engineer or a  
20 certified engineering geologist, and despite the fact that Subchapter 15 required an  
21 individual with such credentials to supervise the McLaughlin Pit's closure. See Adelson  
22 Dep., 111:2-112:20 (This requirement was to be satisfied by the discharger; the Regional  
23 Board did not provide somebody with the requisite credentials from the Regional Board  
24 signing off on the closure). And as detailed extensively above, Mr. McLaughlin's plan to  
25 burn the approximately 54,000 pounds of waste material that remained in the  
26 McLaughlin Pit was carried out without necessary public agency approval, and the pit's  
27 "closure" was in plain violation of Subchapter 15's detailed requirements (including  
28 monitoring for perchlorate), which were just ignored. Further, Mr. Thompson also failed  
to submit a report to the City Engineer certifying that the McLaughlin Pit had been



1 cleaned up in a satisfactory manner with the approvals of all necessary public agencies  
2 – as he was required to do under the mitigated negative declaration adopted by the City  
3 pursuant to CEQA that allowed him to develop the land.

4 As such, Mr. Thompson is directly responsible for the perchlorate discharges  
5 emanating from the McLaughlin Pit and should be named in the CAO. Cal. Wat. Code §  
6 13304(a). It is simply inexplicable (and inexcusable) that the person who agreed to  
7 close the McLaughlin Pit and clean-up any releases (and released and indemnified  
8 Pyrotronics Corporation from any such liability) has never been required to do any  
9 investigation in Rialto and is mysteriously missing from these proceedings. Indeed, the  
10 Regional Board's inexplicable decision to stop the enforcement of its Section 13267  
11 order issued to Mr. Thompson in 2004 leaves no doubt about the inequitable treatment  
12 that Mr. Thompson, the owner of the McLaughlin Pit, has been given when compared to  
13 the alleged "dischargers" whom the Regional Board has chosen to prosecute here.

14 Mr. Thompson is also a liable person under Section 13304(a) because he is the  
15 current owner of the property where the McLaughlin Pit (the only confirmed source of  
16 perchlorate releases from the 160-acre parcel) is located. *See Harvey Spitzer, et al.,*  
17 *Order No. WQ 89-8.* Likewise, as "[t]he owner of the property [of a nonoperating  
18 industrial or business location] on which the condition exists, or is created," Mr.  
19 Thompson is liable. Water Code 13305(f). Therefore, Mr. Thompson "must share in the  
20 responsibility for the cleanup" with the State and the City of Rialto. *Zoecon Corporation,*  
21 *Order No. WQ 86-2 (SWRCB 1986)*<sup>154</sup> (emphasis added).

22 The Regional Board's failure to pursue and excusal from its directive of Mr.  
23 Thompson is highly unusual and contrary to precedent, as the owner of the property  
24 subject to a cleanup order is typically named under "[a] long line of State Board orders  
25 [that] have upheld Regional Board orders holding landowners responsible for cleanup of

26 <sup>154</sup> " . . . the petitioner characterizes itself as the 'mere landowner' in this situation. Yet it  
27 is this very role that puts [the landowner] in the position of being well suited to carrying  
28 out the needed onsite cleanup. The petitioner has exclusive control over access to the  
property. As such, it must share in responsibility for the cleanup."

1 pollution on their property regardless of their involvement in the activities that caused the  
2 pollution.” *Spitzer; see also, Zoecon*. Here, of course, the case for naming Mr.  
3 Thompson is all the more compelling because he bears direct responsibility for the  
4 inadequate closure of the McLaughlin Pit and the ensuing contamination.

5 **C. The State of California Is Responsible For The Contamination**  
6 **Generated By Pyrotronics**

7 **1. The Regional Board “Permitted” Discharges to Occur from the**  
8 **McLaughlin Pit and Robertson Ready Mix Under Water Code**  
9 **Section 13304(a)**

10 Under Water Code Section 13304(a), any “person,” can be held liable if the  
11 conditions of the statute are met. Because it is undefined in the statute, the word  
12 “permit” is given its ordinary dictionary meaning, and “to permit” is defined to mean “to  
13 . . . allow, consent, let; to give leave or license; to acquiesce, by failure to prevent, or to  
14 expressly assent or agree to the doing of an act.” *Black’s Law Dictionary*, p. 1298, col. 1  
15 (Rev. 4th ed. 1968). The definition of “person” “includes any *city*, county, district, the  
16 *state*, and the United States, to the extent authorized by federal law.” Water Code  
17 Section 13050(c). (emphasis added.)

18 Here, the facts establish that the Regional Board’s staff (including key members  
19 of the Advocacy Team here), and by extension the State, allowed, consented to,  
20 acquiesced in, failed to prevent and expressly assented and agreed to: (1) the operation  
21 of the McLaughlin Pit in violation of its WDRs for over sixteen years, and, after 1984,  
22 operation and closure of the Pit without any serious effort to compel compliance with the  
23 Subchapter 15 requirements for waste disposal units, and (2) the installation of four  
24 unlined settling ponds directly over areas of known perchlorate storage and use without  
25 any soil investigation for perchlorate, causing significant amounts of perchlorate to  
26 discharge to the groundwater. The State is thus a liable person under Water Code  
27 Section 13304(a) and should be ordered to investigate and cleanup the contamination it  
28 permitted to be discharged from the McLaughlin Pit. Had the Regional Board carried out  
its Subchapter 15 obligations, the perchlorate contamination caused by the McLaughlin

1 Pit would have been detected in 1987 and remediation efforts initiated immediately until  
2 completion. Instead, the McLaughlin Pit discharge has continued unabated for some  
3 twenty years after its botched closure, and remains unaddressed today.

4 Further, had the Regional Board properly executed its mandatory duties, it would  
5 have protected the State in the Pyrotronics bankruptcy proceeding and obtained a  
6 standard preference for environmental compliance obligations of the debtor with the  
7 preference allocation of Pyrotronics' assets toward the obligations imposed under  
8 Subchapter 15, including the monitoring and leak detection requirements, closure, post-  
9 closure, corrective action requirements and financial assurances.

10 Finally, the Regional Board's issuance of the Water Code Section 13267 letter to  
11 Mr. Ken Thompson in 2004 to investigate the perchlorate contamination emanating from  
12 the improperly closed McLaughlin Pit, and their inexplicable failure to require Mr.  
13 Thompson to do anything other than cooperate in providing access to his property so  
14 that other parties, also compelled by the Regional Board, could bear the burden of the  
15 investigation of the Pit that Mr. Thompson had taken responsibility for, makes clear that  
16 the Advocacy Team here is biased and is attempting to deflect attention away from their  
17 own responsibility for failing to properly address the McLaughlin Pit.

18 **2. The Regional Board is Liable Under Government Code Section**  
19 **815.6 as it Failed to Discharge its Subchapter 15 Duties**

20 Government Code Section 815.6 provides:

21 Where a public entity is under a mandatory duty imposed by an  
22 enactment that is designed to protect against the risk of a particular  
23 kind of injury, the public entity is liable for an injury of that kind  
proximately caused by its failure to discharge the duty unless the  
public entity establishes reasonable diligence to discharge the duty.

24 (emphasis added). For purposes of Government Code Section 815.6, an "enactment"  
25 includes regulations like Subchapter 15. See Gov. Code § 810.6 ("enactment" means a  
26 constitutional provision, statute, charter provision, ordinance or regulation."). A public  
27 entity is under a "mandatory duty" for purposes of Section 815.6 if it is obligated to take a  
28 particular action:

1 [A]pplication of section 815.6 requires that the enactment at issue  
2 be obligatory, rather than merely discretionary or permissive, in its  
3 directions to the public entity; it must require, rather than merely  
4 authorize or permit, that a particular action be taken or not taken.

5 *Walt Rankin & Assocs., Inc. v. City of Murietta*, 84 Cal. App. 4th 605, 613 (2000). The  
6 language of an enactment is useful in determining whether or not it is mandatory: “the  
7 usual rule . . . is that ‘shall’ is mandatory and ‘may’ is permissive unless the context  
8 requires otherwise.” *Id.* at 614.

9 From the time Subchapter 15 was adopted in 1984, and through the rescission of  
10 Apollo’s WDRs for the McLaughlin Pit in 1991, Subchapter 15 imposed on the Regional  
11 Board a mandatory duty to enforce the operation and closure requirements of  
12 Subchapter 15 with respect to the McLaughlin Pit, a Class I hazardous waste unit:

13 The regulations in this subchapter establish waste and site  
14 classifications and waste management requirements for water  
15 treatment, storage, disposal in landfills, surface impoundments,  
16 waste piles, and land treatment facilities. Requirements in this  
17 subchapter are minimum standards for proper management of each  
18 waste category.

19 23 Cal. Code Reg. § 2510(a) (emphasis added). In connection with the enforcement of  
20 these minimum standards, Subchapter 15 mandated that “[r]egional boards **shall**  
21 implement the regulations in this subchapter through the issuance of waste discharge  
22 requirements for waste management units.” *Id.* at § 2510(f) (emphasis added).

23 Subchapter 15 further mandated that regional boards issue WDRs requiring all  
24 dischargers:

25 to establish a detection monitoring program . . . designed to detect  
26 the presence of waste constituents in surface water or ground water  
27 outside of waste management units and in the unsaturated zone  
28 beneath and adjacent to a waste management unit . . . , [including] . . .  
[the] install[ation] [of] groundwater monitoring systems and  
unsaturated zone monitoring systems at the compliance points . . .  
[,and] . . . monitor ground and surface water for indicator parameters  
or waste constituents that provide a reliable indication of leakage  
from a waste management unit. The regional board shall specify in  
water discharge requirements the indicator parameters or waste  
constituents to be monitored after considering [three specific  
factors].

1 *Id.* at § 2556(a).

2 With regard to the “closure” of hazardous waste units, Title 23, California Code of  
3 Regulations Section 2510(d) mandated that the McLaughlin Pit “be closed and  
4 maintained after closure according to Article 8 of this subchapter.” And Article 8 required  
5 compliance with “the monitoring program requirements in Article 5 of this subchapter,  
6 *throughout the closure and post-closure maintenance period*. The post-closure  
7 maintenance period shall extend as long as the wastes pose a threat to water quality.”  
8 (Emphasis supplied.) In turn, Article 5 required that if a discharger found that a waste  
9 management unit had leaked then:

10 For Class I waste management units, dischargers shall analyze  
11 samples from all monitoring points for all constituents identified in  
12 Appendix III of this subchapter. Such analyses shall be performed  
at least annually to determine whether additional hazardous waste  
constituents are present in ground water.

13 23 Cal. Code Reg. § 2557(e) (emphasis added).

14 Appendix III (Table B) in Subchapter 15 listed **potassium perchlorate** as one of  
15 the toxic chemicals for which monitoring was required if a leak was detected. In other  
16 words, the Regional Board had a duty to classify the McLaughlin Pit as a Class I  
17 hazardous waste impoundment and require Pyrotronics to monitor and detect any leaks  
18 from the McLaughlin Pit, which they failed to exercise. Further, had Pyrotronics  
19 implemented the proper detection monitoring program it would have found the massive  
20 leak in the pit that has been confirmed by recent sampling and Pyrotronics would have  
21 been required to sample for potassium perchlorate in the groundwater. All of this should  
22 have occurred between 1984 and 1986, long before Pyrotronics’ bankruptcy had ever  
23 began and long before Ken Thompson had purchased the property, but for the failures of  
24 the Regional Board in exercising their mandatory duties.

25 Finally, Subchapter 15 also mandated that “regional board[s] shall require the  
26 discharger to establish an irrevocable closure fund or provide other means to ensure  
27 closure and post-closure maintenance of each classified waste management unit in  
28 accordance with an approved plan.” *Id.* at § 2580(f).

1 The detailed factual record is clear that the Regional Board never required  
2 Pyrotronics or Ken Thompson to comply with any of these mandatory closure  
3 requirements of Subchapter 15. Had these explicit regulatory obligations been  
4 implemented and enforced by the Regional Board, perchlorate contamination emanating  
5 from the McLaughlin Pit would have been detected in 1987 at the latest, and remediation  
6 could have gotten underway. But unfortunately, they were not. As such, the State of  
7 California is liable under Government Code Section 815.6 for the injuries to Rialto's  
8 groundwater proximately caused by the Regional Board's acts and omissions in  
9 connection with the McLaughlin Pit.

10 **3. The Regional Board's Perchlorate "Investigation" Was**  
11 **Designed to Avoid Scrutiny of the Board's Own Misconduct**

12 When the Regional Board staff began to investigate the perchlorate  
13 contamination in the Rialto/Colton Basin, its files were filled with information that  
14 Pyrotronics manufactured fireworks on the 160-acre parcel and disposed of massive  
15 quantities of perchlorate-laden waste into the McLaughlin Pit. Indeed, current Advocacy  
16 Team member Mr. Berchtold even inspected the McLaughlin Pit while it was operating,  
17 observed its overflow and reported other violations of its WDRs. Regional Board files  
18 also contained information leaving no doubt that the County's gravel washing operations  
19 incident to its Mid-Valley Landfill expansion released substantial quantities of perchlorate  
20 into the groundwater.

21 The Regional Board staff bears direct responsibility for these releases, because it  
22 failed to enforce the McLaughlin Pit's WDRs and disregarded its duty to enforce the  
23 Subchapter 15 regulations regarding monitoring and leak detection and closure of the  
24 pit. Regional Board staff also approved the use of unlined settling ponds by the County  
25 for soil washing operations. As such, it is simply inappropriate for a clearly culpable  
26 party such as the Regional Board through its staff to be responsible for prosecuting the  
27 perchlorate contamination investigation.

28



1           **D. City of Rialto is a Responsible Party**

2                   **1. The City Did Not Enforce a Mitigation Measure Requiring**  
3                   **Proper Cleanup of the McLaughlin Pit**

4           It is black-letter CEQA law that “[a]gencies adopting mitigated negative  
5           declarations must take affirmative steps to ensure that approved mitigation measures  
6           are in fact implemented subsequent to project approval.” Remy, Thomas, Moose &  
7           Manley, Guide to the Cal. Env. Quality Act (10th Ed. 1999), at 247. This makes sense –  
8           mitigation measures that aren’t enforced provide no mitigation at all. And an agency’s  
9           obligation to enforce mitigation is a continuing one: “until mitigation measures have  
10          been completed the lead agency remains responsible for ensuring that implementation  
11          of the mitigation measures occurs . . .” 14 Cal. Code Reg. § 15097(a).

12          The mitigated negative declaration that was approved by the City and which  
13          allowed Mr. Thompson to redevelop Pyrotronics’ former property included a very specific  
14          condition regarding the cleanup and closure of the McLaughlin Pit:

15                   Prior to any grading, construction or installation of equipment on  
16                   Parcel 11, *the applicant shall have completed a satisfactory cleanup*  
17                   *program of the fireworks residual pit on Parcel 11 and shall have*  
18                   *certified the satisfactory completion of that program in a report to the*  
19                   *City Engineer. As part of that cleanup program, the applicant shall*  
20                   *obtain all necessary permits or approvals from local, state and/or*  
21                   *federal agencies as required. (emphasis added.)*

22          Ex. 11162.

23          Thus, it was absolutely clear that before Mr. Thompson could start to develop the  
24          property, indeed before he could even grade the site, he needed to submit a report to  
25          the City Engineer demonstrating that the McLaughlin Pit had been completely cleaned  
26          up in a satisfactory manner, and he needed to obtain all necessary public agency  
27          permits/approvals to carry out the cleanup. The record is devoid of evidence showing  
28          that he did either.

                First, the City has not produced any written documentation that Mr. Thompson  
                submitted any kind of a certification report to the City Engineer. Second, it is clear that  
                Mr. Thompson did not obtain “all necessary permits or approvals from local, state and/or

1 federal agencies as required” to effectuate the cleanup. To the contrary, and as detailed  
2 above, the McLaughlin Pit was closed by Mr. Thompson’s agents without any approval  
3 from the County, SCAQMD, USEPA, Regional Board, or DTSC. Mr. McLaughlin, who  
4 closed the pit on behalf of Mr. Thompson, testified that a December 15, 1987 letter from  
5 Mr. Van Stockum of the County qualified as the County’s approval of his decision to burn  
6 the 54,000 pounds of perchlorate-containing waste that remained in the pit and to  
7 consider it closed. But Mr. Van Stockum testified clearly that this letter was not intended  
8 as the County’s sign off on the burn and approval to proceed with development of the  
9 property, (Van Stockum Dep., 152:14-153:3), and Mr. Van Stockum was also very clear  
10 that the County did not have authority to authorize closure of a hazardous waste facility.  
11 Van Stockum Dep., 46:3-7; 85:13-86:15; 90:5-20; Roberts Dep., 48: 18-23; 109:2-21;  
12 119:23-25; 120:1-11. Further, a December 3, 1987 letter (dated the day before the burn)  
13 from Mr. Van Stockum to State DTSC asked DTSC to respond to Mr. McLaughlin’s  
14 closure plan because the County simply did not have the authority to approve it – further  
15 evidence that Mr. Van Stockum did not and could not approve Mr. McLaughlin’s pit  
16 closure<sup>155</sup>. Goodrich Ex. 10141.

17 Had the City enforced the condition requiring Mr. Thompson to “obtain all  
18 necessary permits or approvals” for proper closure of the McLaughlin Pit prior to any  
19 grading, Mr. Thompson would have needed to receive approval that the pit was closed in  
20 compliance with the Subchapter 15 Regulations, as well as any associated approvals for  
21 the closure of the Class I hazardous waste site from U.S. EPA, California, and he would  
22 have had to obtain a permit from SCAQMD. As previously explained, had the  
23 Subchapter 15 requirements been followed, the perchlorate contamination caused by  
24 the McLaughlin Pit would have been detected in 1987, and remediation steps could have  
25 been undertaken. Instead, the City allowed Mr. Thompson to simply bury the pit and  
26

27 <sup>155</sup> Further, the mitigation measure required that all necessary approvals be obtained  
28 *prior to grading*, but Mr. McLaughlin’s purported satisfaction of this condition was a  
December 15, 1987 letter, while grading had begun in June or July of 1987.



1 build on top of it, leaving it unabated. Thus, through its failure to enforce the McLaughlin  
2 Pit-closure mitigation measure mandated by CEQA, the City has permitted the discharge  
3 of perchlorate in Rialto, and should be named in the CAO pursuant to Water Code  
4 Section 13304. For the same reason, the City is also liable under Government Code  
5 Section 815.6 for injuries to the Rialto groundwater because the City failed in its  
6 mandatory duty under CEQA to enforce the mitigation.

7 Given that the City's obligation to enforce its CEQA mitigation measure is  
8 ongoing, it is inconceivable that the City still hasn't directed Mr. Thompson to comply and  
9 cleanup the McLaughlin Pit after the perchlorate contamination was detected in 1997.  
10 Instead of doing so, and thereby obligating the responsible party to engage in clean up  
11 activities, the City has chosen to pursue an investigation of Goodrich and others and  
12 actually dismiss any claims against Thompson, even though it is undisputed that  
13 Goodrich had absolutely no involvement with the McLaughlin Pit release.

14 **2. The City Was, and Is, Well Aware of the Perchlorate Usage at**  
15 **the Rialto Fireworks Facilities**

16 The City of Rialto through its Fire Department was familiar with the facilities,  
17 inventory and operations of the Rialto fireworks companies going back to the 1960s  
18 because it regularly visited these facilities in the performance of its duties. The Rialto  
19 Fire Department was responsible for preparing "Pre-Fire Planning Inspections", in which  
20 it examined each facility and diagramed its buildings so that the Rialto Fire Department  
21 would be prepared in the event that it was called to respond to an emergency at that  
22 facility. McVeitty Dep., 60:10-61:1. During these inspections, the Rialto Fire Department  
23 also took note of each facility's hazardous materials inventory and recorded the  
24 manufacturing processes that the fireworks companies were involved with at the 160-  
25 acre site. The County eventually assumed jurisdiction over enforcement of hazardous  
26 materials statutes in the mid-1980s, and provided leadership and assistance with these  
27 duties to the City of Rialto Fire Department, but the City of Rialto Fire Department  
28 remained involved. See McVeitty Dep., 135:15-21; 306:5-21; 307:10-308:10; 265:22-

1 267:22.

2 In 1987, when the SCAQMD refused to allow the burning of fireworks waste  
3 material, the City of Rialto Fire Department knew that such waste was being stockpiled  
4 at dangerous levels but refused to record these violations because it was sympathetic to  
5 the fact that the fireworks companies had no means to dispose of their waste. Finally,  
6 the City of Rialto Fire Department sought to invoke AQMD Rule 444, which provided an  
7 exception to the AQMD burning restrictions in cases where there was a fire hazard to life  
8 and property. McVeitty Dep., 150:10-21; 151:4-22; 152:4-153:20; 154:11-23; 156:8-22;  
9 238:15-239:15; 240:12-15; 240:19-241:6; Thrash Dep., 21:19-25:11; Ex. 11229.

10 The City of Rialto Fire Department also inspected locations where materials were  
11 to be burned, including the Fireworks Burn Pit and Burn Pipe, and City of Rialto Fire  
12 Department employees observed aerial fireworks tests in Rialto. Incident reports and  
13 other written records prepared by the City of Rialto Fire Department demonstrate that it  
14 has responded to fires and explosions at the various fireworks companies beginning in  
15 1968 and continuing through the present, and that these fires have often involved  
16 powder and other fireworks materials. In addition, the City, through its police and fire  
17 departments, brought confiscated fireworks to the Pyrotronics facility to be burned in the  
18 Fireworks Burn Pit and the Burn Pipe.

19 **XVII. CCAIEJ AND ENVIRONMENT CALIFORNIA WILL NOT PROVIDE ANY**  
20 **ADDITIONAL INFORMATION RELEVANT TO THE PRESENT PROCEEDINGS**

21 The Designated Parties, Center for Community Action and Environmental Justice  
22 (CCAIEJ) and Environment California, have no relevant evidence to present in these  
23 proceedings. The purpose of the public hearing is to receive "relevant testimony and  
24 evidence" on four issues: "[1] legal responsibility for site investigation and remediation;  
25 [2] the technical evidence justifying site investigation and cleanup; [3] the feasibility and  
26 propriety of cleanup and remediation requirements; and [4] appropriate cleanup  
27 standards for protection of public health and beneficial uses of waters of the state."

28 Ex. 20257 (Second Amended Notice of Public Hearing).

1 On February 13, 2007, Environment California and CCAEJ requested "joint  
2 Designated Party status in any meetings and hearings regarding how to proceed with  
3 cleanup of [the] Rialto Perchlorate Contamination." Ex. 20290. This request was  
4 summarily granted and they were listed as parties in the February 23, 2007 Notice of  
5 Public Hearing. Ex. 20257. As a result, they have been allocated a total of 5 and ½  
6 hours time at the hearing – the same as Goodrich and each of the other parties accused  
7 of liability, and significantly more than the maximum time of three to five minutes allotted  
8 to other "interested persons" who wish to make "policy statements". Ex. 20400.

9 One would expect that Environment California and CCAEJ have been granted the  
10 status of parties in these proceedings because they have something material to say or  
11 present. However, that is not the case at all. As fully discussed below, the deposition  
12 testimony of representatives of Environment California and CCAEJ reveals that, with just  
13 a short time before submissions were due, they had not even figured out what subjects  
14 they intended to address, what witnesses will testify, or what evidence they will present.  
15 Underlying this disorganization is the plain fact that these organizations and their  
16 representatives have no firsthand or expert evidence to offer on any of the relevant  
17 subjects. Thus, it is appropriate that Environment California and CCAEJ's joint  
18 submission admits in the first two paragraphs that they will only present "policy  
19 arguments", unsupported by any witness or admissible evidence.<sup>156</sup> Accordingly,  
20 Goodrich fully expects that their presentation will not be permitted to address, in any  
21 way, the relevant evidentiary subjects of these proceedings. Such a presentation would  
22 amount to nothing more than baseless accusations and politicking, which will accomplish  
23 nothing other than wasting the time, resources, and energy of the proper parties and the  
24 State Board.

25 **A. Environment California**

26 Ms. Sujatha Jahagirdar appeared for deposition on March 26, 2007 as the

27 <sup>156</sup> The legal issues raised by Environment California and CCAEJ are addressed in the  
28 "Legal Arguments" section herein. See Section III, *supra*.

1 Federal Rule of Civil Procedure, Rule 30(b)(6) representative for Environment California  
2 on several subjects, including “any evidence” it intends to rely in these proceedings.  
3 Ex. 20060 (Topic 2).<sup>157</sup>

4 Environment California has not hired any consultants or experts to present any  
5 testimony on its behalf. Jahagirdar Dep., 55:16-19. It has not hired any experts at all.  
6 *Id.*, 68:13-14. It has not retained counsel to represent it at the hearing. *Id.*, 68:19-69:4.  
7 And it has not identified any potential witnesses, with one exception – Ms. Jahagirdar  
8 herself. *Id.*, 221:18-21.

9 Environment California intends to present testimony from Ms. Jahagirdar, who is  
10 “the point person on perchlorate at Environment California”. *Id.*, 169:17-19, 227:3-4. As  
11 of her deposition, Ms. Jahagirdar did not even know what subject she will testify about.

12 Q. You’re going to testify. [¶] Are you preparing a declaration?

13 A. We plan to – we haven’t prepared it yet – for the August – for  
14 the April 12th deadline.

15 Q. And whose declaration is that going to be?

16 A. Myself.

17 Q. You’re going to testify in a declaration. [¶] What are you  
going to say in your declaration?

18 A. I don’t know yet at all. I’m not a lawyer, and I’m very  
19 unfamiliar with the process, and I – I haven’t even begun –

20 \* \* \*

21  
22 <sup>157</sup> Federal Rule of Civil Procedure 30(b)(6) is the procedural vehicle for taking a  
23 deposition of a corporation or other entity, which is accomplished by deposing one or  
24 more representatives selected by the organization with knowledge of whatever topics are  
25 identified in the subpoena and/or deposition notice. Specifically, Rule 30(b)(6) provides:  
26 “A party may in the party’s notice and in a subpoena name as the deponent a public or  
27 private corporation or a partnership or association or governmental agency and describe  
28 with reasonable particularity the matters on which examination is requested. In that  
event, the organization so named shall designate one or more officers, directors, or  
managing agents, or other persons who consent to testify on its behalf, and may set  
forth, for each person designated, the matters on which the person will testify. A  
subpoena shall advise a non-party organization of its duty to make such a designation.  
The persons so designated shall testify as to matters known or reasonably available to  
the organization.”

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. Do you plan on submitting any type of expert testimony on any subject whatsoever?

A. Yes.

Q. What's your expertise –

A. Oh, me? Particular?

Q. Uh-huh.

A. Oh, I plan on submitting testimony.

Q. Yeah. I understand that. [¶] But are you going to submit any expert testimony?

A. I don't know. We haven't decided if I'm going to characterize myself as an expert or not.

Q. Well, what would you be an expert in that you could characterize yourself?

MR. MANN: Objection. Speculative.

A. I don't know. I haven't thought through it.

*Id.*, 227:5-15, 227:25-228:15.

This indecision is likely explained by the fact that Ms. Jahagirdar does not possess firsthand knowledge or expertise concerning any relevant issue. Environment California neglected to include this important fact in its publications on the perchlorate contamination, and when it requested party status in these proceedings.

**1. Ms. Jahagirdar has no relevant firsthand knowledge**

Ms. Jahagirdar has no firsthand knowledge of the issues relevant to these proceedings.

Q. So are you aware of any allegations in this draft CAO which you've read that you have personal knowledge to?

A. No.

Q. Okay.

A. I've not seen, smelled, tasted or whatever.

Q. Or heard any of them?

A. Heard any of them.

1 Q. And to your knowledge, you're [not] getting up in this hearing  
2 and going to be sworn as a witness to testify personally as to  
3 any of the facts that are established --

4 A. Correct.

5 Q. That's very helpful. And we can put this aside, and that  
6 makes a lot of work that we would have to do otherwise,  
7 okay?

8 A. Okay.

9 Q. Now, let me ask you this: [¶] I understand the subject  
10 matters that you and Mr. Diaz are talking about presenting  
11 on, okay. [¶] But I want to know what documents at present  
12 do you intend to put into the record?

13 A. At present, we only plan to submit our -- the materials that we  
14 submit on August 12th, so our kind of outline of our  
15 arguments and --

16 Q. You mean like a brief?

17 A. I don't know the legal term for it.

18 Q. Like a white paper?

19 A. I don't know what we're going to call it.

20 Q. Well, whatever you call it, you're going to write something?

21 A. We're going to present the out- -- as specifically as we need  
22 to, the arguments that we'll be presenting at the --

23 Q. But you haven't started writing that yet?

24 A. No.

25 Q. And to your knowledge, Mr. Diaz hasn't either?

26 A. To my knowledge, no.

27 Q. What about supporting documentation?

28 A. **We haven't thought through that at this point. [¶] But at  
this point, no intention of submitting anything that  
relates to firsthand knowledge of anything in the order.**

*Id.*, 313:19-315:11 (emphasis added).<sup>158</sup>

<sup>158</sup> In addition, and while this is not a topic identified in the Notice of Public Hearing, Ms. Jahagirdar also testified she does not have any knowledge concerning "how citizens of Rialto are feeling about the perchlorate in their water", and therefore, she cannot present on that subject either. Jahagirdar Dep., 118:1-119:12.



1 In particular, Ms. Jahagirdar concedes that she has no factual basis for accusing  
2 Goodrich of responsibility for any perchlorate contamination, which stands in sharp  
3 contrast to her public accusations.

4 Q. So you accuse Goodrich here of polluting the city's drinking  
5 water sources; right? [¶] Right?

6 A. Yes.

7 Q. But you don't know how they handled the waste at the site;  
8 right?

9 A. Yes. [¶] Well, I mean, we know that we -- from what we read  
10 in depositions of the dumping of the unused perchlorate into  
11 the unburn- -- into -- into the unlined pits behind the facility.

12 Q. But you don't know what they did with the perchlorate in terms  
13 of industrial waste practices of --

14 A. Yeah. I don't know what -- they burned it or what they did with  
15 it.

16 Q. And you don't know whether or not the perchlorate that  
17 Goodrich used at that facility and was put in the pits and  
18 burned -- you don't know whether that's in the groundwater  
19 below the facility, do you?

20 A. I don't know.

21 *Id.*, 180:10-181:5.

22 In fact, Ms. Jahagirdar's accusations are based solely on the allegations of the  
23 Regional Board in the proposed CAO.

24 Q. You don't know. [¶] And yet, notwithstanding that fact, you  
25 write in this piece here that you've sent around, put on the  
26 Internet -- you accuse my client of having polluted the  
27 groundwater and the water resources of the City of Rialto,  
28 don't you?

A. Yes. [¶] And the reference for that is the regional board order  
issued by the Regional Water Quality Control Board.

\* \* \*

Q. But you have no idea, none, what Goodrich's contribution is to  
the groundwater contamination in Rialto, do you?

A. Well, I know that they are considered a potentially responsible  
party. They've been subject to an order, a draft order, issued  
by the regional water board. I know that. [¶] Yeah. I mean,  
I'm familiar with the documents in the public record that --

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. Okay. But hold on a second. [¶] You said they've been a potentially responsible party. [¶] [That] [d]oesn't mean they are a responsible party; right? [¶] There's no evidence you're aware of that says that their stuff is in the groundwater, is there?

A. I did not do primary research, but I am relying on the regional water board's --

Q. The regional board has issued a draft, unsigned order; right? [¶] That's what they've done; right?

A. Yeah. [¶] And then also EAD [sic] --

Q. Hold on a second. [¶] And they did that; right?

A. Uh-huh.

Q. Answer "yes" or "no" verbally, please.

A. Yes.

*Id.*, 181:6-15, 268:15-269:16.

**2. Ms. Jahagirdar possesses no expert knowledge on any relevant issue**

In addition to knowing none of the relevant facts, Ms. Jahagirdar is also not an expert in any relevant scientific or medical field.

- Ms. Jahagirdar holds an undergraduate Bachelor of Science degree in "biology and history" from Yale University in 1988. *Id.*, 13:9-16.
- She is not professionally licensed in any field (e.g., engineering or geology). *Id.*, 19:20-20:7.
- She is not an expert in civil engineering. *Id.*, 69:13-14.
- She is not an expert in water distribution. *Id.*, 69:15-16.
- She is not an expert in groundwater modeling. *Id.*, 69:17-18.
- She is not an expert in hydrogeology or geology. *Id.*, 69:19-20.
- She is not an expert in the fate and transport of water. *Id.*, 69:22-24.
- She is not an expert in the movement of chemicals dissolved in water through soil. *Id.*, 69:25-70:1.
- She is not an expert in vadose zone modeling. *Id.*, 70:3-4.
- She is not an expert in epidemiology. *Id.*, 42:24-43:6.
- She is not an expert in toxicology. *Id.*, 43:8-16.



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

- She is not an expert in molecular biology. *Id.*, 46:18-47:5.
- She is not an expert in any medical science. *Id.*, 44:23-25.

Ms. Jahagirdar further admits having no expert knowledge upon which to accuse Goodrich (or any other entity) of legal responsibility for the perchlorate contamination.

- She does not know how Goodrich handled waste rocket propellant or perchlorate. *Id.*, 177:15-23.
- She has not reviewed any historical records of Goodrich's former operations in Rialto. *Id.*, 87:24-88:2.
- She does even know what Goodrich manufacturers, and knows only that it is an "aerospace manufacturer". *Id.*, 90:17-18.
- She does not know the difference between a missile and a rocket. *Id.*, 175:18-20.
- She does not know how much perchlorate "burns off" when rocket fuel is combusted. *Id.*, 177:2-13.
- She does not know the depth to groundwater in Rialto generally or at the 160-acre parcel. *Id.*, 179:2-4, 180:1-3.
- She does not the infiltration rates of perchlorate in soil. *Id.*, 180:6-9.
- She does not know the amount of water in the Rialto-Colton basin. *Id.*, 275:11-16.
- She does not know how many companies used perchlorate in past operations over the Rialto-Colton basin, or how many discharged waste containing perchlorate. *Id.*, 277:3-16.
- She does not know how long it takes for a surface discharge of perchlorate to travel 400 feet to the groundwater below the surface. *Id.*, 292:22-25.
- She does not know about the contribution of Chilean fertilizer to the perchlorate contamination. *Id.*, 297:17-298:1, 8-14.
- She is not an expert in the industrial practices of fireworks manufacturers. *Id.*, 70:7-9.
- She is not an expert in the industrial practices of flare or munitions manufacturers. *Id.*, 70:18-20.
- She is not an expert in the industrial practices of solid rocket manufacturing or research and development facilities. *Id.*, 70:21-23.

Moreover, while Ms. Jahagirdar holds herself out to the public as an "expert" on perchlorate and related issues, she admits having no scientific expertise on perchlorate,

1 its health effects in any population, its safe levels, or any appropriate cleanup standard:

2 Q. On this Internet website here, in your bio, you say you have  
3 expertise -- And that's the magic word there we've been  
talking about; right?

4 A. Yeah. I mean -- Okay. So the basic thing with this whole  
5 expert thing is that I, in most forums, know more about  
6 perchlorate than everybody else there and have spent a lot of  
7 time thinking about it. [¶] If you're asking if I'm going to  
testify as an expert at the water board proceeding, it's  
8 unlikely because I think in that forum, it's not appropriate. [¶]  
So does that answer your question?

8 \* \* \*

9 Q. In scientific circles, are you an expert --

10 A. No.

11 Q. So you're not an expert in perchlorate in scientific circles;  
12 right?

13 A. Correct.

14 \* \* \*

15 Q. So you're not going to testify as an expert on State and  
federal policies related to safe drinking water, as an expert?

16 A. I'm not going to characterize myself as an expert, correct.

17 Q. And the same thing is true of clean water and water quality?

18 A. Correct.

19 Q. And the same thing --

20 A. Correct, correct.

21 Q. Hold on. I get to ask the question. [¶] And you will not be  
22 holding yourself out as an expert in cleanup standards for  
toxic pollution?

23 A. At the State water board proceedings, correct.

24 \* \* \*

25 Q. You're not going to be providing any documentation on  
26 cleanup levels, I take it; right?

27 A. What do you mean by that?

28 Q. Well, you know, the order talks about what is safe for the  
residents, okay. [¶] And in order to offer an opinion or

1 produce documentation on that subject, you would have to  
2 have expertise –

3 A. Well, at this point, we – we don't plan to talk about  
4 specifically the toxicological debate over health effects of  
5 perchlorate at this point.

6 Q. So to your knowledge, that's not something you guys are  
7 introducing into the record?

8 A. At this point, no. We think that's not relevant to this particular  
9 proceeding.

10 *Id.*, 299:24-300:9, 303:21-25, 305:24-306:12, 315:12-316:1.

11 In case Ms. Jahagirdar changes her mind and attempts to address these issues, it  
12 is undeniable that she has no expertise in any of these subjects.

- 13 • She is not an expert in endocrinology. *Id.*, 45:4-6.
- 14 • She is not an expert in the human kinetics of perchlorate. *Id.*, 44:6-12.
- 15 • She is not an expert on fetal brain development. *Id.*, 45:4-6.
- 16 • She is not an expert in risk assessment. *Id.*, 73:5-6.
- 17 • She is not an expert in dose response. *Id.*, 114:19-23.
- 18 • She does not know what a "No Observable Effect Level" or a "No  
19 Observable Adverse Effect Level" represents. *Id.*, 140:9-12.
- 20 • She does not know the therapeutic doses of perchlorate. *Id.*, 72:6-8.
- 21 • She does not know the safe levels of perchlorate exposure for  
22 humans. *Id.*, 251:19-23.
- 23 • She is not aware of any of the case histories of therapeutic uses of  
24 perchlorate. *Id.*, 93:3-6.
- 25 • She does not know the current therapeutic uses of perchlorate. *Id.*,  
26 72:9-20.
- 27 • She does not know what hormones are created by the thyroid. *Id.*,  
28 74:20-22.
- She does not know what hormones are created by the pituitary that  
are relevant to the thyroid. *Id.*, 74:23-75:2.
- She does not the cellular structure of the thyroid. *Id.*, 146:5-10.
- She does not know the amount of iodine necessary for normal adult  
thyroid function. *Id.*, 146:17-21.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

- She does not know sources of iodine other than iodized salt. *Id.*, 147:2-6.
- She does not know whether Rialto residents have an iodine rich diet. *Id.*, 147:10-14.
- She does not know whether the amount of iodine makes any difference to the effect of perchlorate in adults or children. *Id.*, 147:15-148:5.
- She does not know when the fetal thyroid develops and independently produces hormones. *Id.*, 75:15-23, 76:1-4.
- She does not know how perchlorate compares to other endocrine disruptors (e.g., thiocyanates or nitrates). *Id.*, 78:12-19.
- She does not know the qualifications, accomplishments, or research of key professionals in the field, such as Dr. Louis Braverman (whose name she did not ever recognize) (*id.*, 98:25-99:6), Dr. Monte Greer (*id.*, 99:7-100:13), Dr. Steven Lamm (*id.*, 170:17-171:2), or Dr. Richard Pleus (*id.*, 171:23-172:15); nor does she know anything about the universities that were involved in any of the research on perchlorate (*id.*, 101:23-102:1).
- She does not know the hypotheses that were being tested in the studies on perchlorate. *Id.*, 161:4-10.
- She does not know how the Environmental Protection Agency calculated its Drinking Water Equivalent Level of 24.5 parts per billion for perchlorate. *Id.*, 140:6-8.
- She does not know anything about the “benchmark calculations” for perchlorate or the studies on which those calculations are based. *Id.*, 258:6-13.
- She does not know the level of perchlorate that creates an adverse health effect in humans generally, or in sensitive subpopulations. *Id.*, 141:1-8.
- She does not know how much perchlorate is necessary to affect the maternal thyroid and the production of necessary hormones for fetal development. *Id.*, 195:13-16.
- She does not know how much perchlorate is necessary to affect the uptake of iodine or thyroid hormone levels in a pregnant women. *Id.*, 197:21-198:6.
- She is not aware of any evidence that any measured concentration of perchlorate in any well in Rialto is capable of causing any effect in pregnant women or a developing fetus. *Id.*, 198:7-199:2.

1                   **3. Ms. Jahagirdar also may not present the publications of**  
2                   **Environment California or any other hearsay**

3                   Goodrich anticipates that Ms. Jahagirdar may attempt to “rely on” – *i.e.*, simply  
4                   read or submit into the record – documents including the publications of Environment  
5                   California on perchlorate. In addition to being inadmissible hearsay (see Cal. Evid. Code  
6                   § 1200 *et seq.*), such commentaries are not reliable, expert analyses that deserve any  
7                   weight in these proceedings. They do not contain original research, nor are they  
8                   opinions of a qualified expert. In fact, Environment California’s publications were not  
9                   even written or reviewed by anyone with scientific expertise. They were written by a  
10                  non-scientist, Travis Madsen, who is with an organization called “the Frontier Group”,  
11                  and then reviewed by Ms. Jahagirdar. *Id.*, 124:9-20. Mr. Madsen is paid to write these  
12                  pieces for Environment California. For one report, he was paid “around the ballpark” of  
13                  \$10,000. *Id.*, 125:5-14.

14                  Mr. Madsen is also not an expert in any relevant subject. All Ms. Jahagirdar  
15                  knows of Mr. Madsen’s background is that he does not have a Ph.D. degree in any field  
16                  (she also knows nothing of the experience of anyone else at the Frontier Group). *Id.*,  
17                  150:4-151:7. According to his biography, Mr. Madsen is simply a “Policy Analyst” with a  
18                  Bachelor of Arts degree from the University of California. U.S. PIRG website *available at*  
19                  <http://www.pirg.org/media/staff/travismadsen.html>. California Environment’s “reports”,  
20                  which include accusations about health risks from perchlorate, were not even reviewed  
21                  by any expert in endocrinology, epidemiology, or toxicology. *Id.*, 151:24-152:3. In  
22                  summary, these documents are advocacy pieces, not evidence, and therefore have no  
23                  place in these proceedings.<sup>159</sup>

24                  **B. CCAEJ**

25                  Ms. Penny Newman appeared for deposition on April 3, 2007 as the Federal Rule

26  
27                  <sup>159</sup> Even Ms. Penny Newman from CCAEJ acknowledges these are not peer-reviewed,  
28                  scientific publications and should not be used to draw any conclusion about potential  
                    health effects from perchlorate exposure. Newman Dep., 155:14-156:1.

1 of Civil Procedure, Rule 30(b)(6) representative for CCAEJ on several subjects, including  
2 “any evidence” it intends to rely in these proceedings. Ex. 20060 (Topic 2). Ms.  
3 Newman founded CCAEJ in 1993 and has been its Executive Director since that time.  
4 Newman Dep., 21:19-22:3. Mr. Davin Diaz, CCAEJ’s “campaign director”, was also  
5 deposed on April 5, 2007. *Id.*, 37:19-21, Diaz Dep., 191:5-7. Ms. Newman and/or Mr.  
6 Diaz may present testimony on behalf of CCAEJ. Newman Dep., 37:6-24.

7 CCAEJ is in no position to present evidence on any issue relevant to these  
8 proceedings. Ms. Newman and Mr. Diaz are political advocates, not witnesses with  
9 firsthand knowledge or expertise in any relevant subject.

10 Ms. Newman freely admits that CCAEJ is not prepared to present any relevant  
11 evidence, and its submission does not offer any suggestion to the contrary. Indeed, as  
12 of the depositions of Ms. Newman and Mr. Diaz, CCAEJ had not retained counsel to  
13 represent it in these proceedings, nor had it begun preparing any documents or visual  
14 presentation to submit or present, nor had it even decided what evidence it intends to  
15 present. *Id.*, 37:25-38:4, 38:13-15, 39:13-16, 51:8-14; see also Diaz Dep., 106:14-  
16 107:13. CCAEJ had not even decided if it would make any submission. Newman Dep.,  
17 38:21-23.

18 This indecision likely reflects the fact that CCAEJ has no relevant expert  
19 information to present at these proceedings. Ms. Newman<sup>160</sup> is not an expert in any  
20 relevant subject – e.g., hydrogeology, geology, fate and transport of chemicals in the  
21 environment, groundwater modeling, civil engineering, inorganic chemistry, the use of  
22 perchlorate in rocket fuel manufacturing, resulting wastes, waste management,  
23 medicine, endocrinology, the effects of perchlorate on the human thyroid, the effect of  
24 endocrine disruptors in general, epidemiology, toxicology, metabolism, molecular  
25 biology, and law. *Id.*, 82:4-14, 82:15-20, 85:15-17, 87:17-88:1, 95:13-96:11, 205:10-16,  
26

27 <sup>160</sup> Ms. Newman holds an undergraduate Bachelor of Arts degree in “speech and  
28 language pathology” from California State University Fullerton in the “late ‘80s”, along  
with some related graduate coursework. Newman Dep., 79:25-80:18, 81:12-16.



1 206:8-15, 209:10-12, 215:1-5, 215:22-217:19. Mr. Diaz<sup>161</sup> likewise concedes his lack of  
2 expertise in the subjects relevant to these proceedings – e.g., medicine, biology,  
3 toxicology, epidemiology, molecular biology, endocrinology, chemistry, biochemistry,  
4 geology, hydrogeology, risk assessment, water quality, public health, and perchlorate  
5 and its potential health effects in any population. Diaz Dep., 24:12-17, 25:13-26:20,  
6 121:15-122:1, 176:25-177:3, 264:13-265:9, 266:25-270:21, 273:6-274:5. CCAEJ does  
7 not have experts in any relevant subject on its staff either. Newman Dep., 140:17-19,  
8 217:20-218:21.<sup>162</sup> In fact, in Mr. Diaz’s two-plus years working on perchlorate for  
9 CCAEJ, his “research” consisted of reviewing the Environment California’s publications  
10 and he “tried reading” one original study, which he admits not understanding. Diaz Dep.,  
11 261:7-262:4, 275:6-276:9, 284:12-18.

12 CCAEJ also has not retained any experts or consultants on issues related to the  
13 perchlorate contamination in Rialto, including any medical or hydrogeology experts.  
14 Newman Dep., 94:12-17, 95:1-12, 218:22-219:3.<sup>163</sup> Ms. Newman’s reasoning is that

15 \_\_\_\_\_  
16 <sup>161</sup> Mr. Diaz holds an undergraduate Bachelor of Arts degree in “history” from California  
17 State University San Bernardino in 2004. Diaz Dep., 21:1-8. The only college-level  
18 science courses he took were “astronomy and astronomy lab”. *Id.*, 23:20-22.

19 <sup>162</sup> Aside from these relevant subjects, Ms. Newman indicated that Mr. Diaz may present  
20 evidence that \$7.2 million in water bill surcharges should be “reimbursed” to residents.  
21 Newman Dep., 52:15-56:3. This issue is briefly raised in CCAEJ’s submission (see p. 7  
22 and Ex. K). Even if this was one of the subjects relevant to these proceedings (and it is  
23 not), CCAEJ is in no position to raise this issue either. Mr. Diaz explained this is actually  
24 the County of San Bernardino’s calculation, not his, and he does not know how that  
25 number was calculated. Diaz Dep., 189:16-190:20. CCAEJ also has not retained an  
26 expert in accounting or, in particular, forensic accounting, Mr. Diaz is not such an expert,  
27 and CCAEJ does not have an accountant or economist on staff. Newman Dep., 228:16-  
28 21, 239:20-23.

<sup>163</sup> Mr. Diaz testified that he has spoken with several lawyers about possibly serving as  
an unpaid, legal expert on “the California Water Code”, but he has not identified any  
qualified and willing candidate for that role. Diaz Dep., 149:12-150:13, 158:17-161:4,  
163:24-167:21.

26 Otherwise, Mr. Diaz’s only contact with experts of any kind are an unnamed person from  
27 a company named “Simion” and Dr. Brett Stanley, a chemistry professor at California  
28 State University San Bernardino, about potential perchlorate remediation using “ion  
exchange systems”, but neither will testify. *Id.*, 111:21-113:19, 144:15-24. Dr. Stanley  
also told Mr. Diaz that he accepts U.S. EPA’s level of “24 parts per billion” as a cleanup  
standard for perchlorate, but Mr. Diaz was not interested in learning why. *Id.*, 114:17-

1 expert testimony is unnecessary because these proceedings will simply address a lay-  
2 person "public policy issue". *Id.*, 94:18-25.

3 Were there any doubt about Ms. Newman's intention to turn this proceeding into  
4 her personal political soapbox, she openly admits that CCAEJ does not intend to present  
5 evidence and, instead, it intends to make a "public policy" presentation based on her  
6 "personal" opinions and in support of CCAEJ's "campaign" on perchlorate.

7 Q. Now, am I correct, to the best of your knowledge as you sit  
8 here today, if CCAEJ addresses the issue of the cleanup level  
9 for perchlorate in Rialto, if they do it in the state board  
10 proceeding, you're going to be advocating a zero cleanup  
11 level; right?

12 A. I think the position that we've stated is that we want to clean  
13 up to the best available technology.

14 Q. What is your definition of "best available technology"?

15 A. Whatever is the most current that does the most thorough job.

16 Q. No matter how much it costs; right?

17 A. Correct.

18 Q. So literally, anything, that no matter how expensive it is, is  
19 what you want for the Rialto water -- right? -- for perchlorate?

20 A. Correct.

21 Q. In fact, if they can't get it to zero, what you would like to have  
22 is the polluters just buy water that has no perchlorate in it; isn't  
23 that right?

24 A. That is correct.

25 Q. Not one molecule of perchlorate is going to be good enough  
26 for you; correct?

27 A. From my personal standing, yes.

28 Q. And there's no other contaminant in the Rialto water supply  
that you've looked at except for perchlorate; correct?

A. This particular campaign, we're looking for perchlorate.

\* \* \*

115:5. Mr. Diaz does not intend to contact anyone else to offer any type of expert  
opinion in these proceedings. *Id.*, 172:8-11.



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. So I want to make sure I'm clear. CCAEJ's position today is that the level of perchlorate that should be allowed in drinking water is zero and definitely below a level that can be detected by current technology; correct?

A. Our position is that public policy shall be set on no contaminant in the drinking water, and that's the goal, that you use the best available technology to get as far down to that as possible.

Q. But your best available technology is any effort, no matter how much it costs; right?

A. Correct.

Q. So like I say, isn't it always provide water that has zero or at least nondetect of any contaminant that you're worried about?

A. Perchlorate specifically, yes.

Q. I mean, we went over this this morning. I don't want to plow old ground. We did it before. But the fact is, CCAEJ's position is what the polluters should be doing is giving the residents of Rialto water that has not one molecule of perchlorate in it; correct?

A. Correct.

*Id.*, 73:18-74:21, 84:14-85:11. Indeed, the opening paragraph of Environment California and CCAEJ's joint submission confirms that they will only present "policy arguments".

Consistent with Ms. Newman's "political" plan for these proceedings, CCAEJ has not actually investigated whether Goodrich or any other company is responsible for the perchlorate contamination, notwithstanding the public accusations it has made against Goodrich and other companies. *Id.*, 223:4-11; Diaz Dep., 249:8-250:1, 251:1-20. All that CCAEJ knows about potentially responsible parties are what is found in the "records" from the Regional Board and "the EPA order from 2003". Newman Dep., 43:23-44:5. CCAEJ's review did not include transcripts of any depositions of former Goodrich employees (*id.*, 45:20-24), records of Goodrich's (or any other company's) historic operations (*id.*, 47:3-25, 48:25-49:6), or any investigation of potential polluters beyond those identified by the Regional Board or EPA (*id.*, 50:15-51:7).

Ms. Newman readily concedes that CCAEJ has conducted no investigation into which companies and entities may be responsible for the perchlorate contamination;

1 CCAEJ simply is unconcerned with that issue.

2 Q. Have you ever seen any information involving the State of  
3 California's participation in causing any of the contamination  
here?

4 A. Just in some recent briefs that were submitted.

5 Q. And have you formed an opinion as to whether the state has  
6 any responsibility for Rialto's groundwater?

7 A. No, I haven't.

8 Q. Is that something you're looking into?

9 A. I'm sure it will come out in the hearing.

10 Q. Is that something you're looking into?

11 A. No.

12 Q. Why not?

13 A. We don't investigate polluters.

14 Q. You have done no investigation into the polluters; is that  
right?

15 A. Beyond public record, no.

16 Q. What public record is that, just what the regional board  
17 writes?

18 A. It's any records we went through including the County of San  
Bernardino.

19 Q. But if the regional board or County of San Bernardino didn't  
20 say someone is a polluter, CCAEJ would not investigate  
them; correct?

21 A. Correct.

22 Q. So you're relying on whatever the regional board or the  
23 county tells you in terms of who the polluter is?

24 A. We're relying on public record.

25 Q. But the public record you're relying on is whoever the county  
and the regional board tells you is a polluter?

26 A. No. [¶] I think I stated earlier it's the EPA. There's quite a  
27 record on that.

28

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. But if EPA, the regional board, and the county do not identify an entity as a polluter, CCAEJ is not going to go do their own investigation of that entity; isn't that right?

A. If it is not in public record from any agency, then I'm not going to limit ourselves to those particular agencies. We do not do our own investigation.

Q. But when you say "if it's not in public record," what you mean is if the agency itself in some public statement hasn't identified someone as a polluter, CCAEJ isn't going to do an independent investigation of any other entity; right?

A. As I've said previously, we are not doing our own independent investigation. We would rely on what's in public record which includes what other parties submit.

\* \* \*

Q. Did CCAEJ go out and look at the public records, building permits, air permits, water permits, for the different companies that operated on the 160-acre parcel in an effort to determine who all the polluters were from that parcel?

A. I didn't, but I can't say that one of my staff didn't.

Q. Did anybody do it at your direction?

A. No.

Q. Never told anybody go do that, did you?

A. No.

Q. And you didn't personally do it; right?

A. Correct.

Q. Did Mr. Diaz go do that?

A. He might have.

Q. Do you know if he did?

A. I don't.

Q. Do you know if anybody at CCAEJ did that kind of investigative work to determine who the different polluters were on the 160-acre parcel?

A. I don't.

Q. Let me ask you this: If you didn't do it, why not?

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

- A. I wouldn't do it because it's not my area of responsibility. [¶] Davin [Diaz] may have.
- Q. But you don't know he did?
- A. I don't know.
- Q. Does CCAEJ view one of its responsibilities here to go dig through all of the public records, building permits, air permits, water permits, and make its own independent assessment of who a polluter is on the 160-acre parcel?
- A. No.
- \* \* \*
- Q. Finding the precise source of how the perchlorate got into the groundwater in Rialto is not your area of responsibility; right?
- A. Correct.
- Q. Is that anyone's area of responsibility at CCAEJ?
- A. No.
- Q. Am I right, then, in the state board proceeding -- it's coming up in about a month -- CCAEJ is not planning on putting on a presentation about the evidence that identifies the specific polluters that it believes caused perchlorate contamination in Rialto?
- A. That's not the focus of our efforts.
- \* \* \*
- Q. The sentence here in the press release says, "CCA EJ will now provide evidence on why the polluters should clean up the perchlorate contamination they created."
- A. Correct.
- Q. What evidence does CCAEJ intend to present on why the polluters should do all those things you just said?
- A. I think it goes back to the principle if the polluters created the contamination, they should be responsible for cleaning it all up. It doesn't go to who. [¶] We, quite frankly, don't care who the polluters are, just want to make sure the polluters bear the cost of the cleanup and not the taxpayers.
- Q. Thanks, I think I got it. [¶] So who the polluters are is an area that at least at this point you don't intend to put on evidence as to who they are; right?

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

A. No. [¶] I mean, I don't know what evidence that's not already in the public record.

Q. You're going to make policy arguments about why someone who's already been identified by the regional board or EPA as a polluter, why they should pay; right?

A. Our focus is on public policy establishing basis for the polluters to pay for the cleanup of what they created.

*Id.*, 120:6-122:7, 124:2-125:10, 126:13-25, 200:20-201:22.

Likewise, CCAEJ does not intend to present any evidence that the levels of perchlorate in Rialto or Colton have caused any adverse health effect, despite its numerous publications and quotes on the subject. Ms. Newman admits knowing no evidence of any increase in thyroid disease or any other injury caused by perchlorate in the drinking water. *Id.*, 160:12-161:9, 179:20-180:6. All Ms. Newman points to, again, is her political view of a "threat" to human health and that, on that basis alone, there should be cleanup to a "zero" level of perchlorate.

Q. And there's never been one study done that one person even got sick in Rialto for consuming perchlorate-contaminated water; isn't that right?

A. I think there's sufficient evidence to show that perchlorate poses a threat to public health, and as such, should be taken out of drinking water.

Q. That basis alone, at whatever the cost, every molecule of perchlorate should be taken out of the drinking water in Rialto; right?

A. We believe corporations don't have a right to contaminate a public common water resource, and that if you create the problem, whoever that polluter is, you need to take it out of that water.

Q. And therefore, every molecule of perchlorate contamination needs to be taken out of the water in the city of Rialto; right?

A. If at all technically able to do so.

Q. And if it's not technically able to do so, at whatever expense, water without a molecule of perchlorate in it should be provided to all residents of Colton and Rialto; isn't that right, Ms. Newman?

A. That's right.

1 *Id.*, 190:15-191:11.

2 **C. This Testimony Demonstrates That Environment California and**  
3 **CCA EJ Have No Relevant Evidence To Add To These Proceedings**

4 Despite requesting party status, this testimony reveals that Environment California  
5 and CCA EJ have no “relevant testimony and evidence” to offer on any of the four  
6 relevant subjects of these proceedings – “[1] legal responsibility for site investigation and  
7 remediation; [2] the technical evidence justifying site investigation and cleanup; [3] the  
8 feasibility and propriety of cleanup and remediation requirements; and [4] appropriate  
9 cleanup standards for protection of public health and beneficial uses of waters of the  
10 state.” Second Amended Notice of Public Hearing.

11 Whatever other subject these “parties” intend to address will amount to nothing  
12 more than a substantial waste of time, resources, and energy of those accused of  
13 responsibility, the other proper parties in this proceeding, and the State Board.

14 **XVIII. A REVIEW OF THE REGIONAL BOARD’S ACTIONS REVEALS STARTLING**  
15 **MOTIVATIONS THAT SHOULD BE ADDRESSED BY THE STATE BOARD**

16 From the beginning of their investigation, certain staff members of the Regional  
17 Board have a clear motive: identify evidence, no matter how implausible, that supports  
18 claims against Goodrich (and a few others) and ignore facts that point to the real culprits  
19 of the perchlorate contamination in the Rialto-Colton area. When it initiates an  
20 investigation, the Regional Board must proceed cautiously, diligently, and fairly against  
21 all potential sources of the contamination. In this matter, however, these staff members  
22 have failed to follow the Regional Board’s mandate. Each staff member of the Regional  
23 Board who has worked on or supervised this investigation, Gerald Thibeault, Kurt  
24 Berchtold, Robert Holub, Ann Sturdivant, and Kamron Saremi, has misrepresented the  
25 facts and ignored critical evidence. The frequency of these lapses suggests more than  
26 mere coincidence, ignorance, or harmless error but rather that these staff members of  
27 the Regional Board, from the beginning of its investigation, deliberately intended to craft  
28 a case against Goodrich (and just a few others) and to deflect inquiry into their own

1 culpability. As a result of these apparent biases, the Regional Board staff who will testify  
2 in this State Board proceeding will not provide complete and accurate testimony. Their  
3 testimony, largely based on hearsay and influenced by ulterior motives, is not credible.

4 **A. Gerald Thibeault and Kurt Berchtold**

5 The proper mandate for the Regional Board in this administrative proceeding is  
6 not victory against Goodrich, but to establish the actual facts and reach a just resolution,  
7 even if those facts show that Goodrich is not liable for the perchlorate contamination.  
8 Under the leadership of Gerald Thibeault and Kurt Berchtold, the Board's Executive  
9 Officer and the Assistant Executive Officer, the Regional Board staff pursued this action  
10 against Goodrich despite fact and scientific evidence that exonerates Goodrich. And the  
11 Regional Board's staff limited its investigation into one of the most significant source of  
12 perchlorate contamination in the entire Basin because Thibeault, Berchtold, Holub, and  
13 other members of the staff of the Regional Board were themselves directly responsible  
14 for regulating fireworks companies that handled and dumped perchlorate on the 160-  
15 acre site. Consequently, their efforts to deliberately overlook key evidence has  
16 undermined the credibility of the staff's investigation and tainted the Advocacy Team's  
17 ability to mete out justice in a dispassionate manner.

18 As a public official leading a governmental agency with significant authority,  
19 Thibeault admitted that the Regional Board's staff has a responsibility to be fair.  
20 According to Thibeault, the Regional Board's staff must be unbiased, and it must not  
21 have a stake in the outcome. Thibeault Dep., 256:16-257:13. In fact, if the Regional  
22 Board's staff learns of exculpatory evidence that helps the defendant, Thibeault believes  
23 that the staff has an obligation to disclose it. *Id.*, 258:5-259:5. Of course, Thibeault  
24 stated that he believes that when exculpatory evidence undermines a particular  
25 allegation against the defendant, the Regional Board's staff should not make that  
26 allegation. *Id.*, 490:15-491:2.

27 Yet, despite his rhetoric, Thibeault deliberately avoided determining whether  
28 exculpatory evidence existed against Goodrich. Thibeault never asked his staff if



1 exculpatory evidence undermined the allegations contained in the CAO. *Id.*, 491:9-12.  
2 And to the extent he relied on Kurt Berchtold to challenge the staff's investigative  
3 findings, Thibeault admitted that he never asked him whether exculpatory evidence  
4 existed, and he was not aware whether Berchtold questioned the staff about the  
5 possibility that sources other than Goodrich caused the perchlorate contamination in the  
6 Rialto-Colton basin. *Id.*, 491:13-492:12.

7 Throughout this investigation, Thibeault was more concerned about his own self-  
8 interest than the public's interest. On June 7, 2002, Thibeault and his staff met with  
9 then-State Senator Nell Soto and Barry Groveman, counsel to various water purveyors  
10 in the Inland Empire, about the Regional Board's investigation. Thibeault admitted that  
11 Senator Soto and Mr. Groveman were very aggressive at the meeting. *Id.*, 270:21-  
12 271:5. Kamron Saremi who also attended the meeting, testified that Senator Soto  
13 threatened to have the Governor fire Thibeault because of his, and his staff's, failure to  
14 move more quickly to identify the responsible parties for perchlorate contamination.  
15 Saremi Dep. 110:25-113:9. See Ex. 20074, p. 1. Obviously affected by even the  
16 prospect of meeting with Senator Soto, Thibeault had the day before signed the  
17 Regional Board's CAO against Goodrich and Kwikset Corporation.

18 Even then, Thibeault had no factual basis upon which to issue the CAO against  
19 Goodrich. In an email to the Members of the Regional Board written four days after the  
20 meeting with Senator Soto, Thibeault misrepresented critical facts. The email claimed  
21 that fireworks companies that operated on the same land that Goodrich occupied "were  
22 just fireworks assembly companies, and that no actualy [sic] manufacturing took place  
23 where perchlorate-containing liquids would be have been present." Ex. 20074, p. 2.  
24 This statement is simply false. Thibeault testified at deposition that his staff knew a  
25 month earlier about the McLaughlin Pit where fireworks companies (which had been  
26 engaged in one of the largest fireworks manufacturing empires on the West Coast for  
27 more than 20 years) dumped thousands of pounds pyrotechnic waste that had been  
28 generated from the companies' manufacturing process. Thibeault Dep., 99:6-100:21.



1 In addition to providing false information to state officials, Thibeault also  
2 misrepresented the Regional Board's investigation to Senator Soto. In a letter drafted  
3 on the same day as the June 7, 2002 meeting, Thibeault wrote to Senator Soto that the  
4 Regional Board was unaware that other companies handled or used perchlorate. *Id.*,  
5 181:13-20. Given that the Regional Board staff knew from its own files that pyrotechnic  
6 manufacturing waste containing perchlorate had been dumped in the McLaughlin Pit  
7 since 1971, Thibeault's statement to Soto was at best reckless. *Id.*, 181:21-24.  
8 Thibeault included inaccurate information in the letter by claiming that pyrotechnic  
9 companies that operated on the site were not involved in the "manufacturing of fireworks,  
10 which is the type of activity that likely would have resulted in a release of perchlorate."  
11 This statement is controverted by the Regional Board's own files – files that neither  
12 Thibeault nor his staff apparently had bothered to review when the letter was written. *Id.*,  
13 184:2-185:2.

14 Thibeault provided these false statements to the Regional Board Members and to  
15 an elected official out of a concern for his job. Thibeault knew from his meeting with  
16 Senator Soto that the Regional Board had to initiate a proceeding against somebody, in  
17 this case Goodrich (and a few others), right away – even if that meant ignoring the real  
18 sources of contamination – in order to spare his own career. In his email to the Regional  
19 Board Members, Thibeault stated that further investigation of the real sources would  
20 "muddy the waters and possibly give Goodrich or Kwikset a reason to delay...." Ex.  
21 20074, p. 2. Because of Senator Soto's threats, Thibeault deliberately ignored any  
22 further investigation into the true source of perchlorate contamination in the Basin, losing  
23 another opportunity to discovery the companies responsible for the McLaughlin Pit, the  
24 only confirmed source of perchlorate at the 160-Acre Parcel.

25 Not only was Thibeault most interested in maintaining his job, he and his chief  
26 assistant, Kurt Berchtold, focused the Regional Board staff's investigation on Goodrich  
27 and Kwikset out of a concern that their and the staff's negligent oversight of the  
28 McLaughlin Pit would be revealed. The Regional Board staff, including Berchtold and

1 Thibeault, was aware that Pyrotechnics dumped explosive powder that it had  
2 manufactured in a swimming pool that had a 12,000 gallon capacity. Berchtold Dep.,  
3 106:9-14. In fact, Berchtold personally witnessed fireworks companies using that pool  
4 as a disposal pit for fireworks manufacturing waste and had written an on-site inspection  
5 report about it in 1983. *Id.*, 176:3- 179:17. According to the Regional Board's own  
6 reports, Pyrotechnics tried to keep the pyrotechnic waste covered with water up to one  
7 inch from the top of the pool. *Id.*, 106:22-107:5. These types of hazardous wastes  
8 compromised the swimming pool's plastic membrane and consequently, the liquid in the  
9 pool seeped through the swimming pool's porous gunite construction and into the  
10 surrounding soil below. See English Dec., ¶¶ 49-53.

11 Pyrotechnics' practice to have water so close to the top of the McLaughlin Pit  
12 caused perchlorate-contaminated water to spill over the top of the pool after any  
13 significant rainfall. Berchtold himself admitted that he personally witnessed an overflow  
14 of perchlorate-contaminated water from the McLaughlin Pit, and documented it in a  
15 Regional Board report. Berchtold Dep., 179:4-17. Despite the seriousness of this  
16 offense, the Regional Board staff did nothing about the violation. *Id.*, 180:22-23.

17 Like the overflow violation that the Regional Board ignored, it also overlooked and  
18 failed to investigate other critical and harmful errors in managing the McLaughlin Pit. For  
19 instance,

- 20 • According to the December 1973 letter from the Regional  
21 Board to Pyrotechnics, quarterly monitoring reports were due  
22 from Pyrotechnics in 1973 but were not received. *Id.*, 113:20-  
23 115:25. Berchtold is not aware if the Regional Board  
24 investigated whether Pyrotechnics failed to submit quarterly  
25 monitoring reports between 1971 and 1987; although the  
26 Water Board's files demonstrate repeated reporting  
27 violations. *Id.*, 116:2-9. Berchtold never investigated why the  
28 Regional Board staff refrained from citing Pyrotechnics for  
these violations. *Id.*, 118:23-119:3.
- The Regional Board staff knew that 3,000 gallons of industrial  
wastes were being discharged per day into a pool that had a  
capacity to only hold a total of 12,000 gallons. *Id.*, 142:25-  
144:14. Berchtold offered no explanation whether he or other  
Regional Board staff inquired about where that excess water  
went. *Id.*, 147:2-7.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

- Despite evidence that suggests Pyrotronics illegally dumped their hazardous waste, Berchtold does not know whether he or the Regional Board investigated whether Pyrotronics complied with its WDR, requiring that waste be hauled by a certified waste hauler. *Id.*, 163:18-164:5.
- When Pyrotronics could not dispose of the hazardous and explosive sludge that remained after the pool closed, the Regional Board staff knew that sludge remained in the pool filled with water. *Id.*, 213:11-21. And, of course, the Regional Board staff never brought an enforcement action against Pyrotronics. *Id.*, 216:11-16; see also *Id.*, 216:25-217:13.

Berchtold and Thibeault knew, or should have known, about the significant problems with the McLaughlin Pit, because either the Regional Board's own files pointed to the McLaughlin Pit as the source of contamination in the Basin and they, Berchtold and Thibeault, along with other senior staff, were personally involved in its oversight during its 16 years of operations. For example:

- According to the December 1973 letter from John Zasadzinski to Pyrotronics, quarterly monitoring reports were due from Pyrotronics on July 1973, but were not received. *Id.*, 113:20-115:25. This constituted a clear violation of the requirements imposed by the Regional Board in connection with Pyrotronics' waste disposal operations.
- An October 27, 1976 letter from Mr. Silva to Pyrotronics notes that monitoring reports were due in July and October, and a report had not been received since April 9, 1976. *Id.*, 116:21-117:17. This constitutes another violation of the Regional Board's requirements.
- A September 13, 1978 memo from former Regional Board member, Steve Herrera, indicates that Pyrotronics is in violation of their waste discharge requirements. *Id.*, 158:4-159:17, 160:8-11. Mr. Berchtold does not recall asking anyone to follow up on this violation. *Id.*, 160:15-17.
- According to a May 6, 1980 inspection report, Pyrotronics failed to submit three quarterly monitoring reports by that time. *Id.*, 164:10-165:4, 165:24-166:12. The report also notes that the freeboard of the swimming pool is 9 inches, which would have been a violation of the Waste Discharge Requirements. *Id.*, 167:23-168: 14. Mr. Berchtold does not know of any penalty that was assessed against Pyrotronics for that violation. *Id.*, 168:15-169:1.
- A November 1981 report illustrates additional reporting violations by Pyrotronics, including a failure to submit the July

1 and October reports due to the Regional Board. *Id.*, 170:24-  
2 171:25.

- 3 • A report by Mr. Berchtold of a March 3, 1983 inspection of the  
4 Pyrotronics Manufacturing facility reports that the pool had no  
5 freeboard. *Id.* 176:3-177:14, 179:4-13. The report also  
6 states that rainfall had caused an overflow, which Mr.  
7 Berchtold estimated to be about 5 gallons, after three days of  
8 intense precipitation. *Id.* 179:4-17. Although this was a  
9 serious violation, Mr. Berchtold does not know what, if  
10 anything, was done by the Regional Board to remedy the  
11 violation. *Id.* 180:9-23. Mr. Berchtold's recommendation, as  
12 noted on the report, was to send a letter confirming  
13 inspection. *Id.* 181:3-180:23. And when asked at his  
14 deposition, Berchtold, did not recall why he failed to take any  
15 action stop this from occurring. *Id.* 183:4-6.

16 Despite the evidence pointing to the real culprits, neither Thibeault nor Berchtold  
17 ever once directed the Regional Board's investigative team to take action to stop the  
18 repeated violations of the WDRs; violations that resulted in gross contamination of the  
19 groundwater. Thibeault's and Berchtold's silence speaks volumes about their concern  
20 over the Regional Board staff's complicity in the perchlorate contamination that resulted  
21 from the McLaughlin Pit.

22 **B. Robert Holub**

23 The April 6, 2007 submission of the Advocacy Team identifies six topics on which  
24 Mr. Holub intends to testify:

- 25 • "Chilean nitrate does not appear to be a source of perchlorate  
26 at the 160-acre site";  
27 • The perchlorate plume emanating from the property adjacent  
28 to the Mid-Valley Landfill is distinct from the plume emanating  
from the Property";  
• "The general characteristics of perchlorate";  
• "The Regional Board's regulatory history regarding the  
'McLaughlin Pit' ";  
• "Data and findings from investigations of perchlorate and  
TCE discharges at and from the Property"; and  
• "Impacts of perchlorate and TCE on the municipal water  
supply".

Mr. Holub is not an expert in any of these subjects. Likewise, Mr. Holub lacks

1 personal knowledge of all but one of these issues. The notable exception is the history  
2 of the Regional Board's "regulation" of the McLaughlin Pit. As discussed below and  
3 elsewhere in this Brief, the Regional Board has substantially contributed to the  
4 perchlorate contamination in Rialto due to its violations of California and federal law, and  
5 general mismanagement and disregard for the McLaughlin Pit as a source of perchlorate  
6 contamination.

7 Each of the topics on which Mr. Holub is anticipated to testify is addressed below.

8 **1. Chilean Nitrate as a Source of Perchlorate Contamination**

9 Mr. Holub has no percipient knowledge of the historic use of Chilean fertilizer in  
10 Rialto. Holub Dep., 809:21-810:4. Mr. Holub is not an expert on this subject either.  
11 Without any reservation, Mr. Holub admits he is not "an expert" on "Chilean nitrate  
12 fertilizers" in general, or the issue of whether Chilean nitrate is a source of perchlorate on  
13 the 160-acre site. *Id.* 809:16-20; 816:16-20.

14 Mr. Holub's concession is appropriate. His deposition testimony confirms his lack  
15 of expertise.

- 16 • Mr. Holub is not an expert in agriculture. *Id.* 810:22-23.
- 17 • He is not an expert in the distribution of fertilizers in  
18 agriculture. *Id.*, 810:24-811:1.
- 19 • He does not know whether any citrus groves or other  
20 agriculture existed above the 160-acre parcel that used  
21 Chilean nitrate with perchlorate going back to the 1920s. *Id.*,  
22 810:10-14.
- 23 • He has not talked with anyone who lived in Rialto going back  
24 to the 1920s to try to determine where Chilean fertilizers were  
25 used. *Id.* 811:2-6.
- 26 • He has not talked with any farmers in Rialto about whether  
27 they have any information about where Chilean fertilizers  
28 were used. *Id.* 811:7-10.
- He has not talked with any farmers in Rialto about the  
location of farms in the Rialto-Colton basin. *Id.* 811:11-13.
- He does not know whether Chilean fertilizer was used with  
any crops other than citrus in the Rialto area, and he has  
done no investigation of that subject. *Id.* 811:20-812:5.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

- He cannot identify any specific report or document that identifies the concentrations of perchlorate in Chilean nitrate or that supports any conclusion on this subject. *Id.*, 812:12-813:21, 816:6-817:4.
- He does not know how much Chilean nitrate was brought into California generally, or Rialto specifically, since the 1920s. *Id.* 817:5-13.
- He does not know the amount of acreage in the Rialto-Colton basin over which Chilean fertilizer was used. *Id.* 822:22-823:5.
- He does not know about historic agricultural wells in Rialto, including how many there were, how they were constructed, or how they were closed, although he admits such wells can be a source of groundwater contamination. *Id.* 823:15-824:9.
- He has not researched the uses of Chilean fertilizer in agricultural areas outside of the Inland Empire, including uses that led to perchlorate contamination above a hundred parts per billion. For example, he has not reviewed studies by the Environmental Protection Agency at the Apache Powder Superfund site that found measured groundwater contamination as high as 670 parts per billion as a result of historic use of Chilean fertilizer. *Id.* 824:23-828:20.
- His knowledge of whether citrus groves existed at or hydrogeologically upgradient from the property is limited to his review of two photographs, one from 1930 and one from 1938. *Id.* 828:21-830:1, 834:10-16. And only the 1930 photograph was included in the Advocacy Team's record submission on March 27, 2007. *Id.* 830:2-12.
- He does not know when the use of Chilean fertilizer ceased in Rialto, or if it is still being used as of today. *Id.* 938:23-939:4

In summary, Mr. Holub cannot address the extent to which Chilean fertilizer is a source of the perchlorate contamination in Rialto. This includes the Advocacy Team's apparent contention that this source is only responsible for only "low concentrations" of contamination. Mr. Holub lacks the expertise to support that or any other conclusion on this subject.

**2. The Physical Distinction of the Perchlorate Plume Emanating from the Property Adjacent to the Mid-Valley Landfill and from the 160-acre site**

This topic requires little attention. After detailed examination, Mr. Holub conceded that, contrary to the statement in the Advocacy Team's April 6th submission, he would



1 not offer a scientifically supportable opinion that there are two "distinct" perchlorate  
2 plumes. Rather, he is only going to report on well data.

3 Q. You are not going to offer a scientifically supportable  
4 conclusion that there is a separate plume coming off the Mid-  
5 Valley landfill distinct from the Mid-Valley landfill; is that  
6 correct?

7 MS. NOVAK: Calls for a legal conclusion. Calls for expert opinion.

8 A: If we are -- if we both have the same definition of  
9 "scientifically supportable," I believe the answer is yes. I'm  
10 going to use the data from the existing wells out there.

11 Q. You're just going to report on well data; right?

12 A. Yes.

13 \* \* \*

14 Q. You're not going to offer a scientific opinion in these  
15 proceedings before the state board that there are two  
16 independent distinct plumes, one from the 160-acre parcel  
17 and one from the landfill; correct, sir?

18 MS. NOVAK: Vague and ambiguous.

19 A: Not a scientific analysis, no.

20 Q. Not one that would be supportable in like a court of law;  
21 right?

22 MS. NOVAK: Calls for a legal conclusion.

23 A: I'm not sure what would be supportable, but I don't believe  
24 so.

25 MR. DINTZER: Yeah.

26 Q. I mean, you understand in a court of law, it would have to be  
27 a scientifically based opinion. You understand that. I'll tell  
28 you that's what it would have to be; okay? [¶] So assuming  
it had to be that, you're not offering that; right?

A. Correct.

*Id.*, 1052:3-16, 1062:1-20; see generally *Id.*, 1024:20-1062:20.

### 3. The General Characteristics of Perchlorate

Mr. Holub's deposition testimony reveals that he has no expert knowledge of perchlorate. For example, he does not know the most basic aspects of perchlorate

1 chemistry or its fate and transport in any environment.

- 2 • Mr. Holub does not know how perchlorate is chemically  
3 formed. *Id.* 835:22-836:2.
- 4 • He does not know how perchlorate salts are manufactured.  
5 *Id.* 836:23-837:4.
- 6 • He does not know the solubility rate of perchlorate. *Id.* 837:6-  
7 7.
- 8 • He does not know the absorption rate of perchlorate in soil or  
9 silty materials such as the conditions found on the 160-acre  
10 parcel. *Id.* 837:8-10, 943:16-23.
- 11 • He is not “sure” that perchlorate is a negatively charged ion (it  
12 is). *Id.* 837:16-21.
- 13 • He does not know the degradation rate of perchlorate in  
14 groundwater in anaerobic or aerobic environments, or how it  
15 compares with volatile organic substances such as  
16 trichloroethylene. *Id.* 838:1-11.

17 Mr. Holub is simply in no position to offer expert testimony about these or any  
18 related subjects.

#### 19 4. The Regional Board’s Regulatory History regarding the 20 McLaughlin Pit

21 In contrast to the other designated subjects, Mr. Holub knows about the so-called  
22 “regulatory history” of the McLaughlin Pit. In 1987, he was a senior engineer and the  
23 “head of groundwater investigations” at the Regional Board, and had lead responsibility  
24 for application of the “Subchapter 15” regulations at the time the Regional Board was  
25 dealing with the McLaughlin Pit. *Id.*, 1033:17-1035:25.

26 As of his deposition on April 9, 2007, Mr. Holub had not yet determined what  
27 information he will present on this subject (despite the fact that the Regional Board’s  
28 evidentiary submission was due on March 27, almost two weeks earlier). *Id.* 838:13-  
839:7. Mr. Holub had not even begun putting his presentation together and did not know  
what will be included. *Id.* 840:7-15. For example, Mr. Holub had not yet decided  
whether to present evidence of the following facts:

- The waste discharge requirements for Pyrotronics were repeatedly violated. *Id.* 839:8-15.



- 1 • Mr. Berchtold, who was at the Pyrotronics site in 1983, wrote  
2 a report noting a serious overflow violation. *Id.* 839:16-22.
- 3 • Records filed by Pyrotronics with the City of Rialto document  
4 that it was using over 25,000 pounds of potassium  
5 perchlorate on a monthly basis. *Id.* 839:23-840:6.
- 6 • The closure of the McLaughlin Pit violated numerous  
7 Subchapter 15 regulatory requirements, without any  
8 enforcement action by the Regional Board. *Id.* 897:15-  
9 898:15.

10 Even so, certain conclusions are evident from his deposition testimony: (1) Mr.  
11 Holub knows that the Regional Board staff and the State of California's treatment of the  
12 McLaughlin Pit violated California and federal law; (2) he knows those actions  
13 contributed to the perchlorate contamination in Rialto; and (3) in spite of those facts, he  
14 knows there are no plans to fully investigate this contamination source or the fault of the  
15 individual members of Regional Board staff, including members of the Advocacy Team  
16 who nevertheless are serving as prosecutors in this proceeding.

17 Mr. Holub admits he does not know the extent to which the McLaughlin Pit and  
18 the misconduct of the Regional Board is exculpatory evidence of Goodrich and the other  
19 parties' alleged liability.

20 Q. Mr. Holub, isn't it true that the regional board's failure to  
21 require compliance with the WDRs, the monitoring program  
22 under the Subchapter 15 regulations, and a proper closure is  
23 in part responsible for the leakage of material out of the  
24 McLaughlin Pit into the groundwater below?

25 A. I don't know what was left in the pond when it was closed. It  
26 may be, may not be. I don't know.

27 \* \* \*

28 Q. So since you don't know, as you've testified just a moment  
ago, what the regional board's responsibility is for leakage of  
the McLaughlin Pit into the groundwater below -- in other  
words, had it enforced the regulations that were in place --  
how come you're not raising that with the State Board to  
that's exculpatory of my client and Black & Decker?

MS. NOVAK: Same objections.

THE WITNESS: I don't know the relevance in determining  
whether the three parties named in the draft amended order  
discharged waste that impacts the state.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. You don't know one way or another. That's what you testified to; right? You don't know one way or another?

A. I guess so, yes.

Q. In other words, you don't know; correct?

A. Yes.

*Id.*, 899:22-900:4, 901:5-24.

Mr. Holub deposition testimony also reveals his and the Regional Board's failure to fully investigate the McLaughlin Pit, both in the past and still to this day.

- Mr. Holub does not know whether Pyrotronics discharged "hazardous waste" into the McLaughlin Pit. For example, he does not know whether Pyrotronics' "K waste" qualified as "hazardous" under EPA's hazardous waste classification regulations because he is not at all familiar with those regulations. *Id.*, 840:17-847:18. He also does not know whether it was hazardous waste under other state regulations, including Section 66300 of Title 22. *Id.*, 848:12-850:5.
- Despite having information from Pyrotronics identifying material in the McLaughlin Pit as hazardous wastes going back to before 1984, the Regional Board did not classify the facility as a Class I impoundment. *Id.*, 853:3-856:2.
- Mr. Holub did not recall the Regional Board contacting the Department of Toxic Substances Control (or a predecessor entity) to inform it that Pyrotronics operated a hazardous waste pit, even as part of closing the facility and he had no explanation for failing to involve DTSC. *Id.*, 856:3-857:11, 889:3-891:2.
- In 1986, Mr. Holub was aware of regulations that required ground and surface water monitoring as part of the closure requirements for surface impoundments such as the McLaughlin Pit, which would have included monitoring for perchlorate. He even cited these requirements in letters to Pyrotronics and participated in "the early stages of getting the work plan submitted" for the closure. But there was never compliance and the Regional Board took no enforcement action, contrary to its legal responsibility:

Q. Who was the agency in [the] state of California who was responsible for making sure they shall do what they're required to do here; that is, undertake the monitoring program?

A. The regional board has that jurisdiction.

\* \* \*

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. So now let's look at the verification monitoring program. That's section 2557. [¶] Now, if the Regional Board had classified the facility as a Class I facility, right? In other words, because it had hazardous waste in it, and required the monitoring program, which then turned up some of the constituents that were in the pond, then Apollo would have been required to sample for the constituents identified in appendix three. [¶] You'd agree with me, right?

MS. NOVAK: Incomplete hypothetical. Lacks foundation. Calls for speculation. May also calls for a legal conclusion.

MR. ELLIOTT: Join.

A: If the regional board classified it, I don't know necessarily know it would be classified as a Class I unit. But if it was, then what you said would be correct.

Q. And if that were the case, then they would have been required to sample for potassium perchlorate regardless of what they told you; correct, sir?

MS. NOVAK: Same objections.

MR. ELLIOTT: Join.

A: I believe so.

*Id.*, 870:8-12, 872:24-873:23, 857:13-874:6.

- He has not investigated how much of the perchlorate contamination in Rialto would have been prevented if the Regional Board had enforced these monitoring requirements. *Id.*, 874:21-876:8.
- He does not know how much of the perchlorate contamination in Rialto is from the McLaughlin Pit, but he does "believe" some perchlorate leached into the Rialto groundwater. *Id.*, 876:13-877:1, 883:16-21. He later conceded it is a "confirmed source" of contamination at the 160-acre parcel. *Id.*, 1008:1-6.)
- He does not know whether the discharges of large amounts of water through the McLaughlin Pit caused a "mounding effect" on the groundwater beneath the area, or whether such an effect impacted cross-gradient wells. *Id.*, 987:25-988:18.
- Despite these concerns and unanswered questions, he has not considered doing any additional investigation to determine the magnitude of impact of discharges from the McLaughlin Pit on the 160-acre parcel and downgradient from the site. *Id.*, 877:9-878:3.
- The closure of the McLaughlin Pit violated several other mandatory legal requirements, without any enforcement by

1 the Regional Board even though, again, this fell under its  
2 legal responsibility. Mr. Holub either confirmed these facts or  
3 did not know whether compliance occurred. *Id.*, 884:14-  
4 888:25, 891:5-895:5.

5 • Since becoming aware of these violations, the Regional  
6 Board has taken no action to require the proper closure of the  
7 McLaughlin Pit, despite not knowing whether it remains a  
8 source of perchlorate contamination to the ground surface  
9 below it. *Id.*, 895:12-897:14.

10 Mr. Holub's testimony and other evidence of the liability of the Regional Board,  
11 and the personal involvement of Mr. Holub and other members of the Advocacy Team,  
12 calls into significant question their motives and prosecutorial conduct in these  
13 proceedings. The integrity of these proceedings requires a full exploration of these  
14 issues, especially if Mr. Holub and the rest of the Advocacy Team elect not to discuss  
15 them voluntarily, before any conclusion can be made about Goodrich or any other party's  
16 alleged responsibility for any contamination.

17 **5. Data and Findings regarding TCE and Perchlorate discharges  
18 at and from the Property, and Impacts of Perchlorate and TCE  
19 on the Municipal Water Supply**

20 Mr. Holub testified that all he intends to present on these subjects are data,  
21 including principally the analytical results from soil and groundwater sampling results, but  
22 he does not intend to offer a scientific conclusion or opinion as to the sources of any of  
23 the contamination (except for the McLaughlin Pit because that is a confirmed source) or  
24 the migration of any contamination. *Id.*, 989:17-1008:23, 1009:25-1024:19. This further  
25 supports the conclusion that the available evidence does not establish that Goodrich is  
26 responsible for any of the perchlorate or TCE contamination.

27 Mr. Holub's testimony will not include any evidence concerning "waste discharged  
28 by Goodrich", or the other parties named in the Order. Mr. Holub is not addressing those  
issues, despite previous representations to the contrary. *Id.* 803:16-804:1, 804:2-17,  
809:1-10. This change in course is appropriate because, in fact, Mr. Holub lacks the  
necessary expertise and knowledge to address these subjects.

For example, Mr. Holub lacks expertise in the fate and transport issues necessary

1 to identify sources of the contamination. He is not an expert in the vadose zone or  
2 vadose zone modeling, and neither is anyone else on the Advocacy Team. *Id.*, 939:6-  
3 22. He does not know the absorption rate of perchlorate or TCE<sup>164</sup> in the silty materials  
4 found on the 160-acre parcel. *Id.*, 943:16-944:2. And he does not know the  
5 transmissivity rate, permeability rate, or porosity for the soils on the 160-acre parcel. *Id.*,  
6 944:3-11.

7 Mr. Holub also lacks knowledge of Goodrich's operations.<sup>165</sup> He does not know  
8 how much perchlorate reached the ground surface from Goodrich's operations; he  
9 cannot even provide an estimate to an order of magnitude in pounds. *Id.*, 945:8-19. He  
10 also does not know how much waste propellant from Goodrich's operations was burned  
11 in the burn pit or how much would remain after the burn (and he knows of no evidence of  
12 any other potential source of perchlorate from Goodrich's operations). *Id.*, 948:4-22.<sup>166</sup>  
13 Mr. Holub concedes that such information is necessary to make any assessment of how  
14 much perchlorate came from Goodrich's operations (i.e., do determine a "source term"),  
15 yet the Regional Board has never made those calculations. *Id.*, 949:8-950:13.

16 Mr. Holub's lack of knowledge also extends to other potential sources of the  
17 contamination. In addition to the failures related to the McLaughlin Pit discussed  
18 previously, Mr. Holub admits that the Regional Board has not investigated, and  
19 apparently does not plan to investigate, several other potential sources.

- 20 • Mr. Holub has not done any investigation into how much  
21 perchlorate found in the Rialto-Colton basin was formed  
22 spontaneously, despite acknowledging that this occurs. (*Id.*,  
23 836:11-15.)

24 <sup>164</sup> Mr. Holub is not an expert in TCE at all. Holub Dep., 909:23-25.

25 <sup>165</sup> Mr. Holub does not know about the other defendants' operations either. See, e.g.,  
26 Holub Dep., 1072:13-18.

27 <sup>166</sup> Mr. Holub does know that the one burn pit identified at the Goodrich facility was  
28 covered with concrete and a building in 1987, which means that the amount of water  
percolating and potentially carrying any remnant waste into the groundwater is "basically  
zero" for vertical migration and the conditions are not conducive to significant horizontal  
migration. Holub Dep., 957:8-960:11.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

• He is aware of but has not investigated the Rialto Ammunition Backup Storage Point (the "RASP") as a potential source of contamination. *Id.*, 902:14-24, 987:11-15. He knows that the RASP area covers the 160-acre parcel (and more areas). *Id.*, 911:2-7. But his limited knowledge does not include, for example, what kind of munitions were used, how much perchlorate-containing materials passed through the RASP area, the operation of a sludge pond at the facility, what was done with munitions damaged on route to the RASP (including how much was burned throughout the RASP area, deposited in the sludge bed, or discharged to the ground surface in ditches), or how much TCE was brought to the RASP area (e.g., from nearby Camp Anza) for various uses including repairs and degreasing. *Id.*, 903:5-909:10, 911:9-914:14.

• He is aware of government facilities that have discharged TCE and contaminated groundwater (e.g., Norton Air Force base), but has not fully investigated such potential sources in Rialto. *Id.*, 914:15-917:16. Mr. Holub conceded, "[w]e have not undertaken any additional investigation other than this pending inadequate response [from the Department of Defense] that we're trying to get more information on." *Id.*, 917:23-918:4. In fact, no action has been taken since the Regional Board received the "inadequate response" at least "a couple of years" ago. *Id.*, 917:6-16. As a result, he cannot determine whether any positive sample for TCE at the 160-acre parcel, either in soil or water, was the result of the United States government's activities at the RASP. *Id.*, 920:14-921:5.

• He knows of many other companies that operated in the area of the 160-acre parcel that used unidentified hazardous materials, but have not been fully investigated for their potential use or disposal of TCE or perchlorate, or their potential contribution to the groundwater contamination. *Id.*, 922:2-930:24. For example, there has been no investigation into Pyrotronics' use and disposal of TCE or perchlorate, or how those activities contributed to the contamination. *Id.*, 963:3-968:1, 971:11-983:3, 985:7-986:12, 987:17-20.

For all of these reasons, Mr. Holub admits having no basis to conclude that Goodrich, the Emhart Entities, or Pyro Spectaculars is a source of any of the perchlorate or TCE contamination.

Q. With respect to all of these wells that have shown at any time concentrations of trichloroethylene, you cannot tell me on any particular sample that's been taken what the source is of that trichloroethylene from the various operations over time that we've talked about that overlay the basin; is that correct?

A. Correct.



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. And the same thing would be true with respect to perchlorate; isn't that right, sir?

A. There's no direct evidence, yes, I'm sorry.

\* \* \*

Q. You can't tell me with respect to any well that's located in the Rialto-Colton basin anywhere on this map that has shown concentrations of perchlorate, positive concentrations, whether that perchlorate comes from any particular operation; is that correct?

A. Yes.

\* \* \*

Q. With respect to PW-5, okay, the well right in the middle of the basin; right?

A. Yes.

Q. You can't tell me whether PW-5, if it has perchlorate in it at any particular time, whether that perchlorate came from Goodrich or some other operation; correct?

A. Correct.

Q. And the same thing is true with respect to Black and Decker or its alleged predecessor West Coast Loading, you can't tell me whether or not perchlorate that's in PW-5 came from that operation; isn't that right?

A. Correct.

Q. And the same true is Pyro Spectaculars, you cannot tell me whether or not perchlorate that's found in PW-5 at any time was as a result of Pyro Spectaculars' operations; is that right?

A. Correct.

Q. And if I was to ask you that question with respect to each of those operations for each of the wells located on this Exhibit 4256, you would agree you cannot tell me, could you?

A. I could not link the perchlorate in PW-5 to any specific operations.

Q. No. [¶] I'm saying with respect to any of the wells on this map, you can't link it to any particular operation, can you, sir?

A. Not conclusively.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. You can't say one way or another. , You don't know whether or not PW-2, which is on the 160-acre parcel that shows perchlorate concentrations, that's coming from the RASP operation, do you?

A. No.

Q. You don't know whether or not the PW-2 has any perchlorate, any perchlorate that comes from Goodrich's operations, do you?

A. Not conclusively, no.

Q. You can't say that. [¶] You can't say whether PW-2 has perchlorate coming from the West Coast Loading operations, can you?

A. There's no data to indicate.

Q. There's no data to indicate Pyro Spectaculars, Goodrich, or West Coast Loading; isn't that right, sir?

A. Yes.

Q. And the same is true for every single well on this map; isn't that true?

A. Yes.

Q. Yes. [¶] And the same thing is true of every soil sample that's been taken that's located anywhere on this map; isn't that right, sir?

A. You're not asking my opinion. You're asking --

Q. I'm asking -- I mean, soil samples taken from the 160-acre parcel, you already testified, could have perchlorate in them, and it could be solely as a result of the McLaughlin burn; right?

A. Theoretically.

Q. Theoretically? [¶] You saw the plume of smoke that was coming off that facility for hours; right?

MS. NOVAK: Objection. Assumes facts not in evidence. Lacks foundation.

MR. DINTZER: No. [¶] He did. I showed him pictures of it.

THE WITNESS: I saw the pictures.

MS. NOVAK: Okay.

MR. DINTZER: Yeah.



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. I mean, you can't tell me whether or not soil samples taken from the 160-acre parcel come from the McLaughlin burn, can you?

A. No.

Q. No. [¶] And from Pyrotronics' washouts, you can't tell me that either, can you?

A. No.

\* \* \*

Q. With respect to trichloroethylene or perchlorate in soil or groundwater anywhere in this basin, you cannot tell me what the source of either of those constituents is in soil or groundwater anywhere in this basin, can you?

A. No.

\* \* \*

Q. You can't testify, can you, sir, that Goodrich's perchlorate discharge at the site as you allege in your CAO, draft CAO, ever made it to groundwater, can you?

A. I don't have evidence that shows that.

Q. Well, that's what we're here about. We're here about the evidence. [¶] And the same thing would be true West Coast Loading, you don't have any evidence that anything they discharged onto the ground vis a vis perchlorate got into the groundwater, do you?

A. No.

Q. . . . And you don't have any evidence that anything that Pyro Spectaculars handled vis a vis perchlorate ever got into the groundwater either, do you?

A. No.

Q. In fact, with respect to all three of alleged dischargers, you don't even know as you sit here whether or not perchlorate from any of their operations is within a hundred feet of groundwater, do you?

A. I don't know.

Q. There's no evidence that Goodrich's discharge at that site is anywhere within a hundred feet of the groundwater; right?

A. Correct.

Q. And the same thing is true of West Coast Loading?

1 A. Correct.

2 Q. And the same thing is true of Pyro Spectaculars?

3 A. Correct.

4 *Id.*, 932:20-937:13, 955:8-956:16 *also id.*, 951:13-955:7, 983:5-985:2, 988:20-989:2.

5 Moreover, Mr. Holub does not point to any additional investigation that is  
6 necessary for Goodrich to establish that any remaining waste perchlorate (i.e., any  
7 perchlorate ash from the burning of the propellant) or TCE is not in the groundwater or  
8 even within a hundred feet of groundwater. *Id.*, 960:14-21, 961:24-962:10.<sup>167</sup>

9 In summary, whatever “data and findings” related to perchlorate and TCE Mr.  
10 Holub intends to discuss at the hearing does not provide a basis for assigning any  
11 liability to Goodrich or the other accused parties.

12 **C. Ann Sturdivant**

13 Showing her obvious biases against Goodrich, Sturdivant selected testimony from  
14 a single former Goodrich employee while ignoring contradictory testimony provided by  
15 this same witness. In drafting the section on Goodrich in the Memorandum of Points and  
16 Authorities, Sturdivant relied “upon Mr. Ronald Polzien’s deposition testimony [more]  
17 than any other witness that you have presented with respect to Goodrich” *Id.*, 289:22-  
18 290:1. In general, citing to a particular witness numerous times is not problematic so  
19 long as the witness provides consistent testimony and testifies on issues on which he  
20 has personal knowledge. But this was not true with respect to Mr. Polzien. Sturdivant  
21 liberally cited to Mr. Polzien despite the internal inconsistencies in Mr. Polzien’s  
22 testimony, the lack of Mr. Polzien’s personal knowledge on the subjects to which he was  
23 testifying, and the numerous other witnesses who contradict Mr. Polzien’s testimony.

24 Although Polzien directly contradicted himself on numerous occasions, Sturdivant  
25 relied on the contradicted testimony that supported the Regional Board staff’s case  
26 against Goodrich. For instance, Mr. Polzien signed a declaration and provided

27 <sup>167</sup> The same is true with regard to the Emhart Entities’ use and disposal of perchlorate  
28 and TCE, and Pyro Spectaculars’ use and disposal of perchlorate. *Id.*, 960:23-962:10.

1 deposition testimony about a conversation that he had with Archie Japs, a technical  
2 manager at the Goodrich facility, in which Polzien detailed his concerns that solvent  
3 contamination would enter the drinking water supply downgradient from the Goodrich  
4 facility. *Id.*, 300:14- 304:17. Three years following his conversation with Mr. Japs, Mr.  
5 Polzien sold his house that was located downgradient from the Goodrich property, but  
6 he did not disclose his concerns to the buyers because “if I had really been concerned, I  
7 would have notified them.” *Id.*, 306:13-307:15. When presented with this contradictory  
8 evidence, Sturdivant concluded that she could not judge the testimony’s truthfulness  
9 because she was not present at Mr. Polzien’s deposition.

10 Q. Do you understand that Mr. Polzien’s testimony in the first  
11 instance or in the second instance, one or the other, is false?

12 A. I don’t know that.

13 Q. One of them has to be untrue, we agree on that; right? He  
14 either was concerned or he wasn’t concerned; correct?

15 A. That’s how it appears.

16 \* \* \*

17 Q. Is there any question, Ms. Sturdivant, in your mind, that Mr.  
18 Polzien made a false statement, one way or the other?

19 A. I wasn’t there in the deposition.

20 Q. You weren’t there. So you can’t judge whether or not, from  
21 reading the text that I just went through with you, whether this  
22 man made false statements under oath?

23 A. That’s correct.

24 308:8-15, 309:16-24.

25 Whether the testimony is true or false is irrelevant to Ms. Sturdivant. As long as  
26 the testimony supported her preordained conclusion that Goodrich caused perchlorate  
27 contamination, Sturdivant cited to it.

28 It is clear from the testimony of Ms. Sturdivant, a member of the Advocacy Team,  
that the Advocacy Team, with the help of “other parties,” “picked and chose” favorable  
testimony from Mr. Polzien’s deposition transcript, while ignoring other contradictory

1 evidence:

2 Mr. Dintzer: Okay. You picked and chose from Mr. Polzien's  
3 testimony things that you liked to see in there because you thought  
4 it was helpful to your Memorandum of Points and Authorities, and  
5 you ignored testimony that Mr. Polzien gave that was contradictory;  
6 isn't that true?

7 [Objections omitted]

8 Mr. Dintzer: Go ahead, you can answer.

9 Ms. Sturdivant: I didn't pick and choose all of the testimony myself; I  
10 had assistance from other parties.

11 Sturdivant Dep., 671:19-672:7.

12 In another section of the Points and Authorities, Sturdivant cited to Polzien's  
13 testimony, even though Polzien later contradicts it. On direct examination, Polzien's  
14 testified that Goodrich rinsed the test bay. See Ad. Team P&As, 75. On cross-  
15 examination, however, Polzien contradicted the testimony cited by Ms. Sturdivant.

16 Q. Okay. Let's see what he said in cross-examination on that  
17 subject, okay. Page 297, pages -- lines 15 through 16, okay.  
18 This is the question: "Was water utilized in the test bay area?"  
19 "Answer: I have no recollection of water being used." You  
20 see that?

21 A. Yes.

22 Q. Well, you would agree with me that those two pieces of  
23 testimony are in conflict, wouldn't you?

24 A. You could consider it possible.

25 *Id.*, 320:6-17. Sturdivant ignored the possibility that Polzien contradicted his  
26 testimony, and instead she cited to Polzien only when it supported the staff's case  
27 against Goodrich.

28 In another section of the Points and Authorities, Sturdivant cited to Polzien's  
testimony in support of the staff's position that the Goodrich facility used TCE, even  
though later in his deposition, Polzien admitted that he did not know whether the solvent  
used to clean mixers was trichloroethane or trichloroethylene.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. All right. Now let's look at what happened in cross-examination a little bit later on after we had a little discussion about the chemical trichloroethane. Turn the page to page 619, line 13. "Question: Do you know whether or not the cleaning solvent that they used in the mixers and the other places where they had this solvent was trichloroethane or trichloroethylene? "I don't." Continuing on line 1, page 620, "Do you know whether the solvent that made part of the slurry was trichloroethylene or trichloroethane? "Answer: In light of what you just told me and my ignorance between the two, I don't know." Now, you see, Ms. Sturdivant, Mr. Polzien has just admitted in his deposition that he gave false testimony previously concerning whether or not trichloroethylene was used at the facility because he doesn't know whether it was trichloroethylene or it was another chemical called trichloroethane. You see that?

\* \* \*

THE WITNESS: I see the text of the deposition, yes.

MR. DINTZER:

Q. You see what I just said is true; right?

MS. NOVAK: Objection -- Same objections.

THE WITNESS: I read the same text that you do.

MR. DINTZER:

Q. Now, you think that it's responsible, Ms. Sturdivant, to be relying upon the deposition of a person who over and over and over again testifies to one thing and then says something different? Do you think that that's responsible?

A. I think it's responsible to take the testimony that the man gave under oath.

Q. Well, he says under oath here at the end of his deposition, when he's under cross-examination, that he doesn't know which chemical it was. That's what he says. But yet he testified over and over and over again in his depositions and in his declaration that trichloroethylene was utilized. But when it came to cross-examination, it was a different matter altogether. And my question to you is, you've seen contradictions in this man's testimony. Do you think it was responsible for you to rely so heavily upon the deposition testimony of an individual who can't keep his story straight?

MS. NOVAK: Objection. Argumentative. You may answer.

THE WITNESS: I think it's responsible to review these and do the best we can to summarize what's here.

1 *Id.* 344:24-347:6

2 Ms. Sturdivant is wrong – a responsible prosecutor does not pick and choose  
3 evidence that supports a prosecutive theory while ignoring other testimony that  
4 undermines that same theory.

5 Sturdivant disregards the testimony of all former Goodrich employees, even that  
6 of Mr. Polzien, when it undermined a particular contention against Goodrich. For  
7 example,

- 8 • Sturdivant admitted that every single former Goodrich  
9 employee, including Mr. Polzien, testified that Goodrich  
10 operated a single burn pit. *Id.* 333:7-22, 692:24-693:25. Yet,  
11 the Regional Board alleges that there were two burn pits.
- 12 • Sturdivant did not recall a single witness that testified that  
13 water was routed to the burn pit. *Id.* 739:11-740:25. Yet, the  
14 Regional Board alleges that there was water routed to the  
15 burn pit.

16 In addition to misrepresenting the facts in this State Board proceeding, Sturdivant  
17 misrepresented the facts and misled Senator Soto about the status of the staff's  
18 investigation. Beginning in April 2002, the Regional Board staff members who were  
19 investigating the source of the perchlorate contamination in the Basin knew the exact  
20 location of a waste pit where certain fireworks manufacturers dumped their perchlorate-  
21 contaminated pyrotechnic waste and where a large burn had occurred. *Id.*, 533:10-  
22 534:4. Notwithstanding this evidence, Sturdivant drafted a letter in June 2002 to Senator  
23 Soto that stated that the staff is "not aware of any other facilities in the vicinity of the site  
24 that have been identified as having used perchlorate." Ex. 3944. Sturdivant testified  
25 that she did not remember reviewing this critical evidence before the letter was mailed.  
26 *Id.*, 536:22-537:6. And even now, Sturdivant is not troubled that the letter contained  
27 material misrepresentations:

28 Q. Do you think it's troubling that the regional board staff issues  
an order to Kwikset and Goodrich Corporation based upon a  
one-and-a-half-page document that you can't even verify the  
source of from the Rialto Historical Society -- this is a  
Cleanup and Abatement Order – and at the same time the  
executive officer, same person who signs that order, is telling  
a senator, who's making inquiry about other potential



1 sources, that he's not aware of any other information when  
2 he's got in his staff's files a report that shows that for years  
3 and years and years there was fireworks manufacturing going  
4 on and that they burned the waste up there?

5 A. The question is?

6 Q. Is that troubling to you?

7 A. I don't know.

8 *Id.*, 537:7-20.

9 The June 2002 letter, initially drafted by Sturdivant, contained other material  
10 misrepresentations, including:

- 11 • In response to question number 6, the Regional Board staff's  
12 letter states, "This is because the preliminary information we  
13 have indicates that these facilities may not likely be sources."  
14 Ex. 20058. But this statement is categorically false and  
15 contradicted by material in the Regional Board's own files.  
16 *Id.* 538:4-539:1.
- 17 • In response to question number 6, the Regional Board staff's  
18 letter states that "pyrotechnic tenants that operated It appears  
19 that the pyrotechnic tenants that operated at the site were  
20 involved primarily with the import, assembly, storage and  
21 shipping of fireworks, and not necessarily the manufacture of  
22 fireworks, which is the type of activity that likely would have  
23 resulted in a release of perchlorate." Ex. 20058. But this  
24 statement is categorically false and contradicted by material  
25 in the Regional Board's own files. *Id.* 539:13-540:21.

26 When confronted with these obvious inconsistencies, Sturdivant defended the letter by  
27 claiming, "I don't think that the executive officer provided false information intentionally."  
28 Even if the Regional Board staff investigating the perchlorate contamination did not  
deliberately misrepresent the evidence in its possession – and the amount and  
frequency of the misrepresentations suggest more than mere coincidence or harmless  
error – the volume of "false information" provided by the Regional Board staff, and Ms.  
Sturdivant particularly, tarnishes its reputation and undermines the credibility of the  
Advocacy's Team's witnesses, including Ms. Sturdivant.

Ms. Sturdivant's deposition testimony reveals that she has no expert knowledge  
on all of the technical issues, including perchlorate and its fate and transport, about  
which she is scheduled to testify. The April 6, 2007 Advocacy Team's submission states

1 that Ms. Sturdivant plans to testify on the (1) solubility and mobility of potassium  
2 perchlorate and (2) infiltration of contaminants, including perchlorate salts, into the soil  
3 and groundwater. At deposition, Sturdivant testified that she lacks expertise in  
4 perchlorate, fate and transport of contamination in groundwater, groundwater modeling,  
5 and vadose zone modeling. *Id.*, 261:8-262:3, 271:14-272:3. Sturdivant has never  
6 testified before as an expert in hydrogeology in a judicial proceeding, as she has no  
7 peer-reviewed publications related to hydrogeology, has never presented on the subject  
8 of hydrogeology in a conference amongst experts, and has never qualified as an  
9 associate professor or professor at a university, college, or junior college. *Id.* 274:3-  
10 276:1. Without the technical expertise on issues, such as perchlorate and fate and  
11 transport, Sturdivant lacks the requisite expertise to provide testimony to the State Board  
12 on these same issues.

13 In addition to not being an expert witness, Sturdivant lacks any personal  
14 knowledge to testify about the mobility of perchlorate.

15 Q. Would you need to know the sorption rate of perchlorate in  
16 silty material in order to understand how quickly the material  
17 would move from the surface to the groundwater at the 160-  
18 acre parcel?

19 A. The sorption rate --

20 Q. Yes.

21 A. -- or solubility?

22 Q. Sorption rate of perchlorate to soil.

23 A. I don't know.

24 Q. You don't know one way or another?

25 A. Right.

26 *Id.*, 627:1-11.

27 \* \* \*

28 Q. You've made no calculations whatsoever with respect to the  
transport rate of perchlorate from the surface down to the



1 groundwater at the 160-acre parcel as a result of natural  
2 recharge, rain; right?

3 A. Correct.

4 Q. How long does it take for perchlorate to move through the  
5 unsaturated zone at the 160-acre parcel as a result of  
6 rainfall?

7 MS. NOVAK: Calls for speculation, may call for expert  
8 opinion. You may answer.

9 THE WITNESS: I don't know specifically.

10 MR. DINTZER:

11 Q. So you don't know the rate by which perchlorate would move  
12 through the unsaturated zone at the 160-acre parcel as a  
13 result of rainfall solely; is that correct?

14 A. As a result of what?

15 Q. Rainfall solely.

16 A. Right.

17 *Id.*, 629:23-630:18

18 Sturdivant lacks the personal knowledge to testify on the solubility of  
19 contaminants, such as ammonium perchlorate. Without the personal knowledge or the  
20 technical expertise, Sturdivant's testimony, is purely hearsay and is not credible.

21 Consistent with her lack of knowledge and expertise, Ms. Sturdivant concedes  
22 she cannot establish that any groundwater contamination originated from Goodrich.

23 Q. So on any given day, at any sample that's taken from this  
24 basin, when you actually take the sample and you look at the  
25 data, and if you see perchlorate or you see trichloroethylene,  
26 you can't say under oath that that TCE or perchlorate came  
27 from any particular operation versus another one, can you?

28 A. In the water?

Q. Yes.

A. Probably not.

*Id.*, 627:1-11.

Likewise, Ms. Sturdivant concedes she cannot connect any measurement of  
perchlorate or TCE in soil to any particular operation.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. So if I was to take a sample, for example, up near 5 or 4 or 9 or 2, and I got a soil sample that had some perchlorate in it, could you tell me whether or not that perchlorate did or did not come from burns of "Pyrotronic" waste by Pyrotronics or other fireworks manufacturers down here in Area 13?

A. It would depend on what else you found when you found those detections. If you could describe the waste and knew something about the waste, then you may be able to identify the waste better.

\* \* \*

Q. Okay. So I'm talking about any individual sample that shows perchlorate in it, you can't tell me whether that came from that burn or one of those burns or not; right?

A. As I say, depending if it had other material in it and you knew more about the sample itself.

Q. Okay. Well, assuming that it's just perchlorate in the soil, can you tell me whether it came from that burn or not?

MS. NOVAK: She's asked and answered the question.

A: Know —

Q. Go ahead.

MS. NOVAK: You can answer it again.

A: Knowing why you selected a sampling location and what you found there, if there was nothing in it but soil and no waste material, then you couldn't specifically, to my knowledge, not that I know.

Q. Tell one way or another?

A. Correct.

\* \* \*

Q. Okay. So if you take a soil sample from the 160-acre parcel and you find some level of trichloroethylene in it, you don't know one way or another whether that trichloroethylene came from Pyrotronics' operations or from somebody else's operations; is that correct?

A. Based upon where the sampling was done, we might have a better way of relating it to the information.

Q. Well, you know, if people are using this facility for all kinds of different purposes for 50 years, you don't know whether or not a sample that has trichloroethylene in it came from Pyrotronics' operations, from the United States of America,

1 from any operation that's been out there particularly; right?  
2 You just know that the sample has trichloroethylene in it?

3 A. Yes.

4 *Id.*, 646:20-647:4, 649:2-22, 651:17-652:9

5 Ms. Sturdivant's failure to voluntarily bring this exonerating information to the  
6 State Board's attention demonstrates that she has failed to serve as a responsible and  
7 objective prosecutor in these proceedings.

8 **D. Kamron Saremi**

9 Kamron Saremi is not an expert in any sense of the word. As a Water Resources  
10 Control Engineer, Saremi admits that he could not qualify to testify as an expert witness  
11 about perchlorate infiltration or plume boundaries, but he intends to testify in this  
12 administrative proceeding on both of these subjects anyway. Based on the paucity of  
13 evidence that he discovered from 1997 to 2002, Saremi lacks any expertise in  
14 conducting investigations. Although Saremi was tasked by the Regional Board to  
15 investigate the causes of perchlorate contamination in the Rialto-Colton basin, Saremi  
16 failed to uncover meaningful evidence about the historical use of the 160-acre site, and  
17 he misrepresented a critical 2002 audit report that identified the companies responsible  
18 for the only confirmed source of perchlorate contamination in North Rialto. Adding insult  
19 to injury, Saremi plans to testify in this proceeding about an investigation tarnished by his  
20 faulty assumptions and critical errors in judgment. Saremi is not a credible witness, and  
21 his conclusory judgments about Goodrich and the companies that are truly responsible  
22 for the perchlorate contamination raise doubts about whether his testimony is motivated  
23 more by a company's ability to pay, rather than the truth about who actually caused the  
24 perchlorate contamination in the Basin.

25 At the outset of his investigation, Kamron Saremi identified Goodrich as a  
26 potential source of perchlorate and ignored all others. In 1997, Regional Board tasked  
27 Saremi to initiate an investigation concerning perchlorate contamination in the  
28 groundwater in the Rialto-Colton area. Saremi Dep., 72:6-20. For the first five years,

1 Saremi did not obtain a single document from the Regional Board's files, and he never  
2 once drove to the 160-acre site. *Id.*, 85:8-87:5, 101:9-14. Until 2002, the fruits of  
3 Saremi's investigation consisted of a single document from the Rialto Historical Society,  
4 only a page and a half of which identified Goodrich as operating a rocket manufacturing  
5 facility in North Rialto. *Id.*, 475:9-21. Nevertheless, this document, the contents of which  
6 were never verified, became the basis for the Regional Board naming Goodrich in its  
7 CAO in 2002.

8 Based on the document from the Rialto Historical Society, Saremi incorrectly  
9 assumed that Goodrich contaminated the groundwater just as other rocket manufactures  
10 in southern California were accused of doing. Saremi knew that Lockheed Martin, which  
11 operated a rocket manufacturing facility in Mentone, California, was cited for causing  
12 perchlorate contamination in the groundwater in and around Redlands. Because both  
13 facilities manufactured rockets, Saremi believed that Goodrich's facility was the likely  
14 cause for perchlorate contamination in the Rialto-Colton basin. But Saremi lacked a  
15 basic understanding of either the Lockheed Martin facility in Redlands or the Goodrich  
16 facility in Rialto in order to draw a comparison. In his deposition, Saremi testified that he  
17 did not know:

- 18 • the amount of rockets manufactured at the Lockheed Martin  
19 facility. *Id.*, 235:2-6.
- 20 • the volume of perchlorate handled at the Lockheed Martin  
21 facility. *Id.*, 235:7-9.
- 22 • the percentage of rockets manufactured at the Lockheed  
23 Martin facility with ammonium perchlorate. *Id.*, 237:11-238:1
- 24 • whether Lockheed Martin and Goodrich had a similar protocol  
25 related to the grinding, blending, and drying of oxidizers. *Id.*,  
26 236:10-21.
- 27 • whether Lockheed Martin and Goodrich handled the  
28 movement of soft propellant throughout the facility. *Id.*,  
247:22-248:4
- whether Lockheed Martin and Goodrich utilized similar  
methods and tools to clean mixers. *Id.*, 248:7-249:4.

1 In response to a question about whether he knew in June 2002 anything about the  
2 similarities and dissimilarities between the two facilities, Saremi answered, "I didn't. Not  
3 to the detail that you're thinking." *Id.*, 249:14-17. Without that level of detail, Saremi  
4 cannot credibly draw any comparisons between the two different rocket manufacturing  
5 facilities.

6 With the misguided belief that Goodrich caused the perchlorate contamination in  
7 the Rialto-Colton basin, Saremi ignored evidence that exonerated Goodrich and that  
8 pointed to other companies as the source of the problem. In April 2002 the West San  
9 Bernardino County Waster District produced an environmental audit that documented all  
10 of the various operators that handled perchlorate in the North Rialto area. The audit  
11 reported that numerous fireworks companies, while operating on the same land that  
12 Goodrich occupied years earlier, handled perchlorate, had explosions, and responded to  
13 emergencies and fatal accidents, that obviously involved the mismanagement of  
14 oxidizers, such as perchlorate, and the release and discharge of those compounds into  
15 the groundwater. The audit also identified a waste pit where certain fireworks  
16 manufacturers dumped their pyrotechnic waste and recommended further investigation  
17 of the potential source. Saremi testified that he read the audit, and he spoke with Ann  
18 Sturdivant and Gerald Thibeault about its contents. *Id.*, 102:20-103:12, 106:14-107:6.  
19 Based on his conversations with Saremi, Gerald Thibeault drafted an email to the  
20 Regional Board Members on June 11 which stated that "Kamron believed that the  
21 information in the audit added very little to what he already knew." Ex. 20074, p. 2.  
22 Thibeault's email continues: "information to date indicates that these were just fireworks  
23 assembly companies, and that no actualy [sic] manufacturing took place where  
24 perchlorate-containing liquids would have been present." *Id.* Both sentences in  
25 Thibeault's email to the Regional Board are false – as the Regional Board's own files  
26 clearly demonstrate. Upon questioning, Saremi testified that at the time Thibeault wrote  
27 the email, Saremi knew that information in the audit contradicted Thibeault's summary to  
28 the Board Members. *Id.*, 117:12-123:12. If Saremi's deposition testimony is to be

1 believed, Saremi misrepresented critical evidence that exonerates Goodrich and  
2 supports the company's claims that it was not the cause of perchlorate contamination in  
3 the Basin. Saremi's testimony implies that the Regional Board's staff steered the  
4 Regional Board away from evidence in their own files that pointed directly at the  
5 McLaughlin Pit as the key source of the contamination and the staff's embarrassing role  
6 in mismanaging the source over two decades.

7       Although the West San Bernardino County Water District's environmental audit  
8 report provided Saremi with a crucial lead in his investigation into the source of  
9 perchlorate contamination, Saremi failed to conduct any follow-up. The audit report  
10 identified that Pyrotronics, a fireworks manufacturer, operated a Class I hazardous waste  
11 surface impoundment on the 160-acre site. Despite this critical evidence, Saremi  
12 testified that he never even went to the Regional Board's catalogue to see if the Board  
13 issued Pyrotronics a Waste Discharge Requirement ("WDR"). *Id.*, 268:21-269:7.  
14 Because he failed to look for the WDR, Saremi did not recognize that it allowed  
15 Pyrotronics to dump up to 3,000 gallons of water a day into a pool that could not possibly  
16 hold that much waste. *Id.*, 310:1-312:12. Saremi never sought out other records from  
17 the San Bernardino Valley Municipal Water District, as Goodrich has done, that  
18 documented that Pyrotronics used over 10,000 gallons of water a day, an amount, after  
19 excluding the water used for manufacturing and sanitation, that was far in excess of what  
20 the pit could hold. *Id.*, 316:12-318:1. Saremi does not know how often, if at all,  
21 Pyrotronics violated the reporting requirements as mandated by the WDR. *Id.*, 382:17-  
22 383:6. And to this day, Saremi does not know whether the closure of the McLaughlin Pit  
23 complied with the law. *Id.*, 389:1-390:6.

24       In addition to knowing none of the relevant facts because of his ineffectual  
25 investigation, Saremi is also not a technical expert on a subject matter about which he  
26 plans to provide testimony. Saremi is not an expert in: (1) geology; (2) hydrogeology;  
27 (3) chemistry; (4) groundwater modeling; (5) industrial practices of flare or munitions  
28 loading facilities; (6) industrial practices of solid rocket manufacturing facilities; (7)



1 industrial practices of firework manufacturing operations; (8) industrial practices of  
2 firework operations; (9) toxicology; (10) epidemiology; (11) medical sciences; (12) the  
3 effect that perchlorate or trichloroethylene on the human function; (13) vadose zone  
4 transport; and (14) fate and transport of contaminants in the subsurface. *Id.*, 48:14-  
5 49:21, 51:17-24. Without the technical expertise on issues, such as plume boundaries,  
6 perchlorate infiltration, and rocket manufacturing, Saremi lacks any credibility to provide  
7 testimony to the State Board on these same issues.

8         These facts establish that Mr. Saremi decided Goodrich's fault without objectively  
9 reviewing all of the relevant evidence. Likewise, he and the rest of the Advocacy Team  
10 have overzealously prosecuted Goodrich, with full knowledge that the evidence does not  
11 prove that Goodrich is responsible for any contamination found in any groundwater well.  
12 As shown below, Mr. Saremi concedes this critical truth only after detailed cross-  
13 examination. His unwillingness to freely offer this admission is further evidence of his  
14 bias.

15                 Q. These wells that are down here that I've mentioned, PW-9, PW-7,  
16                 PW-6, PW-5, PW-8, these wells that are in this basin, you  
17                 don't know where the perchlorate that's being seen in those  
18                 wells originated from, do you, sir?

19                 A. I'll make a correction. We do know it's from the 160-acre site.

20                 Q. You don't know what industrial operation is responsible for the  
21                 contamination in those wells; is that true, sir?

22                 A. Not specifically.

23                 Q. I mean, in other words, you can't tell me whether or not the  
24                 perchlorate in PW-5 belongs to West Coast Loading or Pyro  
25                 Spectaculars or Goodrich or Pyrotronics, can you?

26                 A. With respect to perchlorate, no.

27                 Q. No. [¶] Trichloroethylene either?

28                 A. Well, that -- that -- I have a different take on that.

                  Q. Okay. Well, let me ask you something: Here you see all of these  
                  users of the properties in the area in this basin?

                  A. Yes.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. I asked you questions about whether they used perchlorate; right?

A. Yeah, I believe you --

Q. And trichloroethylene; right?

A. Yes.

Q. You don't know whether or not their perchlorate or trichloroethylene, to the extent they had any, is in any of these wells, do you?

A. I -- I don't.

Q. Okay. So let me come back to my question. Okay? [¶] You don't know and cannot tell us with respect to any of the wells in this basin, exclusive of the landfill, what industrial operations are specifically responsible for either perchlorate or trichloroethylene in those wells, can you?

A. We have three parties at the 160-acre site, and based on --

Q. Sir, focus on my question.

A. Yes.

Q. You cannot tell us which specific operation is responsible for perchlorate in any of these specific wells, can you, sir, throughout the basin? You can't tell us?

A. Yeah, based on available records, probably not.

Q. And the same is true of trichloroethylene; right?

A. We're generalizing. I -- I got to be --

Q. You cannot tell me specifically?

A. You have to ask me specific questions.

Q. You cannot tell me, with respect to any of these wells that are showing trichloroethylene, where the specific trichloroethylene came from; in other words, which specific operation it came from, can you?

A. I -- I answer this question earlier. I said the perchlorate and TCE is coming from 160-acre site.

Q. But you cannot tell me what specific operation is responsible for TCE or perchlorate in any specific well, can you, sir?

A. If other operation are -- are contributing? [¶] No, I don't.



1 Q. You can't tell me whether or not, for example, in PW-5, the  
2 perchlorate is coming from the McLaughlin pit, can you?

3 A. That, I cannot.

4 Q. Okay. I mean, all of the perchlorate in there, you can't tell me  
5 whether it's all coming from the McLaughlin pit, can you?

6 A. All I can say, it's coming from the 160-acre site.

7 Q. You can't tell me whether or not all the perchlorate that belongs in  
8 PW-5, that's been seen there, is as a result of Apollo's  
9 operation of that pit, can you, sir?

10 A. That's correct.

11 Q. Same thing is true of PW-6, PW-7, PW-9; right, sir?

12 A. That is correct.

13 Q. And you can't tell me whether trichloroethylene that's seen in  
14 varying concentrations at different places in the basin is as a  
15 result of the 160-acre parcel or any of these operations that  
16 are up here, that we've listed and discussed yesterday, that  
17 come out of the GeoLogic report, can you, sir?

18 A. You're generalizing.

19 Q. You can't say specifically, sir?

20 A. The only thing I can respond is we don't know the contribution  
21 from the other facilities, but we do know about the contribution  
22 from the 160-acre site.

23 Q. You do not know what the contribution of trichloroethylene is in  
24 PW-5 from the 160-acre parcel as opposed to operations from  
25 the airport, can you, sir?

26 A. No.

27 *Id.*, 455:22-459:18; *see also id.*, 656:19-24.

28 Mr. Saremi also cannot link any perchlorate soil contamination with any  
particular operation. He admits not knowing how much of the perchlorate found in  
soil on the 160-acre parcel is the result of the single "extensive burn" of  
pyrotechnic waste in the McLaughlin Pit in 1987.

Q. Mr. McLaughlin has testified that there was 52,000 pounds of  
pyrotechnic waste in that pit when he burned it as Dan Brown  
and the City fire department watched on. Okay?

A. I -- I don't --

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

Q. I'm just telling you that's what he said.

A. Okay. If that's what he said.

Q. Okay. The documents indicate that that's what the volume was.

A. Okay.

Q. So 52,000 pounds of pyrotechnic waste containing perchlorate, of course, were burned for hours and hours; right?

A. Yeah, it -- it was extensive burn, yeah.

Q. How much of the perchlorate that's been found in the soil on the 160-acre parcel comes from that burn?

MS. NOVAK: Lacks foundation, assumes facts not in evidence, calls for speculation.

A: Have no way --

MR. TANAKA: Join.

MR. SITES: Join.

A: I have no way -- I have no way of estimating that.

Q. You don't know?

A. No.

Q. You have no way of knowing what percentage -- what percentage of the samples that have been taken from the 160-acre parcel, since the investigation of that site has gone on, that contained perchlorate in the sample came from that burn?

MS. NOVAK: Objection.

MR. ELLIOTT: Objection. Asked and answered.

MS. NOVAK: It lacks foundation, assumes facts not in evidence, calls for speculation.

MR. SITES: (Indicating.)

A: I have no way of estimating or knowing.

*Id.*, 305:6-19, 307:15-308:13.

An objective and responsible prosecutor would highlight for this State Board that there is not evidence proving that Goodrich is responsible for any of the groundwater or soil contamination in Rialto. But that is not the case here. Mr. Saremi, along with the

1 rest of the "Advocacy Team", plainly has a different and improper agenda.

2 **XIX. ADDITIONAL SUBMISSIONS OF EVIDENCE IN REBUTTAL WILL BE**  
3 **NECESSARY**

4 The Second Revised Notice of Public Hearing allows for a rebuttal submission,  
5 but the Hearing Officer has placed certain restrictions on any rebuttal, such as:

6 Rebuttal submissions must be limited to **forty pages, single sided,**  
7 **double spaced, in Arial 12-point font.** Rebuttal submissions must  
8 be received by **Tuesday, May, 1, 2007 at 5:00 p.m.** If any  
9 additional documents are submitted as part of the rebuttal, they  
must be accompanied by an explanation as to why their need could not  
have been foreseen; that explanation shall be part of the forty-page  
argument, although the document(s) will not be considered part of  
the forty-page limit.

10 The ability to submit this limited rebuttal does not cure the injustice created by (1) the  
11 Hearing Officer's *sua sponte* Orders granting the Advocacy Team additional time to  
12 submit its evidence, *without any corresponding extension of time for the alleged*  
13 *dischargers*, (2) the Advocacy Team's continued failure to comply with the Hearing  
14 Officer's Orders, and (3) and the City of Rialto's submission of 25 boxes and a 135 page  
15 brief just two business days before Goodrich must submit its case.<sup>168</sup>

16 It is simply impossible for Goodrich to respond to the sheer volume of information  
17 produced by the City of Rialto just two business days before its submittal is due, let  
18 alone within the 19 days before Goodrich must submit its rebuttal. Due process and  
19 fairness dictates that after Goodrich has had an opportunity to review and respond to the

20  
21 <sup>168</sup> As the Hearing Officer is aware, Goodrich and the other alleged dischargers have  
22 filed several objections to both the Advocacy Team and the City of Rialto's submissions.  
23 These objections provide further details regarding the extent of the Advocacy Team's  
24 past and current violations and the City of Rialto's submission of 25 boxes and 135 page  
25 brief on April 12, 2007 (just two business days before Goodrich's submission was due).  
26 See March 29, 2007 Objection to Advocacy Team Submission submitted by of Goodrich  
27 Corporation, the Emhart Entities, and Pyro Spectaculars, Inc. ("Objecting Parties"); April  
28 2, 2007 Objections to Advocacy Team submission submitted by Objecting Parties; April  
3, 2007 Objections submitted by Objecting Parties; April 4, 2007 Objections submitted by  
the Objecting Parties; April 5, 2007 Objections submitted by the Objecting Parties; April  
10, 2007 Objections submitted by Pyro Spectaculars and joined by Goodrich; April 10,  
2007 Objections submitted by Goodrich; April 11, 2007 Objection submitted on behalf of  
the Objecting Parties; April 13, 2007 Objection to City of Rialto submissions submitted  
on behalf of Objecting Parties. Goodrich hereby incorporates by reference these prior  
objections.

1 sheer volume of this information presented against it, Goodrich be permitted to submit  
2 additional evidence responding to this evidence. See *Mathews v. Eldridge*, 424 U.S.  
3 319, 333 (1976) (“The fundamental requirement of [administrative] due process is the  
4 opportunity to be heard at a meaningful time and in a meaningful manner.”) (emphasis  
5 added); *Memphis Light, Gas & Water Div. v. Craft*, 436 U.S. 1, 14 (1978) (The notice in  
6 an administrative adjudicatory hearing must “apprise the affected individual of, and  
7 permit adequate preparation for, an impending ‘hearing.’”) (emphasis added); *Nightlife  
8 Partners, Ltd. v. City of Beverly Hills*, 108 Cal. App. 4th 81, 90 (2003) (Due process  
9 “always requires . . . [the] ‘constitutional floor’ of a ‘fair trial in a fair tribunal,’ in other  
10 words, a fair hearing before a neutral or unbiased decision-maker”), quoting *Bracy v.  
11 Gramley*, 520 U.S. 899, 904-905 (1997), and *Withrow v. Larkin* 421 U.S. 35, 43 (1975).  
12 Because Goodrich has no time to review this evidence before its submission is due on  
13 April 17, 2007, this evidence necessarily must be submitted in its rebuttal. Goodrich  
14 cannot and should not be expected to “guess” what information the City of Rialto  
15 submitted in order to submit this purely “rebuttal” evidence in its initial submission.

16 Moreover, Goodrich cannot be expected to respond to evidence relied upon by  
17 the Advocacy Team, but never produced to Goodrich in compliance with the Notice of  
18 Public Hearing. Goodrich cannot be expected to be clairvoyant and respond to evidence  
19 the Advocacy Team is relying upon, but never produced to Goodrich.

20 In light of this, Goodrich’s rebuttal submission will necessarily include additional  
21 evidence (both documentary and testimonial) addressing those allegations raised by the  
22 City of Rialto and the Advocacy Team.

23 **XX. CONCLUSION**

24 As demonstrated in the preceding brief, the Advocacy Team has not only failed to  
25 carry its burden to prove by the weight of the evidence that Goodrich had a discharge to  
26 the waters of the state, but the factual and technical evidence overwhelmingly  
27 demonstrates that Goodrich has not caused the perchlorate or TCE contamination in the  
28 Rialto-Colton Basin. Likewise, there is no legal authority under the Porter-Cologne Act

1 for the State Board to issue Goodrich any order, to say the least given its years of  
2 operation predating the statute and work done at the direction of the U.S. government.  
3 Rather, the facts which have unfolded through discovery in these proceedings  
4 disturbingly reveal that the Advocacy Team and the City of Rialto not only played integral  
5 roles in the events leading to contamination from the only proven sources, but did  
6 everything in their power to skirt responsibility and take unfair advantage of Goodrich's  
7 five years of good faith cooperation. The Draft CAO must be dismissed.

8  
9 Dated: April 16, 2007

Respectfully submitted,

10 MANATT, PHELPS & PHILLIPS, LLP  
11 GIBSON, DUNN & CRUTCHER, LLP

12 By: \_\_\_\_\_

13 Peter R. Duchesneau  
14 *Attorneys for Designated Party,*  
15 GOODRICH CORPORATION