APPENDICES

APPENDIX A
GLOSSARY

Areas of Special Biological Significance (ASBS) – are those areas designated by the State Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of State Water Quality Protection Areas.

Basin Plan - The plan for the protection of water quality prepared by the Regional Water Quality Control Board in response to the Porter-Cologne Water Quality Control Act. The Basin Plan for the San Diego Region is also known as the Water Quality Control Plan for the San Diego Basin (9) and contains Water Quality Standards for the federal Clean Water Act.

Beneficial Uses - The uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals "Beneficial Uses" of the waters of the State that may be protected against include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code section 13050(f)].

Best Management Practices (BMPs) - The practice or combination of practices that are determined to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals (including technological, economic, and institutional considerations).

Bioaccumulation - The accumulation of contaminants in the tissues of organisms through any route, including respiration, ingestion, or direct contact with contaminated water, sediment, food, or dredged material.

California Water Code, Division 7 - a.k.a. Porter Cologne Water Quality Control Act.

Capping - The controlled, accurate placement of contaminated material at an open-water site, followed by a covering or cap of clean isolating material.

CEQA - California Environmental Quality Act of 1970.

Clean Water Act - a.k.a. Federal Water Pollution Control Act.

Confined disposal - Placement of dredged material within dikes nearshore or upland confined disposal facilities that enclose the disposal area above any adjacent water surface, isolating the dredged material from adjacent waters during placement. Confined disposal does not refer to subaqueous capping or contained aquatic disposal.

Contaminant - A chemical or biological substance in a form that can be incorporated into, onto, or be ingested by and that harms aquatic organisms, consumers of aquatic organisms, or users of the aquatic environment.

Contaminated sediment or contaminated dredged material - Contaminated sediments or contaminated dredged materials are defined as those that have been demonstrated to cause an unacceptable adverse effect on human health or the environment.

Contamination - means an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. "Contamination" includes any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected.

Dredged material - Material excavated from waters of the United States or ocean waters.

The term dredged material refers to material which has been dredged from a water body, while the term sediment refers to material in a water body prior to the dredging process.

Dredged material discharge - The term dredged material discharge means any addition of dredged material into waters of the United States or ocean waters. The term includes open- water discharges; discharges resulting from unconfined disposal operations (such as beach nourishment or other beneficial uses); discharges from confined disposal facilities that enter waters of the United States (such as effluent, surface runoff, or leachate); and overflow from dredge hoppers, scows, or other transport vessels.

Effluent Limitations - Limitations on the volume of each waste discharge, and the quantity and concentrations of pollutants in the discharge. The limitations are designed to ensure that the discharge does not cause water quality objectives to be exceeded in the receiving water and does not adversely affect beneficial uses.

Ephemeral - Water bodies, or segments thereof, that contain water only for a short period following precipitation events.

Hydrologic Area - A major logical subdivision of a hydrologic unit which includes both water-bearing and nonwater-bearing formations. It is best typified by a major tributary of a stream, a major valley, or a plain along a stream containing one or more ground water basins and having closely related geologic, hydrologic, and topographic characteristics. Area boundaries are based primarily on surface drainage boundaries. However, where strong subsurface evidence indicates that a division of ground water exists, the area boundary may be based on subsurface characteristics.

Hydrologic Subarea - A major logical subdivision of a hydrologic area which includes both water-bearing and nonwater-bearing formations.

Hydrologic Unit - A classification embracing one of the following features which are defined by surface drainage divides: (1) in general, the total watershed area, including water-bearing and nonwater-bearing formations, such as the total drainage area of the San Diego River Valley; and (2) in coastal areas, two or more small contiguous watersheds having similar hydrologic characteristics, each watershed being directly tributary to the ocean and all watersheds emanating from one mountain body located immediately adjacent to the ocean.

Implementation Plan - Basin Plan chapter which describes the actions by the Regional Board and others that are necessary to achieve and maintain the designated beneficial uses and water quality objectives of the Region's waters.

Intermittent - Water bodies, or segments thereof, that contain water for extended periods during the year, but not at all times.

Interrupted - Water bodies or streams that contain perennial segments or pools, with intervening intermittent or ephemeral segments.

Leachate - Water or any other liquid that may contain dissolved (leached) soluble materials, such as organic salts and mineral salts, derived from a solid material. For example, rainwater that percolates through a confined disposal facility and picks up dissolved contaminants is considered leachate.

Major federal action - Includes actions with effects that may be major and that are potentially subject to federal control and responsibility. Major refers to the context (meaning that the action must be analyzed in several contexts, such as the effects on the environment, society, regions, interests, and locality) and intensity (meaning the severity of the impact). It can include (a) new and continuing activities, projects, and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies; (b) new or revised agency rules, regulations, plans, policies, or procedures; and (c) legislative proposals. Action does not include funding assistance solely in the form of general revenue-sharing funds where there is no federal agency control over the subsequent use of such funds. Action does not include judicial or administrative civil or criminal enforcement action.

National Pollution Discharge Elimination System (NPDES) - These permits pertain to the discharge of waste to surface waters only. All State and Federal NPDES permits are also WDRs.

Nonpoint Sources - This refers to pollutants from diffuse sources that reach water through means other than a discernable, confined, and discrete conveyance.

Non-storm Water Discharge - Any discharge to a storm water conveyance system that is not composed entirely of storm water.

Nuisance - means anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and (3) Occurs during or as a result of the treatment or disposal of waste.

Open-water disposal - Placement of dredged material in rivers, lakes, estuaries, or oceans via pipeline or surface release from hopper dredges or barges.

Person - Also includes any city, county, district, the state or any department or agency thereof. "*Person*" includes the United States, to the extent authorized by federal law.

pH - Term used to refer to the hydrogen ion concentration of water. The acidity or alkalinity of water is measured by the pH factor.

Point Sources - This refers to pollutants discharged to water through any discernable, confined, and discrete conveyance.

Pollution - means an alteration of the quality of the waters of the state by wastes to a degree which unreasonably affects either of the following: (1) The waters for beneficial uses, or (2) Facilities which serve those beneficial uses. "Pollution" may include "contamination."

Porter-Cologne Water Quality Control Act (Porter-Cologne Act) - This is also known as the California Water Code.

Quality of the Water - or "quality of the waters" refers to chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affect its use.

Reclaimed water - or "recycled water" means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefor considered a valuable resource.

Regional Board - a.k.a. California Regional Water Quality Control Board.

Region - a.k.a., San Diego Basin (9).

Sewage, Domestic - Waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works. [40 CFR 503.9(g)]

Sewage Sludge - A solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works [40 CFR 503.9(w)].

State Board - a.k.a. State Water Resources Control Board.

State Water Quality Protection Areas (SWQPAs) - are nonterrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All Areas of Special Biological Significance (ASBS) that were previously designated by the State Board in Resolutions No. 74-28, 74-32, and 75-61 are also classified as a subset of State Water Quality Protection Areas and require special protections afforded by this Plan

Statewide Plan - A water quality control plan adopted by the State Water Resources Control Board in accordance with the provisions of Water Code sections 13240 through 13244, for waters where water quality standards are required by the Federal Water Pollution Control Act. Such plans supersede regional water quality control plans for the same waters to the extent of a conflict [California Water Code section 13170].

Triennial Review - Review of the Basin Plan which is required to be done every three years by the federal Clean Water Act [section 303(c)(1)].

Waste - Includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or

of human or animal origin, or from any producing, manufacturing, or processing operation of whatever nature, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Waste Discharge Requirements (WDRs) - The name of permits issued by the Regional Board for the discharge of waste to land. The discharge of waste to land may potentially impact ground water quality. These permits require that waste not be discharged in a manner that would cause an exceedance of applicable water quality objectives or adversely affect beneficial uses designated in the Basin Plan.

Water Quality Criteria - Numerical or narrative limits for constituents or characteristics of water designed to protect specific designated uses of the water. When criteria are met, water quality will generally protect the designated use [40 CFR section 131.3(b)]. This term is also used to describe scientific information on the relationship that the effect of a constituent concentration has on human health, aquatic life, or other uses of water, such as the criteria in the USEPA "Gold Book". California's water quality criteria are called "water quality objectives". See "water quality standard".

Water Quality Control - means the regulation of any activity or factor which may affect the quality of the water of the state and includes the prevention and correction of water pollution and nuisance.

Water Quality Goal - The most stringent, applicable, numerical water quality limit for a constituent or parameter of concern in a specific body of ground or surface water at a specific site that is chosen to protect either (1) existing water quality or (2) beneficial uses of water. In the first case, the water quality goal is set equal to the background level in the body of water. In the second case, the water quality goal is set at the less stringent of either (a) the numerical limit which implements all applicable water quality objectives or (b) the background level.

Water Quality Objectives - Numerical or narrative limits on constituents or characteristics of water designed to protect designated beneficial uses of the water. [California Water Code section 13050(h)]. California's water quality objectives are established by the State and Regional Water Boards in the Water Quality Control Plans. See "water quality standards".

Water Quality Standards - Provisions of State or federal law which consist of a designated use or uses for waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Act [40 CFR section 131.3(i)]. A water quality standard under the Federal Clean Water Act is equivalent to a beneficial use designation plus a water quality objective. In California, water quality standards are promulgated by the State and Regional Water Boards in Water Quality Control Plans. Water quality standards are enforceable limits for the bodies of surface or ground waters for which they are established.

Water Quality Control Plans - There are two types of water quality control plans - Basin Plans and Statewide Plans. Regional Boards adopt Basin Plans for each region based upon surface water hydrologic basin boundaries. The Regional Basin Plans designates or describes (1) existing and potential beneficial uses of ground and surface water; (2) water quality objectives to protect the beneficial uses; (3) implementation programs to achieve these objectives; and (4) surveillance and monitoring activities to evaluate the effectiveness of the water quality control plan. The Statewide Plans address water quality concerns for surface waters that overlap Regional Board boundaries, are statewide in scope, or are otherwise considered significant and contain the same four elements. Statewide Water Quality Control Plans include the Ocean Plan, the Enclosed Bays and Estuaries Plan, the Inland Surface Waters Plan, and the Thermal Plan. A water quality control plan consists of a designation or establishment for the waters within a specified area of (1) beneficial uses to be protected, (2) water quality objectives, and (3) a program of implementation needed for achieving water quality objectives [California Water Code section 13050(j)].

Waters of the State - Any water, surface or underground, including saline waters within the boundaries of the State [California Water Code section 13050(e)].

ACRONYMS

ACL .....Administrative Civil Liability
Adj. SAR .....adjusted sodium adsorption ratio
AF .....acre-foot (acre-feet)
af/y ..... acre-foot (acre-feet) per year
AG ..... attorney general
AGR ..... beneficial use of agricultural supply
AQUA ..... beneficial use of aquaculture
ASBS ..... beneficial use of Area of Special Biological Significance
BAT .....Best Available Technology
BCT ..... Best Control Technology
BEP ..... Bays and Estuaries Plan
BIOL ..... beneficial use of preservation of biological habitats of special significance
BMP ..... Best Management Practice
BOD ..... Biological Oxygen Demand
BPTCP Bay Protection and Toxic Cleanup Program
° C ..... degrees Centigrade
Ca ..... Calcium
Cal-EPA's..... .....California Environmental Protection Agency
CAOs ..... Cleanup and Abatement Orders
CBOD...carbonaceous biochemical oxygen demand
CCR ..... California Code of Regulations
CDFFP ..... California Department of Forestry and Fire Protection, Rainbow Conservation Camp
CDOs ..... Cease and Desist Orders
CEQA .....California Environmental Quality Act
CERCLA ..... Comprehensive, Environmental Response, Compensation, and Liability Act, commonly referred to as Superfund
CFR ..... Code of Federal Regulations
CIWMB ..... California Integrated Waste Management Board
COLD.....Beneficial use of cold freshwater habitat
COMM.....Beneficial use of commercial and sport fishing
CTR ..... California Toxics Rule
Cu ..... copper
CWA ..... federal Clean Water Act
CWS ..... Clean Water Strategy
CZARA..... Coastal Zone Act Reauthorization Amendments
DA ..... district attorney
DDE ..... Dichlorodiphenyldichloroethylene
DDT ..... Dichlorodiphenyltrichloroethane
DFG ..... Department of Fish and Game
DoD ..... Department of Defense
DHS ..... Department of Health Services
DPR ..... Department of Pesticide Regulation
DTSC .... Department of Toxic Substance Control
DWR ..... Department of Water Resources
E. coli ..... Escherichia coli
EIR ..... Environmental Impact Report
EIS ..... Environmental Impact Statement
EST ..... beneficial use of estuarine habitat
ET ..... evapotranspiration
ETI ..... evapotranspiration-Infiltration
°F ..... degrees Fahrenheit
FFA ..... Federal Facility Agreement
FRSH .. beneficial use of freshwater replenishment
ft ..... foot (feet)
GIS ..... geographic information system
Gold Book ..... Quality Criteria for Water, 1986
GWR ..... beneficial use of ground water recharge
HA ..... hydrologic area
HCO_3..... bicarbonate
HEP ..... Health Evaluation Plan
HSA ..... hydrologic subarea
HU ..... hydrologic unit
IND ..... beneficial use of industrial service supply
ISWP ..... Inland Surface Waters Plan
K ..... potassium
kg/yr ..... kilogram per year
kg N/yr ..... kilogram nitrogen per year
kg P/yr ..... kilogram phosphorus per year
L ..... liter
LA ..... Load Allocation
m ..... meter(s)
mg ..... milligram
MAA ..... Management Agency Agreement
MAR ..... beneficial use of marine habitat
MBAS ..... Methylene Blue-Activated Substances
MEP ..... Maximum Extent Practicable
mg .....milligram(s)
Mg ..... magnesium
mg/L ..... milligram(s) per liter
mg N/L ..... milligram(s) nitrogen per liter
mg P/L..... milligram(s) phosphorus per liter
MGD ..... Million Gallons per Day
MIGR ..... beneficial use of migration of aquatic organisms
MPRSA.....Marine Protection, Research and Sanctuaries Act of 1972
ml ..... milliliter(s)
MLLW ..... Mean Lower Low Water
MMs ..... Management Measures
MOS ..... Margin of Safety
MOU ..... Memorandum of Understanding
MPs ..... Management Practices

MRCD ..... Mission Resource Conservation District
MS4..... Municipal Separate Storm Sewer System
MSD ..... Marine Sanitation Device
MUN ..... beneficial use of municipal and domestic supply
Mussel Watch ..... State Mussel Watch
MWD ..... Metropolitan Water District of Southern California
NASSCO. National Steel and Shipbuilding Company
Na ..... sodium
NAV ..... beneficial use of navigation
ND .....Negative Declaration
NEPA . National Environmental Policy Act of 1969
ng/l .....nannograms per liter
No ..... number(s)
NO_3.....nitrate
NPDES .... National Pollutant Discharge Elimination System
NPSMP ..... Nonpoint Source Management Plan
NRCS ..... Natural Resources Conservation Service
NRMP... Nutrient Reduction and Management Plan
NOV ..... Notice of Violation
NTO ..... Notice to Comply
NTU .....turbidity unit
O,P'-DDD .... O,P'- Dichlorodiphenyldichloroethane
O,P'-DDE . O,P'- Dichlorodiphenyldichloroethylene
OWTS ..... onsite wastewater treatment system(s)
P,P'-DDD .... P,P'- Dichlorodiphenyldichloroethane
P,P'-DDE ... P,P'- Dichlorodiphenyldichloroethylene
P,P'-DDMS .... P,P'- Dichloro-diphenylmonochlorosaturatedethan
PAH ..... polyaromatic hydrocarbon
PCB ..... polychlorinated biphenyl
pH ..... hydrogen ion concentration
POTW ..... Publicly Owned Treatment Works
POW ..... beneficial use of hydropower generation
ppb .....part(s) per billion (ng/g)
ppm .....part(s) per million (ug/g)
Primary Network ..... Primary Water Quality Monitoring Network
PROC .. beneficial use of industrial process supply
QA ..... Quality Assurance
QAPP ..... Quality Assurance Program Plan
RARE ..... beneficial use of rare, threatened, or endangered species
RCD ..... Resource Conservation District
RCRA ..... Resource Conservation and Recovery Act of 1976
REC-1 .. beneficial use of contact water recreation
REC-2 ..... beneficial use of non-contact water recreation
ROWD ..... Report of Waste Discharge
RV ..... Recreational Vehicle
SAL ... beneficial use of inland saline water habitat
SANDAG . San Diego Association of Governments
SAR ..... sodium adsorbtion ratio
SCE ..... Southern California Edison
SDG&E ..... San Diego Gas and Electric Company
SHELL ..... beneficial use of shellfish harvesting
SIYB..... Shelter Island Yacht Basin
SOCs.....synthetic organic chemicals
SONGS .... San Onofre Nuclear Generating Station
SPWN . beneficial use of spawning, reproduction, and/or early development
SRF ..... State Revolving Fund
SWAT ..... Solid Waste Assessment Test
SWP ..... State Water Project
SWRCB ....California State Water Resources Control Board
TBT ..... tributyl tin
TDS ..... total dissolved solids
TKN ..... total Kjeldahl nitrogen
TMDL ..... Total Maximum Daily Load
TSM ..... Toxic Substances Monitoring
TSO ..... time schedules
TSS ..... total suspended solids
UCCE .... University of California Cooperative Extension
μg ..... microgram(s)
μg/l .....micrograms per liter
UHC ..... underwater hull cleaning
USCG ..... United States Coast Guard
USEPA .... United States Environmental Protection Agency
USGS ..... United States Geologic Survey
UST ..... underground storage tank
WARM beneficial use of warm freshwater habitat
WDR ..... Waste Discharge Requirement
WILD ..... beneficial use of wildlife habitat
WLA ..... Waste Load Allocation
WQA ..... Water Quality Assessment
WQLS ..... Water Quality Limited Segment
WQLZ ..... Water Quality Limited Zone
WRR ..... Water Reclamation Requirement

APPENDIX B - 1. Summary of the Regional Growth Forecast for Various Land Uses Within the San Diego Association of Governments' (SANDAG) Sphere of Influence.

HU 901 - 911	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	1,895,749	1,895,749	1,895,749	1,895,749
Developed Acres	395,746	428,622	539,895	660,646
Low Density Single Family	52,556	61,663	127,357	227,763
Single Family	141,512	159,132	194,286	207,021
Multiple Family	24,068	26,288	31,139	33,564
Mobile Homes	5,344	5,127	4,774	4,468
Other Residential	1,095	1,095	1,095	1,095
Industrial	35,043	36,167	38,790	40,034
Retail	24,850	25,733	27,238	28,084
Office	2,642	2,756	3,135	3,327
Schools	10,309	10,624	11,130	11,359
Agriculture	3,544	3,546	3,546	3,546
Parks	83,119	83,119	83,119	83,119
Roads & Freeways	11,665	13,372	14,288	17,267

APPENDIX B - 2. Summary of the Regional Growth Forecast for Various Land Uses Within the Southern California Association of Governments' Sphere of Influence.

HU 901 - 911	Year 1994
TOTAL ACRES	460,572
Developed Acres	121,766
Low Density Single Family	3,793
Single Family	24,395
Multiple Family	6,388
Mobile Homes	1,045
Other Residential	9,484
Industrial	3,087
Retail	20,060
Office	1,262
Schools	1,291
Agriculture	46,887
Parks	2,523
Roads & Freeways	1,551

APPENDIX B - 3. Regional Growth Forecast for Various Land Uses Within SANDAG's Sphere of Influence for the San Juan Hydrologic Unit (Hydrologic Unit Basin 901).*

HU 901	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	100,823	100,823	100,823	100,823
Developed Acres	6,137	6,137	6,137	6,137
Low Density Single Family	0	0	0	0
Single Family	152	152	152	152
Multiple Family	100	100	100	100
Mobile Homes	142	142	142	142
Other Residential	27	27	27	27
Industrial	2,816	2,816	2,816	2,816
Retail	0	0	0	0
Office	0	0	0	0
Schools	8	8	8	8
Agriculture	0	0	0	0
Parks	2,487	2,487	2,487	2,487
Roads & Freeways	405	405	405	405

Regional Growth Forecast for Various Land Uses Within SANDAG's Sphere of Influence for the Santa Margarita Hydrologic Unit (Hydrologic Unit Basin 902).*

HU 902	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	122,902	122,902	122,902	122,902
Developed Acres	8,600	9,011	11,957	13,362
Low Density Single Family	2,090	2,340	5,137	5,965
Single Family	727	879	1,013	1,548
Multiple Family	459	460	464	470
Mobile Homes	61	61	61	61
Other Residential	11	11	11	11
Industrial	4,573	4,580	4,585	4,588
Retail	330	332	337	340
Office	0	0	0	0
Schools	50	50	50	50
Agriculture	0	0	0	0
Parks	148	148	148	148
Roads & Freeways	151	151	151	182

* This is the Regional Growth Forecast for the area within SANDAG's Sphere of Influence only; that portion covered within SCAG's Sphere of Influence is not shown.

APPENDIX B - 3 (continued). Regional Growth Forecast for the Period 1990 through 2015 for the San Luis Rey Hydrologic Unit (Hydrologic Unit Basin 903).

HU 903	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	351,640	351,640	351,640	351,640
Developed Acres	37,262	42,289	60,999	79,877
Low Density Single Family	14,985	16,599	29,134	44,539
Single Family	5,019	8,196	13,963	17,066
Multiple Family	1,722	1,889	2,057	2,077
Mobile Homes	620	392	391	391
Other Residential	86	86	86	86
Industrial	1,531	1,543	1,634	1,653
Retail	1,068	1,144	1,295	1,364
Office	60	66	78	75
Schools	360	369	374	384
Agriculture	161	161	161	161
Parks	11,005	11,005	11,005	11,005
Roads & Freeways	646	786	825	1,052

Regional Growth Forecast for the Period 1990 through 2015 for the Carlsbad Hydrologic Unit (Hydrologic Unit Basin 904).

HU 904	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	132,554	132,554	132,554	132,554
Developed Acres	56,749	64,927	79,666	92,898
Low Density Single Family	6,834	8,348	12,617	19,299
Single Family	27,365	32,713	40,582	46,007
Multiple Family	5,385	5,863	7,097	7,181
Mobile Homes	1,715	1,715	1,448	1,389
Other Residential	103	103	103	103
Industrial	4,133	4,330	5,059	5,483
Retail	4,274	4,496	4,944	5,183
Office	376	420	556	612
Schools	1,517	1,568	1,759	1,841
Agriculture	274	274	274	274
Parks	3,387	3,387	3,387	3,387
Roads & Freeways	1,386	1,710	1,840	2,140

APPENDIX B - 3 (continued). Regional Growth Forecast for the Period 1990 through 2015 for the San Dieguito Hydrologic Unit (Hydrologic Unit Basin 905).

HU 905	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	217,586	217,586	217,586	217,586
Developed Acres	38,210	42,855	62,662	83,105
Low Density Single Family	9,559	12,482	24,900	42,295
Single Family	14,271	15,802	22,695	24,991
Multiple Family	1,146	1,220	1,379	1,492
Mobile Homes	140	140	140	140
Other Residential	8	8	8	8
Industrial	904	941	1,066	1,098
Retail	2,385	2,413	2,468	2,493
Office	142	147	218	269
Schools	442	466	481	488
Agriculture	770	772	772	772
Parks	8,011	8,011	8,011	8,011
Roads & Freeways	432	453	526	1,049

Regional Growth Forecast for the Period 1990 through 2015 for the Penasquitos Hydrologic Unit (Hydrologic Unit Basin 906).

HU 906	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	92,823	92,823	92,823	92,823
Developed Acres	47,609	50,663	56,484	61,032
Low Density Single Family	988	1,071	2,110	4,910
Single Family	20,740	22,441	25,240	25,484
Multiple Family	4,081	4,532	5,313	5,786
Mobile Homes	322	333	273	210
Other Residential	67	67	67	67
Industrial	4,736	4,954	5,701	6,051
Retail	3,641	3,882	4,107	4,243
Office	714	726	766	783
Schools	2,628	2,715	2,835	2,888
Agriculture	745	745	745	745
Parks	7,353	7,353	7,353	7,353
Roads & Freeways	1,595	1,844	1,974	2,515

APPENDIX B - 3 (continued). Regional Growth Forecast for the Period 1990 through 2015 for the San Diego Hydrologic Unit (Hydrologic Unit Basin 907).

HU 907	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	289,243	289,243	289,243	289,243
Developed Acres	82,095	84,372	99,269	118,659
Low Density Single Family	8,802	9,399	18,364	36,328
Single Family	27,121	26,068	33,000	33,468
Multiple Family	4,187	4,342	4,688	4,959
Mobile Homes	1,178	1,178	1,178	1,170
Other Residential	96	96	96	96
Industrial	5,524	5,524	5,823	6,001
Retail	5,079	5,168	5,347	5,408
Office	713	749	831	877
Schools	2,098	2,124	2,157	2,188
Agriculture	216	216	216	216
Parks	24,521	24,521	24,521	24,521
Roads & Freeways	2,590	2,936	3,049	3,427

Regional Growth Forecast for the Period 1990 through 2015 for the Pueblo San Diego Hydrologic Unit (Hydrologic Unit Basin 908).

HU 908	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	44,368	44,368	44,368	44,368
Developed Acres	33,226	33,402	34,177	34,374
Low Density Single Family	0	0	0	0
Single Family	15,950	15,902	15,780	15,548
Multiple Family	3,817	3,967	4,797	5,233
Mobile Homes	151	151	133	102
Other Residential	162	162	162	162
Industrial	4,340	4,373	4,394	4,399
Retail	4,235	4,251	4,289	4,296
Office	415	416	419	421
Schools	1,178	1,179	1,194	1,196
Agriculture	0	0	0	0
Parks	1,641	1,641	1,641	1,641
Roads & Freeways	1,337	1,361	1,368	1,376

APPENDIX B - 3 (continued). Regional Growth Forecast for the Period 1990 through 2015 for the Sweetwater Hydrologic Unit (Hydrologic Unit Basin 909).

HU 909	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	147,593	147,593	147,593	147,593
Developed Acres	56,400	59,870	73,470	90,120
Low Density Single Family	5,686	6,262	16,882	32,718
Single Family	22,859	25,084	27,149	27,329
Multiple Family	2,004	2,273	2,686	2,962
Mobile Homes	443	443	436	436
Other Residential	90	90	90	90
Industrial	1,229	1,302	1,364	1,380
Retail	2,380	2,500	2,644	2,712
Office	141	152	174	182
Schools	1,262	1,278	1,356	1,388
Agriculture	164	164	164	164
Parks	19,036	19,036	19,036	19,036
Roads & Freeways	1,104	1,285	1,490	1,723

Regional Growth Forecast for the Period 1990 through 2015 for the Otay Hydrologic Unit (Hydrologic Unit Basin 910).

HU 910	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	100,465	100,465	100,465	100,465
Developed Acres	15,762	19,416	30,411	45,290
Low Density Single Family	2,198	2,818	8,514	21,814
Single Family	4,729	6,785	11,040	11,628
Multiple Family	799	1,152	1,849	2,418
Mobile Homes	466	466	466	377
Other Residential	338	338	338	338
Industrial	3,664	3,737	3,897	3,964
Retail	1,044	1,106	1,239	1,354
Office	17	17	32	40
Schools	429	498	523	537
Agriculture	1,155	1,155	1,155	1,155
Parks	665	665	665	665
Roads & Freeways	257	679	692	998

APPENDIX B - 3 (continued). Regional Growth Forecast for the Period 1990 through 2015 for the Tijuana Hydrologic Unit (Hydrologic Unit Basin 911).

HU 911	Year 1990	Year 2000	Year 2010	Year 2015
TOTAL ACRES	295,751	295,751	295,751	295,751
Developed Acres	13,695	15,731	24,661	35,792
Low Density Single Family	1,411	2,344	9,700	19,895
Single Family	2,578	3,109	3,672	3,801
Multiple Family	398	489	710	885
Mobile Homes	108	108	108	51
Other Residential	107	107	107	107
Industrial	1,593	2,016	2,450	2,602
Retail	414	440	569	671
Office	62	63	63	64
Schools	339	370	393	393
Agriculture	57	57	57	57
Parks	4,866	4,866	4,866	4,866
Roads & Freeways	1,763	1,763	1,967	2,399

APPENDIX C
WATER QUALITY CRITERIA

The literature contains many different water quality criteria designed to protect specific beneficial uses of water. A summary of the specific numerical water quality criteria considered by the Regional Board for designation as water quality objectives is described in Table C-1, Water Quality Criteria - Inorganic Constituents; and Table C-2, Water Quality Criteria - Organic Constituents. The water quality criteria summarized in Tables C-1 and C-2 provided the basis for the Regional Board's designation of many of the specific numerical water quality objectives described earlier in this Chapter.

The water quality criteria presented in Tables C-1 and C-2 are not enforceable water quality objectives. The purpose of presenting the information summarized in these tables is to allow interested persons to compare available water quality criteria to the specific water quality objectives designated by the Regional Board described in Chapter 3.

A summary of the available types of numerical water quality criteria considered by the Regional Board for designation as numerical water quality objectives are summarized below.

- ***Maximum Contaminant Levels (MCLs):***

  MCLs are part of the drinking water standards adopted both by the California Department of Health Services (DHS), Office of Drinking Water in Title 22 of the California Code of Regulations (CCR), Division 4, Chapter 15, "*Domestic Water Quality and Monitoring*" and by the USEPA under the Safe Drinking Water Act. The State MCL drinking water standards must be at least as stringent as those adopted by USEPA. Primary MCLs are derived from the one in a million incremental cancer risk estimate for carcinogens and from threshold toxicity levels for non-carcinogens. Secondary MCLs are derived from human welfare considerations (e.g., taste or odor).

- ***Maximum Contaminant Level Goals (MCL Goals):***

  MCL Goals are promulgated by USEPA under the National Primary Drinking Water Regulations as the first step in establishing MCLs. MCL Goals are set at levels which represent no adverse health risks.

- ***State "Action" Levels:***

  Action levels are published by the DHS's Office of Drinking Water and are based mainly on health effects. The 10-6 incremental cancer risk estimates are used for carcinogens and threshold toxicity limits are used for other constituents.

- ***Proposition 65 Regulatory Limits:***

  Proposition 65 limits are established under the California Safe Drinking Water and Toxic Enforcement Act of 1986 for known human carcinogens and reproductive toxins. For carcinogens the No-Significant-Risk-Levels are set at the one-in-100,000 incremental cancer risk level. 1/1000 of the No-Observable-Effect Level (NOEL) is used for reproductive toxicants.

- ***National Ambient Water Quality Criteria:***

  These criteria are published by USEPA under the federal Clean Water Act to protect human health and welfare and freshwater and marine aquatic life. These criteria are found in: *Quality Criteria for Water, 1986* - the "*Gold Book*"; the Ambient Water Quality Criteria volumes (1980, 1984, 1986, 1987, and 1989); Quality Criteria for Water (1976) - the "*Red Book*"; and Water Quality Criteria, 1972 - the "*Blue Book*".

- ***Health Advisories and Water Quality Advisories:***

  These advisories are published by USEPA's Office of Water. Short-term (10 days or less), long-term (7 years or less), and lifetime exposure health advisories for non-carcinogens and suspected human health carcinogens are included where sufficient data exist.

- ***Suggested No-Adverse-Response Levels (SNARLS):***

  These human health-related criteria are published by the National Academy of Sciences in the Drinking Water and Health Volumes. Incremental cancer risk estimates are presented separately for carcinogens.

- ***Water Quality for Agriculture:***

  Water Quality for Agriculture was published by the Food and Agriculture Organization of the United Nations in 1985, which contains criteria protective of agricultural uses of water.

- ***Water Quality Criteria:***

  Water Quality Criteria was written by McKee and Wolf and published by the State Water Resources Control Board in 1963 and 1978. It contains criteria for human health and welfare, aquatic life, agricultural use, industrial use, and various other beneficial uses.

Table C-1. WATER QUALITY CRITERIA - INORGANIC CONSTITUENTS

Inorganic Constituent	BASIN PLAN				Drinking Water Standards (California & Federal) Maximum Contaminant Levels (MCLs)		
	Ocean Waters (1) "‡" = carcinogen	Bays and Estuaries	Inland Surface Waters	Ground Water	California Dept.of Health Services		USEPA Primary MCL
					Primary MCL	Secondary MCL	
Ammonia	600 (2)	NH_3 not > 0.025 mg/l	NH_3 not > 0025 mg/l				
Antimony	1,200						6 (8)
Arsenic	8				50		50
Beryllium	0.033 ‡						4 (8)
Boron			0.5 mg/l or as noted in Table 3-1	0.5 mg/l or as noted in Table 3-2			
Bromide							
Cadmium	1				10		5
Chloride			250 mg/l or as noted in Table 3-1	60 mg/l or as noted in Table 3-2		250,000 (7)	
Chlorine	2 (3)						
Chromium (III)	190,000						
Chromium (VI)	2 (4)						
Chromium (total)	2 (4)				50		100
Color			20 units or as noted in Table 3-1	15 units or as noted in Table 3-2		15 units	
Copper	3					1,000	1,300 (9)
Cyanide	1						200 (8)
Fluoride			1.0 mg/l or as noted in Table 3-1	1.0 mg/l or as noted in Table 3-2	1,400 to 2,400 (5)		4,000
Iron			0.3 mg/l or as noted in Table 3-1	0.3 mg/l or as noted in Table 3-2		300	
Lead	2				50		15 (9)
Manganese			0.05 mg/l or as noted in Table 3-1	0.05 mg/l or as noted in Table 3-2		50	
Mercury (inorganic)	0.04				2		2
Nickel	5						100 (8)
Nitrate			5 mg/l or as noted in Table 3-1	5 mg/l or as noted in Table 3-2	45,000 (6)		10,000 (10)
Oxygen, dissolved	Shall not be depressed >10%	Shall not be less than 5.0 mg/l with designated MAR. The annual mean DO shall not be less than 7 mg/l more than 10% of the time.	Shall not be less than 5.0 mg/l in inland surface waters with WARM or less than 6.0 m/l in waters with COLD beneficial use The annual mean D.O. conc. shall not be less than 7 mg/l more than 10% of the time.				

Table C-1 -- Values are in ug/l (ppb) unless otherwise indicated. Numbers in parenthesis indicate endnotes following the tables.

Table C-1. WATER QUALITY CRITERIA - INORGANIC CONSTITUENTS

Inorganic Constituent	BASIN PLAN				Drinking Water Standards (California & Federal) Maximum Contaminant Levels (MCLs)		
	Ocean Waters (1) "‡" = carcinogen	Bays and Estuaries	Inland Surface Waters	Ground Water	California Dept.of Health Services		USEPA Primary MCL
					Primary MCL	Secondary MCL	
pH	Shall not be +/- 0.2 units of natural pH	Shall not be depressed below 7.0; nor raised above 9.0. Changes in normal ambient pH shall not exceed 0.2 units.	Shall not be depressed below 6.5 nor raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.5 units in fresh waters with designated COLD or WARM beneficial uses.				
Phosphorus			Shall not exceed 0.05 mg/l in any steam at the point where it enters any standing body of water, nor 0.025 mg/l in any standing body of water; for flowing waters, shall not exceed 0.1 mgl total P. These values not to be exceeded more than 10% of the time.				
Radioactivity, Gross Alpha					15 pCi/l		15 pCi/l (12)
Radioactivity, Gross Beta					50 pCi/l		4 mrem/yr
Radium 226 + 228					5 pCi/l		5 pCi/l / 20 pCi/l (13)
Selenium	15				10		50
Settleable solids			Shall not contain suspended and settleable solids in concentrations that result in the deposition of solids that cause nuisance or adversely affect beneficial uses.				
Silver	0.7				50		100
Sodium			60% Na; or as noted in Table 3-1	60% Na; or as noted in Table 3-2			
Strontium-90					8 pCi/l		
Sulfate			65 mg/l; or as noted in Table 3-1	60 mg/l; or as noted in Table 3-2		250,000 (7)	400,000 - 500,000 (13)
Total dissolved solids (TDS)			300 mg/l; or as noted in Table 3-1	350 mg/l; or as noted in Table 3-2		500,000 (11)	
Thallium	14						2 (8)
Tritium					20,000 pCi/l		
Turbidity		Shall not be less than 50% of the depth at locations where measurement is made by means of a standard Secchi disk, or as noted in Chapter 3 page 30.	20 NTU; or as noted in Table 3-1. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.	5 NTU; or as noted in Table 3-2. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.		5 units	1 to 5 units
Uranium					20 pCi/l		20 μg/l = 30 pCi/l (13)
Zinc	20					5,000	

Table C-1 -- Values are in ug/l (ppb) unless otherwise indicated. Numbers in parenthesis indicate endnotes following the tables.

Table C-1. WATER QUALITY CRITERIA - INORGANIC CONSTITUENTS

Inorganic Constituent	Drinking Water Standards (Federal) Maximum Contaminant Levels		California Recommended Public Health Level (RPHL)	Health Advisories or Suggested No-Adverse-Response Levels (SNARLs) for toxicity other than cancer risk		US EPA Integrated Risk Information System (IRIS) Reference Dose	One-in-a-Million Incremental Cancer Risk Estimates for Drinking Water			California Proposition 65 Regulatory Level as a Water Quality Criterion (19)	Agricultural Water Quality Goals (21)
	USEPA		Department of Health Services	USEPA	National Academy of Sciences (NAS)	as a Water Quality Criterion (16)	Cal/EPA Cancer Potency Factor as a Water Quality Criterion (17)	USEPA Integrated Risk Information System (IRIS)	USEPA Health Advisory or SNARL		
	Secondary MCL	MCL Goal									
Ammonia				30,000 (14)					(D)		
Antimony		6 (8)		3		2.8			(D)		
Arsenic								0.02	0.02 (A,14)	5	100
Beryllium		4 (8)		4,000 / 20,000 (7-yr,14,15)				0.008	0.008 (B,14)	(18)	100
Boron				600 (14)		630			(D)		750 (22) /700
Bromide					2,300						
Cadmium		5		5	5	3.5	(18)		(D)	(18)	10
Chloride	250,000										106,000
Chlorine						1,050			(D)		
Chromium (III)											
Chromium (VI)							0.083		(A)	(18)	100
Chromium (total)		100		100		35			(D)		
Color	15 units										
Copper	1,000	1,300							(D)		200
Cyanide		200 (8)		200		150			(D)		
Fluoride	2,000	4,000				840			(D)		1,000
Iron	300										5,000
Lead		zero							(B)	0.25 (20)	5,000
Manganese	50					980					200
Mercury (inorganic)		2	2 (13)	2		2.1			(D)		
Nickel		100 (8)		100		140	(18)		(D)	(18)	200
Nitrate		10,000 (2)		10,000 (2)		11,000 (2)			(D)		
Oxygen, dissolved											

Table C-1 -- Values are in ug/l (ppb) unless otherwise indicated. Numbers in parenthesis indicate endnotes following the tables.

Table C-1. WATER QUALITY CRITERIA - INORGANIC CONSTITUENTS

Inorganic Constituent	Drinking Water Standards (Federal) Maximum Contaminant Levels		California Recommended Public Health Level (RPHL)	Health Advisories or Suggested No-Adverse-Response Levels (SNARLs) for toxicity other than cancer risk		US EPA Integrated Risk Information System (IRIS)	One-in-a-Million Incremental Cancer Risk Estimates for Drinking Water			California Proposition 65 Regulatory Level as a Water Quality Criterion (19)	Agricultural Water Quality Goals (21)
	USEPA						Cal/EPA Cancer	USEPA	USEPA		
	Secondary MCL	MCL Goal	Department of Health Services	USEPA	National Academy of Sciences (NAS)	Reference Dose as a Water Quality Criterion (16)	Potency Factor as a Water Quality Criterion (17)	Integrated Risk Information System (IRIS)	Health Advisory or SNARL		
pH	6.5 to 8.5 unts										
Phosphorus				0.1 (23)					(D)		
Radioactivity, Gross Alpha		zero							(A)		
Radioactivity, Gross Beta		zero							0.04 mrem/yr (A,14)		
Radium 226 + 228		zero (13)							0.22–0.26 pCi/l (A,14)		
Selenium		50				35					20
Settleable solids											
Silver				100 (14)		35			(D)		
Sodium				2,000 (24)							
Strontium-90									(A)		
Sulfate	250,000	400,000 - 500,000 (13)									
Total dissolved solids (TDS)	500,000										450,000
Thallium		0.5 (8)		0.4		0.5					
Tritium									(A)		
Turbidity											
Uranium		zero (13)			35				1.7 pCi/l (A)		
Zinc	5,000			2,000		2,100			(D)		2,000

Table C-1 -- Values are in ug/l (ppb) unless otherwise indicated. Numbers in parenthesis indicate endnotes following the tables.

Table C-1. WATER QUALITY CRITERIA - INORGANIC CONSTITUENTS

Inorganic Constituent	USEPA National Ambient Water Quality Criteria									
	Health and Welfare Protection			Freshwater Aquatic Life Protection						
				Recommended Criteria				Additional Toxicity Information		
	Non-Cancer Public Health Effects	One-in-a-Million Incremental Cancer Risk Estimate	Taste & Odor or Welfare	Continuous Concentration (4-day Average)	24-hour Average	Maximum Concentration (1-hour Average)	Maximum (Instantaneous)	Acute	Chronic	Other
Ammonia				(26)		(26)				
Antimony	14 / 4300 (25)			30 (13,27)		88 (13,27)		9,000	1,600	610 (42)
Arsenic		0.018 / 0.14 (25)		190 (27)		360 (27)		850 (41)		48 (43)
Beryllium								130	5.3	
Boron										
Bromide										
Cadmium				0.55 (28,29)		1.4 (28,36)				
Chloride	250,000			230,000 (30)		860,000 (30)				
Chlorine				11 (31)		19 (31)				
Chromium (III)				98 (28,32)		820 (28,37)				
Chromium (VI)				11		16				
Chromium (total)										
Color										
Copper			1000	5.4 (28,33)		7.5 (28,38)				
Cyanide	700 / 220,000 (25)			5.2		22				
Fluoride										
Iron			300				1000			
Lead				0.99 (28,34)		25 (28,39)				
Manganese			50							
Mercury (inorganic)	0.14 / 0.15 (25)			0.012		2.4				
Nickel	610 / 4600 (25)			73 (28,35)		653 (28,40)				
Nitrate	10,000 (2)									
Oxygen, dissolved				(22)	(22)					

Table C-1 -- Values are in ug/l (ppb) unless otherwise indicated. Numbers in parenthesis indicate endnotes following the tables.

Table C-1. WATER QUALITY CRITERIA - INORGANIC CONSTITUENTS

Inorganic Constituent	USEPA National Ambient Water Quality Criteria									
	Health and Welfare Protection			Freshwater Aquatic Life Protection						
				Recommended Criteria				Additional Toxicity Information		
	Non-Cancer Public Health Effects	One-in-a-Million Incremental Cancer Risk Estimate	Taste & Odor or Welfare	Continuous Concentration (4-day Average)	24-hour Average	Maximum Concentration (1-hour Average)	Maximum (Instantaneous)	Acute	Chronic	Other
pH			5 to 9 units				6.5 to 9.0 units			
Phosphorus										
Radioactivity, Gross Alpha										
Radioactivity, Gross Beta										
Radium 226 + 228										
Selenium				5		20				
Settleable solids										
Silver				0.12 (13)		0.84 (28,44)			0.12	
Sodium										
Strontium-90										
Sulfate			250,000							
Total dissolved solids (TDS)										
Thallium	1.7 / 6.3 (25)							1,400	40	20 (46)
Tritium										
Turbidity										
Uranium										
Zinc						54 (28,45)				

Table C-1 -- Values are in ug/l (ppb) unless otherwise indicated. Numbers in parenthesis indicate endnotes following the tables.

Table C-1. WATER QUALITY CRITERIA - INORGANIC CONSTITUENTS

Inorganic Constituent	USEPA National Ambient Water Quality Criteria Saltwater Aquatic Life Protection						California Ocean Plan Numerical Water Quality Objectives					
	Recommended Criteria		Additional Toxicity Information				Human Health Protection	Marine Aquatic Life Protection				
	Continuous Concentration (4-day Average)	Maximum Concentration (1-hour)	Maximum (Instantaneous)	Acute	Chronic	Other	(30-day Average) "‡" = carcinogen	6-month Median	30-day Average	7-day Average	Daily Maximum	Instantaneous Maximum
Ammonia	35 (47)	233 (47)						600 (2)			2,400 (2)	6,000 (2)
Antimony	500 (13,27)	1,500 (13,27)					1,200					
Arsenic	36 (27)	69 (27)		2,319 (41)		13 (43)		8			32	80
Beryllium							0.033 ‡					
Boron												
Bromide												
Cadmium	9.3	43						1			4	10
Chloride												
Chlorine	7.5 (48)	13 (48)						2 (3)			8 (3)	60 (3)
Chromium (III)				10,300 (49)			190,000					
Chromium (VI)	50	1,100						2 (4)			8 (4)	20 (4)
Chromium (total)								2 (4)			8 (4)	20 (4)
Color												
Copper	2.9	2.9						3			12	30
Cyanide	1	1						1			4	10
Fluoride												
Iron												
Lead	5.6	140						2			8	20
Manganese			100									
Mercury (inorganic)	0.025	2.1						0.04			0.16	0.4
Nickel	8.3	75						5			20	50
Nitrate												
Oxygen, dissolved												

Table C-1 -- Values are in ug/l (ppb) unless otherwise indicated. Numbers in parenthesis indicate endnotes following the tables.

Table C-1. WATER QUALITY CRITERIA - INORGANIC CONSTITUENTS

Inorganic Constituent	USEPA National Ambient Water Quality Criteria Saltwater Aquatic Life Protection						California Ocean Plan Numerical Water Quality Objectives					
	Recommended Criteria			Additional Toxicity Information			Human Health Protection	Marine Aquatic Life Protection				
	Continuous Concentration (4-day Average)	Maximum Concentration (1-hour)	Maximum (Instantaneous)	Acute	Chronic	Other	(30-day Average) "‡" = carcinogen	6-month Median	30-day Average	7-day Average	Daily Maximum	Instantaneous Maximum
pH			6.5 to 8.5 units									6.0 to 9.0 units
Phosphorus			0.1 (50)									
Radioactivity, Gross Alpha												15 pCi/l (12)
Radioactivity, Gross Beta												50 pCI/l
Radium 226 + 228												5 pCi/l
Selenium	71	300						15			60	150
Settleable solids									1,000	1,500		3,000
Silver	0.92 (13)	2.3						0.7			2.8	7
Sodium												
Strontium-90												8 pCi/l
Sulfate												
Total dissolved solids (TDS)												
Thallium				2,130			14					
Tritium												20,000 pCi/l
Turbidity									75 NTU	100 NTU		225 NTU
Uranium												20 pCi/l
Zinc	86	95						20			80	200

Table C-1 -- Values are in ug/l (ppb) unless otherwise indicated. Numbers in parenthesis indicate endnotes following the tables.

ENDNOTES FOR TABLE C-1 - INORGANICS

(7-day) For exposure of 7 days or less.
(10-day) For exposure of 10 days or less.
(24-hr) For exposure of 24 hours or less.
(7-yr) For "longer-term" exposure (7 years or less, EPA).
(A) Known human carcinogen; sufficient epidemiologic evidence in humans.
(B) Probable human carcinogen; sufficient evidence from animal studies; no or inadequate human data.
(C) Possible human carcinogen; limited evidence from animal studies; no human data.
(D) Not classified as to human carcinogenicity; no data or inadequate evidence.
(E) Evidence of non-carcinogenicity for humans.
(1) Or as noted in the California Ocean Plan (Reference 28)
(2) Expressed as nitrogen.
(3) For total chlorine residual; for intermittent chlorine sources see Reference 26, Chapter IV, Table B.
(4) Value developed for chromium VI; may be applied to total chromium if valence unknown.
(5) MCL varies with air temperature; 2.4 mg/l (S 53.7 °F); 2.2 mg/l (53.8 – 58.3 °F); 2.0 mg/l (58.4 – 63.8 °F); 1.8 mg/l (63.9 – 70.6 °F); 1.6 mg/l (70.0 – 79.2 °F); 1.4 mg/l (79.3 – 90.5 °F).
(6) As NO_3.
(7) Recommended level; Upper level = 500 mg/l; Short-term level = 600 mg/l.
(8) Effective 17 January 1994.
(9) MCL includes this "Action level", to be exceeded in no more than 10 percent of samples.
(10) As nitrogen; in addition, MCL for total nitrate and nitrite = 10,000 µg/l (as N).
(11) Recommended level; Upper level = 1,000; Short-term level = 1,500 mg/l.
(12) Includes Radium 226 but excludes Radon and Uranium.
(13) Proposed.
(14) Draft / tentative / provisional.
(15) Calculated for child / for adult
(16) Assumes 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution. An additional uncertainty factor of 10 is used for Class C carcinogens.
(17) Assumes 70 kg body weight and 2 liters/day water consumption.
(18) Determined not to pose a risk of cancer through ingestion (Title 22, CCR, Division 2).
(19) Regulatory dose level divided by 2 liters per day average consumption; represents a 1-in-100,000 incremental cancer risk estimate unless otherwise noted.
(20) Based on reproductive toxicity
(21) Reference 19 unless noted otherwise.
(22) See Reference 16.
(23) For white phosphorus.
(24) Guidance level (Reference 3) assumes relative source contribution of 10% from drinking water.
(25) For consumption of water and aquatic organisms / for consumption of aquatic organisms only.
(26) Varies with pH and temperature.
(27) For the trivalent form.
(28) Value based on hardness of 40 mg/l; value increases with increasing hardness.
(29) For hardness in mg/l as CaCO3, criterion = e(0.7852 [ln (hardness)] –3.490) µg/l.
(30) For dissolved chloride associated with sodium; criterion probably will not be adequately protective when chloride is associated with potassium, calcium, or magnesium, rather than sodium.
(31) For total residual chlorine.
(32) For hardness in mg/l as CaCO3, criterion = e(0.8190 [ln (hardness)] + 1.561) µg/l.
(33) For hardness in mg/l as CaCO3, criterion = e(0.8545 [ln (hardness)] – 1.465) µg/l.
(34) For hardness in mg/l as CaCO3, criterion = e(1.273 [ln (hardness)] – 4.705) µg/l.
(35) For hardness in mg/l as CaCO3, criterion = e(0.8460 [ln (hardness)] + 1.1645) µg/l.
(36) For hardness in mg/l as CaCO3, criterion = e(1.128 [ln (hardness)] – 3.828) µg/l.
(37) For hardness in mg/l as CaCO3, criterion = e(0.8190 [ln (hardness)] + 3.688) µg/l.
(38) For hardness in mg/l as CaCO3, criterion = e(0.9422 [ln (hardness)] – 1.464) µg/l.
(39) For hardness in mg/l as CaCO3, criterion = e(1.273 [ln (hardness)] – 1.460) µg/l.
(40) For hardness in mg/l as CaCO3, criterion = e(0.8460 [ln (hardness)] + 3.3612) µg/l.
(41) For the pentavalent form.
(42) Toxicity to algae occurs.
(43) Based on reproductive toxicity.
(44) For hardness in mg/l as $CaCO_3$, criterion = e(1.72 [ln (hardness)] –6.52) µg/l.
(45) For hardness in mg/l as $CaCO_3$, criterion = e(0.8473 [ln (hardness)] + 0.8604) µg/l.
(46) Toxicity to one species of fish after 2,600 hours of exposure.
(47) Unionized ammonia concentrations.
(48) For sum of chlorine-produced oxidants.
(49) EC50 for eastern oyster embryos.
(50) For elemental phosphorus; marine or estuarine.

Table C-2. WATER QUALITY CRITERIA - ORGANIC CONSTITUENTS

Organic Constituent	BASIN PLAN				Drinking Water Standards (California & Federal) Maximum Contaminant Levels (MCLs)					California Recommended Public Health Level (RPHL) Department of Health Services	California State Action Levels Department of Health Services		Other Taste and Odor Thresholds	Health Advisories or Suggested No-Adverse Response Levels (SNARLS) for toxicity other than cancer risk	
	Ocean Waters (1) ‡ = carcinogen	Bays and Estuaries	Inland Surface Waters and Ground Waters		California Dept. of Health Services		US Environmental Protection Agency							USEPA	National Academy of Sciences
			Primary MCL	Secondary MCL	Primary MCL	Secondary MCL	Primary MCL	Secondary MCL	MCL Goal		Toxicity	Taste & Odor			
Acenaphthylene	0.0088 ‡ (2)														
Acenaphthylene	220														
Acrylonitrile	0.10 ‡													1 / 4 (7-yr,13,14)	
Aldrin	0.000022 ‡										0.05 (LOQ)			0.3 (10-day,14)	
Anthracene	0.0088 ‡ (2)														
Atrazine			3		3		3		3	3 (11)				3	150
Bentazon			18		18					18 (11)				20	
Benz(a)anthracene	0.0088 ‡ (2)						0.1 (11)		zero (11)						
Benzene	5.9 ‡		1		1		5		zero	0.35 (11)				200 (10-day)	
Benzidine	0.000069 ‡														
Benzo(b)fluoranthene	0.0088 ‡ (2)						0.2 (11)		zero (11)						
Benzo(k)fluoranthene	0.0088 ‡ (2)						0.2 (11)		zero (11)						
Benzo(g,h,i)perylene	0.0088 ‡ (2)														
Benzo(a)pyrene	0.0088 ‡ (2)						0.2 (12)		zero (12)						
alpha-BHC	0.008 (3)										0.7				500 (7-day,3)
beta-BHC	0.008 (3)										0.3				500 (7-day,3)
Gamma-BHC (Lindane)	0.008 (3)		4		4		0.2		0.2					0.2	500 (7-day,3)
delta-BHC	0.008 (3)														500 (7-day,3)
technical-BHC	0.008 (3)														500 (7-day)
Bis(2-chloroethoxy) methane	4.4														
Bis(2-chloroethyl) ether	0.045 ‡														
Bis(2-chloroisopropyl) ether	1200													300	
Bromodichloromethane	130 ‡ (4)		100 (10)		100 (10)		100 (10)							400 / 1,300 (7-yr,13,14)	
Bromoform	130 ‡ (4)		100 (10)		100 (10)		100 (10)							2,000 (10-day)	
Bromomethane	130 ‡ (4)													10	
Carbofuran			18		18		40		40	18 (11)				40	
Carbon tetrachloride	0.90 ‡		0.5		0.5		5		zero	0.5 (11)				200 (10-day)	200 (7-day)
Catechol	30 (5)														2,200 (24-hr)
Chlordane	0.000023 ‡ (6)		0.1		0.1		2		zero	0.03 (11)				60 (10-day)	
Chlorobenzene	570		30		30		100		100	30 (11)				100	
4-Chloro-m-cresol	1 (7)														
4-Chloro-o-cresol	1 (7)														
6-Chloro-m-cresol	1 (7)														
Chloroform	130 ‡		100 (10)		100 (10)		100 (10)							4,000 (10-day)	
Chloromethane	130 ‡ (4)													3	
2-Chlorophenol	1 (7)													40 (14)	
3-Chlorophenol	1 (7)														
4-Chlorophenol	1 (7)														
Chrysene	0.0088 ‡ (2)						0.2 (11)		zero (11)						
2,4-D			100		100		70		70					70	87.5
DBCP			0.2		0.2		0.2		zero	0.002 (11)				50 (10-day)	
DDD	0.00017 ‡ (8)														
DDE	0.00017 ‡ (8)														
DDT	0.00017 ‡ (8)														
Dibenz(a,h)anthracene	0.0088 ‡ (2)						0.3 (11)		zero (11)						
Dibromochloromethane	130 ‡ (4)		100 (10)		100 (10)		100 (10)							60 (14)	18,000 (24-hr)
Dibutyl phthalate	3,500														770
1,2-Dichlorobenzene	5,100 (9)						600	10 (11)	600		130 (9)	10		600	300 (15)
1,3-Dichlorobenzene	5,100 (9)						600		600		130 (9)	20		600	

Table C-2. WATER QUALITY CRITERIA - ORGANIC CONSTITUENTS

Organic Constituent	BASIN PLAN				Drinking Water Standards (California & Federal) Maximum Contaminant Levels (MCLs)					California Recommended Public Health Level (RPHL) Department of Health Services	California State Action Levels Department of Health Services		Other Taste and Odor Thresholds	Health Advisories or Suggested No-Adverse Response Levels (SNARLS) for toxicity other than cancer risk	
	Ocean Waters (1) ‡ = carcinogen	Bays and Estuaries	Inland Surface Waters and Ground Waters		California Dept. of Health Services		US Environmental Protection Agency							USEPA	National Academy of Sciences
			Primary MCL	Secondary MCL	Primary MCL	Secondary MCL	Primary MCL	Secondary MCL	MCL Goal		Toxicity	Taste & Odor			
1,4-Dichlorobenzene	18 ‡		5		5		75	5 (11)	75	5 (11)				75	94 (15)
3,3'-Dichlorobenzidine	0.0081 ‡														
1,1-Dichloroethane			5		5					5 (11)					
1,2-Dichloroethane	130 ‡		0.5		0.5		5		zero	0.3 (11)				700 (10-day)	
1,1-Dichloroethylene	7,100		6		6		7		7	6 (11)				7	100
cis-1,2-Dichloroethylene			6		6		70		70	6 (11)				70	
trans-1,2-Dichloroethylene			10		10		100		100	10 (11)				100	
Dichloromethane	450 ‡						5 (12)		zero (12)		40			2,000 (10-day)	5000 (7-day)
2,3-Dichlorophenol	1 (7)														
2,4-Dichlorophenol	1 (7)													20	2000 / 7000 (13)
2,5-Dichlorophenol	1 (7)														
2,6-Dichlorophenol	1 (7)														
3,4-Dichlorophenol	1 (7)														
1,2-Dichloropropane			5		5		5		zero	5 (11)				90 (10-day)	
1,3-Dichloropropene	8.9 ‡		0.5		0.5					0.2 (11)				30 (10-day)	
Dieldrin	0.000040 ‡										0.05 (LOQ)			0.5 (10-day)	
Di(2-ethylhexyl)phthalate	3.5 ‡		4		4		6 (12)		zero (12)	4 (11)					4,200
Diethyl phthalate	33,000								5,000 (11)					5,000	
2,4-Dimethylphenol	30 (5)											400			
Dimethyl phthalate	820,000														
4,6-Dinitro-o-cresol	30 (5)														
Dinitrophenol															110
2,4-Dinitrophenol	4														110
2,4-Dinitrotoluene	2.6 ‡													500 (10-day)	
1,2-Diphenylhydrazine	0.16 ‡														
Endosulfan	9 (16)														
Endosulfan sulfate	9 (16)														
Endrin	0.002		0.2		0.2		2 (12) / 0.2		2 (12)					2	
Ethylbenzene	4,100		680		680		700	30 (11)	700	680 (11)			29 (18)	700	
Ethylene dibromide (EDB)			0.02		0.02		0.05		zero	0.01 (11)				8 (10-day)	
Fluoranthene	15														
Fluorene	0.0088 ‡ (2)														
Glyphosate			700		700		700 (12)		700 (12)	700 (11)				700	
Heptachlor	0.00072 ‡ (17)		0.01		0.01		0.4		zero	0.01 (11)				10 (10-day)	
Heptachlor epoxide	0.00072 ‡ (17)		0.01		0.01		0.2		zero	0.007 (11)				0.1 (7-yr)	
Hexachlorobenzene	0.00021 ‡						1 (12)		zero (12)					50 (10-day)	30 (7-day)
Hexachlorobutadiene	14 ‡													1	
Hexachlorocyclopentadiene	58						50 (12)	8 (11)	50 (12)						
Hexachloroethane	2.5 ‡													1	
Indeno(1,2,3-c,d)pyrene	0.0088 ‡ (2)						0.4 (11)		zero (11)						
Isophorone	150,000													100	
Methanes, halo-	130 ‡ (4)						100 (10)								
Methoxychlor			100		100		40		40					40	700
Molinate			20		20					20 (11)					
Nitrobenzene	4.9														5 (7-day)
2-Nitrophenol	30 (5)														290 (7-day,19)
Nitrophenol	30 (5)														290 (7-day)
4-Nitrophenol	30 (5)													60 (14)	290 (7-day,19)

Table C-2. WATER QUALITY CRITERIA - ORGANIC CONSTITUENTS

Organic Constituent	BASIN PLAN				Drinking Water Standards (California & Federal) Maximum Contaminant Levels (MCLs)					California Recommended Public Health Level (RPHL) Department of Health Services	California State Action Levels Department of Health Services		Other Taste and Odor Thresholds	Health Advisories or Suggested No-Adverse Response Levels (SNARLS) for toxicity other than cancer risk	
	Ocean Waters (1) ‡ = carcinogen	Bays and Estuaries	Inland Surface Waters and Ground Waters		California Dept. of Health Services		US Environmental Protection Agency							USEPA	National Academy of Sciences
			Primary MCL	Secondary MCL	Primary MCL	Secondary MCL	Primary MCL	Secondary MCL	MCL Goal		Toxicity	Taste & Odor			
N-Nitrosodimethylamine	7.3 ‡														
N-Nitrosodiphenylamine	2.5 ‡														
trans-Nonachlor	0.000023 ‡ (6)														
Oil & grease	25,000														
Oxychlordane	0.000023 ‡ (6)														
PAHs	0.0088 ‡ (2)						see individual chemicals		see individual chemicals					see individual chemicals	
Pentachlorophenol	1 (7)						1		zero		30			300 (10-day)	6 / 21 (13)
Phenanthrene	0.0088 ‡ (2)														
Phenol	30 (5)											5.0 (22)		4000	
Phenols, chlorinated	1														
Phenols, nitro-	30 (5)														
Phenols, non-chlorinated	30														
Phthalate esters			see individual chemicals		see individual chemicals		see individual chemicals		see individual chemicals					see individual chemicals	see individual chemicals
Phenanthrene	0.0088 ‡ (2)		1												
Phenazopyridine			1												
Phenazopyridine hydrochloride			1												
Phenesterin			1												
Phenobarbital			1												
Phenol	30 (5)		1									5.0 (22)		4,000	
Phenols, chlorinated	1		1												
Phenols, nitro-	30 (5)		1												
Phenols, non-chlorinated	30		1												
Phenoxybenzamine			1												
Phenoxybenzamine hydrochloride			1												
Phenyl glycidyl ether			1												
o-Phenylphenate, sodium			1												
Polychlorinated biphenyls	0.000019 ‡						0.5 (21)		zero (21)						50 (7-day)
Pyrene	0.0088 ‡ (2)														
Resorcinol	30 (5)														500 (7-day)
Simazine			10		10		4 (12)		4 (12)					4	1,505
2,3,7,8-TCDD (Dioxin)	0.0000000039 ‡ (20)						0.00003 (12)		zero (12)					0.0001 (10-day)	0.0007
1,1,2,2-Tetrachloroethane	1,200		1		1					1 (11)					
Tetrachloroethylene (PCE)	99 ‡		5		5		5		zero	0.7 (11)				2,000 (10-day)	
2,3,4,6-Tetrachlorophenol	1 (7)														
2,3,5,6-Tetrachlorophenol	1 (7)														
Thiobencarb			70	1	70	1				70 (11)					
Toluene	85,000						1,000	40 (11)	1,000		100		42 (18)	1,000	340
Toxaphene	0.00021 ‡		5		5		3		zero					40 (10-day)	8.75
2,4,5-TP (Silvex)			10		10		50		50					50	5.25
Tributyltin	0.0014														
1,1,1-Trichloroethane	540,000		200		200		200		200	200 (11)				200	3800
1,1,2-Trichloroethane	43,000		32		32		5 (12)		3 (12)					3	
Trichloroethylene (TCE)	27 ‡		5		5		5		zero	2.5 (11)					
Trichlorofluoromethane			150		150					150 (11)				2,000	8,000 (7-day)
2,4,5-Trichlorophenol	1 (7)														
2,4,6-Trichlorophenol	0.29 ‡														2,500 (7-day)
1,1,2-Trichloro-1,2,2-trifluoroethane			1,200		1,200					1,200 (11)					
Trinitrophenol	30 (5)														200 (7-day)
Vinyl chloride	36 ‡		0.5		0.5		2		zero	0.15 (11)				3,000 (10-day)	
Xylene(s)			1,750		1,750		10,000	20 (11)	10,000	1,750 (11)			17 (18)	10,000	

Table C-2. WATER QUALITY CRITERIA - ORGANIC CONSTITUENTS

Organic Constituent	USEPA Integrated Risk Information System (IRIS) Reference Dose as a Water Quality Criterion (23)	One-in-a-Million Incremental Cancer Risk Estimates for Drinking Water				California Proposition 65 Regulatory Level as a Water Quality Criterion	Agricultural Water Quality Goals (28)	USEPA National Ambient Water Quality Criteria					
								Health and Welfare Protection			Freshwater Aquatic Life Protection Recommended Criteria		
		Cal/EPA Cancer Potency Factor as a Water Quality Criterion (23)	USEPA Integrated Risk Information System (IRIS)	USEPA Health Advisory or SNARL	National Academy of Sciences (NAS) Drinking Water and Health			Non-Cancer Public Health Effects	One-in-a-Million Incremental Cancer Risk Estimate	Taste and Odor or Welfare	Continuous Concentration (4-day Average)	24-hour Average	Maximum Concentration (1-hour Average)
Acenaphthylene													
Acenaphthylene				(C)				320 / 780 (29)					
Acrylonitrile		0.035	0.07	0.07 (B1)	0.38	0.35			0.059 / 0.66 (29)				
Aldrin		0.0021	0.002	0.002 (B2,14)	0.003	0.02			0.00013 / 0.00014 (29)				
Anthracene	2,100			(D)				9,600 / 110,000 (29)					
Atrazine	3.5		0.14	(C)				25 (30)					
Bentazon	18			(D)									
Benz(a)anthracene				(B2)					0.0028 / 0.031 (32)				
Benzene		0.35	1	1.0 (A)		3.5			1.2 / 71 (29)				
Benzidine		0.00007		(A)		0.0005			0.00012 / 0.00054 (29)				
Benzo(b)fluoranthene				(B2)					0.0028 / 0.031 (32)				
Benzo(k)fluoranthene				(B2)					0.0028 / 0.31 (32)				
Benzo(g,h,i)perylene				(D)									
Benzo(a)pyrene		0.0029	0.003	(B2)		0.03			0.0028 / 0.031 (32)				
alpha-BHC					0.33	0.15			0.0039 / 0.013 (29)				
beta-BHC					0.12	0.25			0.014 / 0.046 (29)				
Gamma-BHC (Lindane)	0.2	0.032		0.03 (C)	0.054	0.3			0.019 / 0.063 (29)			0.08	
delta-BHC													
technical-BHC		0.0088				0.1			0.0123				
Bis(2-chloroethoxy) methane													
Bis(2-chloroethyl) ether		0.014			0.42	0.15			0.031 / 1.4 (29)				
Bis(2-chloroisopropyl) ether	280			(D)				1,400 / 170,000 (29)					
Bromodichloromethane		0.27	1.4	0.6 (B2,14)		2.5			0.27 / 22 (29)				
Bromoform			4	4 (B2,14)					4.3 / 360 (29)				
Bromomethane	7			(D)				48 / 4,000 (29)					
Carbofuran	35			(E)									
Carbon tetrachloride		0.23	0.3	0.3 (B2)	4.5	2.5			0.25 / 4.4 (29)				
Catechol													
Chlordane		0.029 / 0.027	0.03	0.03 (B2)	0.028	0.25			0.00057 / 0.00059 (29)			0.0043	
Chlorobenzene	140			(D)	2.3 (25)			680 / 21,000 (29)		20			
4-Chloro-m-cresol										3,000			
4-Chloro-o-cresol										1,800			
6-Chloro-m-cresol										20			
Chloroform		1.1 / 0.43	6	6.0 (B2,14)	0.26 / 5.6 (26)	10			5.7 / 470 (29)				
Chloromethane	2.8			(C)									
2-Chlorophenol	35			(D)						0.1			
3-Chlorophenol										0.1			
4-Chlorophenol										0.1			
Chrysene				(B2)					0.0028 / 0.31 (32)				
2,4-D	70			(D)				100					
DBCP		0.005	0.03	0.03 (B2)	0.051	0.05			0.025				
DDD		0.15				1 (8)			0.00083 / 0.00084 (29)				
DDE		0.1				1 (8)			0.00059 / 0.00059 (29)				
DDT		0.1	0.1	(B2)	0.042	1 (8)			0.00059 / 0.00059 (29)			0.0010	
Dibenz(a,h)anthracene				(B2)		0.1			0.0028 / 0.031 (32)				
Dibromochloromethane	14			(C)	0.6	3.5			0.41 / 34 (29)				
Dibutyl phthalate	700			(D)				2700 / 12,000 (29)					
1,2-Dichlorobenzene	620			(D)				2700 / 17,000 (29)					
1,3-Dichlorobenzene	620			(D)				400 / 2,600 (31)					

Table C-2. WATER QUALITY CRITERIA - ORGANIC CONSTITUENTS

Organic Constituent	USEPA Integrated Risk Information System (IRIS) Reference Dose as a Water Quality Criterion (23)	One-in-a-Million Incremental Cancer Risk Estimates for Drinking Water				California Proposition 65 Regulatory Level as a Water Quality Criterion	Agricultural Water Quality Goals (28)	USEPA National Ambient Water Quality Criteria					
								Health and Welfare Protection			Freshwater Aquatic Life Protection Recommended Criteria		
		Cal/EPA Cancer Potency Factor as a Water Quality Criterion (23)	USEPA Integrated Risk Information System (IRIS)	USEPA Health Advisory or SNARL	National Academy of Sciences (NAS) Drinking Water and Health			Non-Cancer Public Health Effects	One-in-a-Million Incremental Cancer Risk Estimate	Taste and Odor or Welfare	Continuous Concentration (4-day Average)	24-hour Average	Maximum Concentration (1-hour Average)
1,4-Dichlorobenzene	70	0.88		(C)		10		400 / 2,600 (31)					
3,3'-Dichlorobenzidine		0.029				0.3			0.04 / 0.077 (29)				
1,1-Dichloroethane						50							
1,2-Dichloroethane		0.5	0.4	0.4 (B2)	0.71	5			0.38 / 99 (29)				
1,1-Dichloroethylene	6.3		0.06	0.06 (C)					0.057 / 3.2 (29)				
cis-1,2-Dichloroethylene	70			(D)									
trans-1,2-Dichloroethylene	140			(D)									
Dichloromethane		2.5	5	5 (B2)		25			4.7 / 1,600 (29)				
2,3-Dichlorophenol										0.04			
2,4-Dichlorophenol	21			(D)				93 / 790 (29)		0.3			
2,5-Dichlorophenol										0.5			
2,6-Dichlorophenol										0.2			
3,4-Dichlorophenol										0.3			
1,2-Dichloropropane		0.56	0.5	0.5 (B2)									
1,3-Dichloropropene		0.19	0.2	0.2 (B2)	0.45			10 / 1,700 (29)					
Dieldrin		0.0022	0.002	0.002 (B2)	0.0019	0.02			0.00014 / 0.00014 (29)			0.0019	
Di(2-ethylhexyl)phthalate		4.2	3	3 (B2)	2.4	40			1.8 / 5.9 (29)		360 (11)		400 (11)
Diethyl phthalate	5,600			(D)				23,000 / 120,000 (29)					
2,4-Dimethylphenol	140									400			
Dimethyl phthalate				(D)				313,000 / 2,900,000(29)					
4,6-Dinitro-o-cresol								13.4 / 765 (29)					
Dinitrophenol								70					
2,4-Dinitrophenol								70 / 14,000 (29)					
2,4-Dinitrotoluene		0.11	50	0.05 (B2)		1			0.11 / 9.1 (29)				
1,2-Diphenylhydrazine						0.4			0.040 / 0.54 (29)				
Endosulfan								0.93 / 2.0 (29)				0.056	
Endosulfan sulfate								0.93 / 2.0 (29)				0.056 (35)	
Endrin	2.1			(D)				0.76 / 0.81 (33,29)				0.0023	
Ethylbenzene	700			(D)				3,100 / 29,000 (29)					
Ethylene dibromide (EDB)		0.0097	0.0004	0.0004 (B2)	0.055	0.1							
Fluoranthene				(D)				300 / 370 (29)					
Fluorene	280			(D)				1,300 / 14,000 (29)					
Glyphosate	700			(D)									
Heptachlor		0.0061 / 0.0078	0.008	0.008 (B2)	0.012	0.1			0.00021 / 0.00021 (29)			0.0038	
Heptachlor epoxide		0.0027 / 0.0038	0.004	0.004 (B2)		0.04			0.00010 / 0.00011 (29)			0.0038	
Hexachlorobenzene		0.019		0.02 (B2)	0.017	0.2			0.00075 / 0.00077 (29)		3.68 (11)		6 (11)
Hexachlorobutadiene	1.4			(C)					0.44 / 50 (29)				
Hexachlorocyclopentadiene	49			(D)				240 / 17,000 (29)		1			
Hexachloroethane				(C)		10			1.9 / 8.9 (29)				
Indeno(1,2,3-c,d)pyrene				(B2)					0.0028 / 0.031 (32,29)				
Isophorone	140			40 (C)					8.4 / 600 (29)				
Methanes, halo-													
Methoxychlor	35			(D)				100					
Molinate	14												
Nitrobenzene								17 / 1,900 (29)		30			
2-Nitrophenol													
Nitrophenol													
4-Nitrophenol				(D)									

Table C-2. WATER QUALITY CRITERIA - ORGANIC CONSTITUENTS

Organic Constituent	USEPA Integrated Risk Information System (IRIS) Reference Dose as a Water Quality Criterion (23)	One-in-a-Million Incremental Cancer Risk Estimates for Drinking Water				California Proposition 65 Regulatory Level as a Water Quality Criterion	Agricultural Water Quality Goals (28)	USEPA National Ambient Water Quality Criteria					
								Health and Welfare Protection			Freshwater Aquatic Life Protection Recommended Criteria		
		Cal/EPA Cancer Potency Factor as a Water Quality Criterion (23)	USEPA Integrated Risk Information System (IRIS)	USEPA Health Advisory or SNARL	National Academy of Sciences (NAS) Drinking Water and Health			Non-Cancer Public Health Effects	One-in-a-Million Incremental Cancer Risk Estimate	Taste and Odor or Welfare	Continuous Concentration (4-day Average)	24-hour Average	Maximum Concentration (1-hour Average)
N-Nitrosodimethylamine		0.0022				0.02			0.00069 / 8.1 (29)				
N-Nitrosodiphenylamine		3.9				40			5.0 / 16 (29)				
trans-Nonachlor													
Oil & grease													
Oxychlordane													
PAHs									0.0028 / 0.31 (29)				
Pentachlorophenol		1.9	0.3	0.3 (B2)		20			0.28 / 8.2 (29)	30	(34)		(36)
Phenanthrene											6.3 (11)		30 (11)
Phenol	4,200			(D)				21,000 / 4,600,000 (29)		300			
Phenols, chlorinated													
Phenols, nitro-													
Phenols, non-chlorinated													
Phthalate esters				see individual chemicals		see individual chemicals		see individual chemicals					
Phenanthrene											6.3 (11)		30 (11)
Phenazopyridine						2							
Phenazopyridine hydrochloride						2.5							
Phenesterin						0.0025							
Phenobarbital						1							
Phenol	4,200			(D)				21,000 / 4,600,000 (29)		300			
Phenols, chlorinated													
Phenols, nitro-													
Phenols, non-chlorinated													
Phenoxybenzamine						0.1							
Phenoxybenzamine hydrochloride						0.15							
Phenyl glycidyl ether						2.5 (11)							
o-Phenylphenate, sodium						100							
Polychlorinated biphenyls		0.0045	0.005	0.005 (B2)	0.16 (37)	0.045			0.000044/0.000045(29)			0.014	
Pyrene	210 (14)			(D)				960 / 11,000 (29)					
Resorcinol													
Simazine	3.5			(C)									
2,3,7,8-TCDD (Dioxin)		0.00000027	0.0000002	0.0000002 (B2)		0.0000025			1.3E-8 / 1.4E-8 (29)				
1,1,2,2-Tetrachloroethane				(C)		1.5			0.17 / 11 (29)				
Tetrachloroethylene (PCE)		0.69	0.7	0.7 (B2)	3.6	7			0.8 / 8.85 (29)				
2,3,4,6-Tetrachlorophenol										1			
2,3,5,6-Tetrachlorophenol													
Thiobencarb													
Toluene	1,400			(D)		3,500 (38)		6,800 / 200,000 (29)					
Toxaphene		0.029	0.03	0.03 (B2)		0.3			0.00073 / 0.00075 (29)		0.0002		0.73
2,4,5-TP (Silvex)	53			(D)				10					
Tributyltin													
1,1,1-Trichloroethane	250			(D)	17 (25)								
1,1,2-Trichloroethane	2.8		0.6	0.6 (C)		5			0.60 / 42 (29)				
Trichloroethylene (TCE)		2.3 (11)	3	3 (B2)	1.5 (25)	25			2.7 / 81 (29)				
Trichlorofluoromethane	2,100			(D)					0.19				
2,4,5-Trichlorophenol								2,600		1	63 (100)		100 (11)
2,4,6-Trichlorophenol		0.5	3	3 (B2,14)		5			2.1 / 6.5 (29)	2			
1,1,2-Trichloro-1,2,2-trifluoroethane													
Trinitrophenol													
Vinyl chloride		0.13	0.015	0.015 (A)	1.1	1.5			2 / 525 (29)				
Xylene(s)	14,000			(D)									

Table C-2. WATER QUALITY CRITERIA - ORGANIC CONSTITUENTS

Organic Constituent	USEPA Ambient Water Quality Criteria (cont.) Freshwater Aquatic Life Protection (cont.) Recommended Criteria (cont.)				California Ocean Plan Numerical Water Quality Objectives						USEPA National Ambient Water Quality Criteria Saltwater Aquatic Life Protection Recommended Criteria						
	Maximum (Instantaneous)	Additional Toxicity Information			Human Health Protection (30-day Average)	Marine Aquatic Life Protection					Continuous Concentration (4-day Average)	24-hour Average	Maximum Concentration (1-hour Average)	Maximum (Instantaneous)	Additional Toxicity Information		
		Acute	Chronic	Other	"‡" = carcinogen	6-month Median	30-day Average	7-day Average	Daily Maximum	Instantaneous Maximum					Acute	Chronic	Other
Acenaphthylene					0.0088 ‡ (2)										300 (32)		
Acenaphthylene		68	21		220										55		
Acrylonitrile		7,550		2,600 (44)	0.10 ‡												
Aldrin	3				0.000022 ‡									1.3			
Anthracene					0.0088 ‡ (2)										300 (32)		
Atrazine	1.0 (30)																
Bentazon																	
Benz(a)anthracene					0.0088 ‡ (2)										300 (32)		
Benzene		5,300			5.9 ‡										5,100		700 (47)
Benzidine		2,500			0.000069 ‡												
Benzo(b)fluoranthene					0.0088 ‡ (2)										300 (32)		
Benzo(k)fluoranthene					0.0088 ‡ (2)										300 (32)		
Benzo(g,h,i)perylene					0.0088 ‡ (2)										300 (32)		
Benzo(a)pyrene					0.0088 ‡ (2)										300 (32)		
alpha-BHC						0.004 (3)			0.008 (3)	0.012 (3)							
beta-BHC						0.004 (3)			0.008 (3)	0.012 (3)							
Gamma-BHC (Lindane)	2.0					0.004 (3)			0.008 (3)	0.012 (3)				0.16			
delta-BHC						0.004 (3)			0.008 (3)	0.012 (3)							
technical-BHC		100				0.004 (3)			0.008 (3)	0.012 (3)					0.34		
Bis(2-chloroethoxy) methane					4.4												
Bis(2-chloroethyl) ether		238,000 (39)	122 (43)		0.045 ‡												
Bis(2-chloroisopropyl) ether		238,000 (39)	122 (43)		1200												
Bromodichloromethane		11,000 (40)			130 ‡ (4)										12,000 (40)	6,400 (40)	11,500 (40,48)
Bromoform		11,000 (40)			130 ‡ (4)										12,000 (40)	6,400 (40)	11,500 (40,48)
Bromomethane		11,000 (40)			130 ‡ (4)										12,000 (40)	6,400 (40)	11,500 (40,48)
Carbofuran																	
Carbon tetrachloride		35,200			0.90 ‡										50,000	6,400 (40)	11,500 (40,48)
Catechol						30 (5)			120 (5)	300 (5)							
Chlordane	2.4				0.000023 ‡ (6)							0.004		0.09			
Chlorobenzene		250 (41)		50 (41,45)	570										160 (41)	129 (41)	
4-Chloro-m-cresol		30				1 (7)			4 (7)	10 (7)							
4-Chloro-o-cresol						1 (7)			4 (7)	10 (7)							
6-Chloro-m-cresol						1 (7)			4 (7)	10 (7)							
Chloroform		28,900	1,240		130 ‡										12,000 (40)	6,400 (40)	11,500 (40,48)
Chloromethane		11,000 (40)			130 ‡ (4)										12,000 (40)	6,400 (40)	11,500 (40,48)
2-Chlorophenol		4,380		2,000 (46)		1 (7)			4 (7)	10 (7)							
3-Chlorophenol						1 (7)			4 (7)	10 (7)							
4-Chlorophenol						1 (7)			4 (7)	10 (7)					29,700		
Chrysene					0.0088 ‡ (2)										300 (32)		
2,4-D																	
DBCP																	
DDD		0.6			0.00017 ‡ (8)										3.6		
DDE		1,050			0.00017 ‡ (8)										14		
DDT	1.1				0.00017 ‡ (8)							0.001		0.13			
Dibenz(a,h)anthracene					0.0088 ‡ (2)										300 (32)		
Dibromochloromethane		11,000 (40)			130 ‡ (4)										12,000 (40)	6,400 (40)	11,500 (40,48)
Dibutyl phthalate		940 (42)	3 (42)		3,500										2,944 (42)		3.4 (49,42)
1,2-Dichlorobenzene		1,120 (31)	763 (31)		5,100 (9)										1,970 (31)	129 (41)	
1,3-Dichlorobenzene		1,120 (31)	763 (31)		5,100 (9)										1,970 (31)	129 (41)	

Table C-2. WATER QUALITY CRITERIA - ORGANIC CONSTITUENTS

Organic Constituent	USEPA Ambient Water Quality Criteria (cont.) Freshwater Aquatic Life Protection (cont.) Recommended Criteria (cont.)				California Ocean Plan Numerical Water Quality Objectives						USEPA National Ambient Water Quality Criteria Saltwater Aquatic Life Protection						
						Marine Aquatic Life Protection					Recommended Criteria				Additional Toxicity Information		
	Maximum (Instantaneous)	Additional Toxicity Information			Human Health Protection (30-day Average)						Continuous Concentration (4-day Average)	24-hour Average	Maximum Concentration (1-hour Average)	Maximum (Instantaneous)			
		Acute	Chronic	Other	"‡" = carcinogen	6-month Median	30-day Average	7-day Average	Daily Maximum	Instantaneous Maximum					Acute	Chronic	Other
1,4-Dichlorobenzene		1,120 (31)	763 (31)		18 ‡										1,970 (31)	129 (41)	
3,3'-Dichlorobenzidine					0.0081 ‡												
1,1-Dichloroethane																	
1,2-Dichloroethane		118,000	20,000		130 ‡										113,000		
1,1-Dichloroethylene		11,600 (50)			7100										224,000 (50)		
cis-1,2-Dichloroethylene		11,600 (50)													224,000 (50)		
trans-1,2-Dichloroethylene		11,600 (50)													224,000 (50)		
Dichloromethane		11,600 (50)			450 ‡										12,000 (40)	6,400 (40)	11,500 (40,48)
2,3-Dichlorophenol						1 (7)			4 (7)	10 (7)							
2,4-Dichlorophenol		2,020	365	70 (56)		1 (7)			4 (7)	10 (7)							
2,5-Dichlorophenol						1 (7)			4 (7)	10 (7)							
2,6-Dichlorophenol						1 (7)			4 (7)	10 (7)							
3,4-Dichlorophenol						1 (7)			4 (7)	10 (7)							
1,2-Dichloropropane		23,000 (51)	5,700 (51)												10,300 (51)	3,040 (51)	
1,3-Dichloropropene		6,060 (52)	244 (52)		8.9 ‡										790 (52)		
Dieldrin	2.5				0.000040 ‡							0.0019		0.71			
Di(2-ethylhexyl)phthalate		940 (42)	3 (42)		3.5 ‡						360 (11)		400 (11)		2,944 (42)		3.4 (49,42)
Diethyl phthalate		940 (42)	3 (42)		33,000										2,944 (42)		3.4 (49,42)
2,4-Dimethylphenol		2120				30 (5)			120 (5)	300 (5)							
Dimethyl phthalate		940 (42)	3 (42)		820,000										2,944 (42)		3.4 (49,42)
4,6-Dinitro-o-cresol		230 (53)		150 (49,53)	220	30 (5)			120 (5)	300 (5)					4,850 (53)		
Dinitrophenol		230 (53)		150 (49,53)		30 (5)			120 (5)	300 (5)					4,850 (53)		
2,4-Dinitrophenol		230 (53)		150 (49,53)	4	30 (5)			120 (5)	300 (5)					4,850 (53)		
2,4-Dinitrotoluene		330 (54)	230 (54)		2.6 ‡										590 (54)		370 (54,48)
1,2-Diphenylhydrazine		270 (9)			0.16 ‡												
Endosulfan	0.22					9 (16)			18 (16)	27 (16)		0.0087		0.034			
Endosulfan sulfate						9 (16)			18 (16)	27 (16)		0.0087 (35)					
Endrin	0.18					0.002			0.004	0.006		0.0023		0.037			
Ethylbenzene		32,000			4100										430		
Ethylene dibromide (EDB)																	
Fluoranthene		3,980			15										40	16	
Fluorene					0.0088 ‡ (2)										300 (32)		
Glyphosate																	
Heptachlor	0.52				0.00072 ‡ (17)							0.0036		0.053			
Heptachlor epoxide	0.52				0.00072 ‡ (17)							0.0036		0.053			
Hexachlorobenzene		250 (41)		50 (41,45)	0.00021 ‡										160 (41)	129 (41)	
Hexachlorobutadiene		90	9.3		14 ‡										32		
Hexachlorocyclopentadiene		7.0	5.2		58										7		
Hexachloroethane		980	540		2.5 ‡										940		
Indeno(1,2,3-c,d)pyrene					0.0088 ‡ (2)										300 (32)		
Isophorone		117,000			150,000										12,900		
Methanes, halo-		11,000			130 ‡ (4)										12,000	6,400	11,500 (48)
Methoxychlor	0.03													0.03			
Molinate																	
Nitrobenzene		27,000			4.9										6,680		
2-Nitrophenol		230 (53)		150 (49,53)		30 (5)			120 (5)	300 (5)					4,850 (53)		
Nitrophenol		230 (53)		150 (49,53)		30 (5)			120 (5)	300 (5)					4,850 (53)		
4-Nitrophenol		230 (53)		150 (49,53)		30 (5)			120 (5)	300 (5)					4,850 (53)		

Table C-2. WATER QUALITY CRITERIA - ORGANIC CONSTITUENTS

Organic Constituent	USEPA Ambient Water Quality Criteria (cont.) Freshwater Aquatic Life Protection (cont.) Recommended Criteria (cont.)				California Ocean Plan Numerical Water Quality Objectives						USEPA National Ambient Water Quality Criteria Saltwater Aquatic Life Protection						
						Marine Aquatic Life Protection					Recommended Criteria				Additional Toxicity Information		
	Maximum (Instantaneous)	Additional Toxicity Information			Human Health Protection (30-day Average)	6-month Median	30-day Average	7-day Average	Daily Maximum	Instantaneous Maximum	Continuous Concentration (4-day Average)	24-hour Average	Maximum Concentration (1-hour Average)	Maximum (Instantaneous)			
		Acute	Chronic	Other	"‡" = carcinogen										Acute	Chronic	Other
N-Nitrosodimethylamine		5,850 (55)			7.3 ‡										3,300,000 (55)		
N-Nitrosodiphenylamine		5,850 (55)			2.5 ‡										3,300,000 (55)		
trans-Nonachlor					0.000023 ‡ (6)												
Oil & grease							25,000	40,000		75,000							
Oxychlordane					0.000023 ‡ (6)												
PAHs					0.0088 ‡ (2)										300		
Pentachlorophenol				1.74 (57)		1 (7)			4 (7)	10 (7)	7.9		13				
Phenanthrene					0.0088 ‡ (2)						4.6 (11)		7.7 (11)		300 (32)		
Phenol		10,200	2,560			30 (5)			120 (5)	300 (5)					5,800		
Phenols, chlorinated						1			4	10							
Phenols, nitro-		230		150 (49)		30 (5)			120 (5)	300 (5)					4,850		
Phenols, non-chlorinated						30			120	300							
Phthalate esters		940	3												2,944		3.4 (49,42)
Phenanthrene					0.0088 ‡ (2)						4.6 (11)		7.7 (11)		300 (32)		
Phenazopyridine																	
Phenazopyridine hydrochloride																	
Phenesterin																	
Phenobarbital																	
Phenol		10,200	2,560			30 (5)			120 (5)	300 (5)					5,800		
Phenols, chlorinated						1			4	10							
Phenols, nitro-		230		150 (49)		30 (5)			120 (5)	300 (5)					4,850		
Phenols, non-chlorinated						30			120	300							
Phenoxybenzamine																	
Phenoxybenzamine hydrochloride																	
Phenyl glycidyl ether																	
o-Phenylphenate, sodium																	
Polychlorinated biphenyls		> 2			0.000019 ‡							0.03			>10		
Pyrene					0.0088 ‡ (2)										300 (32)		
Resorcinol						30 (5)			120 (5)	300 (5)							
Simazine	10 (58)																
2,3,7,8-TCDD (Dioxin)					0.0000000039 ‡ (20)												
1,1,2,2-Tetrachloroethane		9,320 (59)	2,400		1,200										9,020		
Tetrachloroethylene (PCE)		5,280	840		99 ‡										10,200	450	
2,3,4,6-Tetrachlorophenol						1 (7)			4 (7)	10 (7)							
2,3,5,6-Tetrachlorophenol						1 (7)			4 (7)	10 (7)					440		
Thiobencarb																	
Toluene		17,000			85,000										6,300	5,000	
Toxaphene					0.00021 ‡						0.0002		0.21				
2,4,5-TP (Silvex)																	
Tributyltin	0.026 (30)				0.0014									0.010 (30)			
1,1,1-Trichloroethane		18,000		200 (60)	540,000										31,200		
1,1,2-Trichloroethane		18,000	9,400		43,000												
Trichloroethylene (TCE)		45,000		21,900 (61)	27 ‡										2,000		
Trichlorofluoromethane		11,000 (40)													12,000 (40)	6,400 (40)	11,500 (40,48)
2,4,5-Trichlorophenol						1 (7)			4 (7)	10 (7)	11 (11)		240 (11)				
2,4,6-Trichlorophenol			970		0.29 ‡	1 (7)			4 (7)	10 (7)							
1,1,2-Trichloro-1,2,2-trifluoroethane																	
Trinitrophenol		230 (53)		150 (49,53)		30 (5)			120 (5)	300 (5)					4,850 (53)		
Vinyl chloride					36 ‡												
Xylene(s)																	

ENDNOTES FOR TABLE C-2 – ORGANICS

(7-day) For exposure of 7 days or less.
(10-day) For exposure of 10 days or less.
(24-hr) For exposure of 24 hours or less.
(7-yr) For "longer-term" exposure (7 years or less, EPA).
(A) Known human carcinogen; sufficient epidemiologic evidence in humans.
(B) Probable human carcinogen; sufficient evidence from animal studies; no or inadequate human data.
(C) Possible human carcinogen; limited evidence from animal studies; no human data.
(D) Not classified as to human carcinogenicity; no data or inadequate evidence.
(E) Evidence of non-carcinogenicity for humans.
(1) For hardness in mg/l as $CaCO_3$, criterion = e(0.8473[ln(hardness)] + 0.8604) μg/l.
(2) For sum of acenaphthylene, anthrancene, benz(a)anthrancene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(g,h,i)perylene, benzo(a)pyrene, chrysene, dibenz(a,h)anthracene, fluorene, indeno(1,2,3-c,d)pyrene, phenanthrene, and pyrene.
(3) For hardness in mg/l as $CaCO_3$, criterion = e(1.273[ln(hardness)] – 1.460) μg/l.
(4) For sum of bromoform, bromomethane, chloromethane, dibromochloromethane, and bromodichloromethane.
(5) For sum of nonchlorinated phenolic compounds.
(6) For the sum of oxychlordane and alpha and gamma isomers of chlordane, chlordene and nonachlor.
(7) For sum of chlorinated phenolic compounds.
(8) Instantaneous maximum.
(9) For sum of 1,2- and 1-3-dichlorobenzenes.
(10) From Reference 30.
(11) Proposed.
(12) Effective 17 January 1994.
(13) For hardness in mg/l as $CaCO_3$, criterion = e(0.8473[ln(hardness)] + 0.7614) μg/l.
(14) MCL varies with air temperature; 2.4 mg/l (Š 53.7°F); 2.2 mg/l (53.8 – 58.3 °F); 2.0 mg/l (58.4 – 63.8°F); 1.8 mg/l (63.9 – 70.6 °F); 1.6 mg/l (70.0 – 79.2°F); 1.4 mg/l (79.3 – 90.5 °F).
(15) Based on organoleptic considerations (taste, odor, color, laundry staining, etc.)
(16) For hardness in mg/l as CaCO3, criterion = e(1.273[ln(hardness)] – 4.705) μg/l.
(17) As $CaCO_3$; minimum concentration except where natural concentrations are less.
(18) Toxicity to algae occurs.
(19) For hardness in mg/l as $CaCO_3$, criterion = e(0.8190[ln(hardness)] + 1.561) μg/l.
(20) For "TCDD equivalents" calculated as the sum of 2,3,7,8-chlorinated dibenzodioxin and dibenzofuran concentrations multiplied by their respective USEPA Toxicity Equivalency Factors.
(21) Expressed as decachlorobiphenyl.
(22) For hardness in mg/l as $CaCO_3$, criterion = e(0.8190 [ln(hardness)] + 3.688) μg/l.
(23) Assumes 70 kg body weight, 2 liters/day water consumption, and 20% relative source contribution. An additional uncertainty factor of 10 is used for Class C carcinogens.
(24) Assumes 70 kg body weight and 2 liters/day water consumption.
(25) For sum of dichloropropanes.
(26) Draft / tentative / provisional.
(27) For sum of halomethanes.
(28) Reference 19 unless noted otherwise.
(29) For the sum of oxychlordane and alpha and gamma isomers of chlordane, chlordene and nonachlor.
(30) For hardness in mg/l as $CaCO_3$, criterion = e(0.7852[ln(hardness)] – 3.490) μg/l.
(31) For hardness in mg/l as $CaCO_3$, criterion = e(1.128[ln(hardness)] – 3.828) μg/l.
(32) For hardness in mg/l as $CaCO_3$, criterion = e(0.9422[ln(hardness)] – 1.464) μg/l.
(33) For sum of dichlorobenzenes.
(34) For total trihalomethanes (sum of bromoform, bromodichloromethane, chloroform and dibromochloromethane); based largely on technology and economics.
(35) Based on endosulfan; USEPA Water Quality Advisory (Reference 13).
(36) Determined not to pose a risk of cancer through ingestion (Title 22, CCR, Division 2).
(37) Includes Radium 226 but excludes Radon and Uranium.
(38) Pentavalent arsenic [As(V)] effects on plants.
(39) Recommended level; Upper level = 500 mg/l; Short-term level = 600 mg/l.
(40) For sum of dichloroethylenes.
(41) For sum of dichloropropenes.
(42) As NO_3.
(43) Effective 17 January 1994.
(44) Toxicity to a fish species exposed for 7.5 days.
(45) Adverse behavioral effects occur to one species.
(46) For hardness in mg/l as $CaCO_3$, criterion = e(1.72 [ln(hardness)] – 6.52) μg/l.
(47) Adverse effects on a fish species exposed for 168 days.
(48) A decrease in the number of algal cells occurs.
(49) Guidance level (Reference 3) assumes reletive source contribution of 10% from drinking water.
(50) For chlorinated systems.
(51) For white phosphorus.
(52) For sum of carcinogenic polynuclear aromatic hydrocarbons.
(53) For sum of nitrophenols.
(54) For hardness in mg/l as $CaCO_3$, criterion = e(0.8460[ln(hardness)] + 3.3612) μg/l.
(55) For total chlorine residual; for intermittent chlorine sources see Reference 26, Chapter IV, Table B.
(56) For consumption of water and aquatic organisms / for consumption of aquatic organisms only.
(57) MCL includes this "Action level," to be exceeded in no more than 10 percent of samples.
(58) For sum of nonchlorinated phenolic compounds.
(59) Recommended level; Upper level = 1,000; Short-term level = 1,500 mg/l.
(60) For sum of tetrachloroethanes.
(61) Calculated from corn oil gavage animal study / from drinking water animal study.

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APPENDIX D

CONDITIONS FOR CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS IN TABLE 4-4

In order for the conditional waivers to be consistent with the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan), the following general overall conditions apply to each specific type of discharge to be eligible for a conditional waiver:

- The discharge shall not create a nuisance[1] or pollution[2] as defined in the Porter-Cologne Water Quality Control Act (Water Code);
- The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board), or the State Water Resources Control Board (State Water Board), as required by the Federal Water Pollution Control Act (Clean Water Act); and
- The discharge of any substance in concentrations toxic to animal or plant life is prohibited.

In addition to the general overall conditions listed above, the San Diego Water Board determined that it is consistent with the Basin Plan and in the public interest to issue conditional waivers under one or more of the following circumstances:

- The type of discharge is effectively regulated by other public agencies; or
- The type of discharge does not adversely affect the quality or the beneficial uses of the waters of the state; or
- The type of discharge is not readily amenable to regulation through adoption of waste discharge requirements (WDRs), but warrants San Diego Water Board oversight to ensure compliance with the mandated conditions (e.g., Basin Plan water quality objectives).

There are 35 specific types of discharge that are eligible for a conditional waiver of waste discharge requirements. However, in examining the specific types of discharge that are eligible for a conditional waiver, several of the discharge types are similar and/or related in terms of discharge setting, discharge source, and/or waiver conditions.

Instead of developing conditional waivers for each specific type of discharge, an integrated approach was employed to simplify the conditional waivers. Types of discharge that are similar in nature or originate from a common setting or operation were grouped together into a "discharge classification," as shown in Table D-1. The grouping allows dischargers to easily identify all the waiver conditions that may apply to their operations.

For example, discharge types that typically require a Clean Water Act section 401 Water Quality Certification (401 Certification) were grouped together in Conditional Waiver No. 6. A type of discharge that typically requires a 401 Certification is one where dredged and/or fill material may be discharged to land and/or surface waters. These types of discharge include sand and gravel mining operations, dredging

[1] "Nuisance" is defined by Water Code section 13050(m) as anything which meets all of the following requirements: (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and (3) Occurs during, or as a result of, the treatment or disposal of wastes.

[2] "Pollution" is defined by Water Code section 13050(l)(1) as an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects waters for beneficial uses or facilities which serve these beneficial uses. Pollution may include contamination.

project wastes, and stream channel alterations. All of these types of discharge have similar waiver conditions.

There are several types of discharge classified as discharges from agricultural and/or nursery operations in Conditional Waiver No. 4. Discharges of plant crop residues, storm water runoff from agricultural lands, mulches and/or amendment applied to soil, agricultural return water or nursery irrigation return water, and green wastes for composting can all occur on the same site. Many of the proposed waiver conditions are similar, and many, if not all, of these types of discharge are found on nursery or agricultural operations.

Therefore, as in the examples above, the types of discharge eligible for conditional waivers were grouped into 11 discharge classifications. One type of discharge may be included in more than one discharge classification. For example, discharges of plant crop residues are included in both Conditional Waiver No. 4 for discharges from agricultural and nursery operations, and Conditional Waiver No. 8 for discharges/disposal of solid wastes to land.

Table D-1 lists the discharge classifications and associated conditional waiver identification number, and groups the specific types of discharge according to those discharge classifications.

Table D-1 Conditional Waivers and Discharge Classifications

Conditional Waiver No.	Discharge Classification	Types of Discharge Included in Conditional Waiver Discharge Classification
1	Discharges from on-site disposal systems	a) Discharges from conventional septic tank/subsurface disposal systems for residential units b) Discharges from conventional septic tank/subsurface disposal systems for commercial/industrial establishments c) Discharges from alternative individual sewerage systems d) Discharges from conventional septic tank/subsurface disposal systems for campgrounds e) Discharges from on-site graywater disposal systems
2	"Low threat" discharges to land	a) Discharges from construction and test pumping of water wells to land b) Discharges of air conditioner condensate and non-contact cooling water to land c) Swimming pool discharges to land d) Discharges from short-term construction dewatering operations to land e) "Low Threat" discharges to land and/or groundwater including the following: - Groundwater pumped from drinking water wells - Groundwater from foundation drains, crawl space pumps, and footing drains - Discharges from flushing water lines - Discharges from washing vehicles, pavement, buildings, etc. - Infiltration from residential/commercial/industrial/recreational facility landscape and lawn irrigation using groundwater or municipal supply water - Infiltration from structural infiltration-based BMPs
3	Discharges from animal operations	a) Discharges from medium animal feeding operations (300-999 animal units, where 1 animal unit is equivalent to 1 cow or 1,000 animal pounds) b) Discharges from small animal feeding operations (less than 300 animal units) c) Discharges of storm water runoff d) Discharge/application of manure to soil as an amendment or mulch e) Discharges from grazing lands

Table D-1 Conditional Waivers and Discharge Classifications

Conditional Waiver No.	Discharge Classification	Types of Discharge Included in Conditional Waiver Discharge Classification
4	Discharges from agricultural and nursery operations	a) Discharges of plant crop residues to land b) Discharges of storm water runoff c) Discharge/application of amendments or mulches to soil d) Discharges of agricultural irrigation return water e) Discharges of nursery irrigation return water
5	Discharges from silvicultural operations	a) Discharges of storm water runoff b) Discharges from timber harvesting projects c) Discharges from wildfire suppression and fuels management activities
6	Discharges of dredged or fill materials nearby or within surface waters	a) Discharges from sand and gravel mining operations b) Discharges from dredging projects c) Discharges from stream channel alternation projects d) Other projects proposing to discharge dredged or fill material nearby or within surface waters of the state
7	Discharges of recycled water to land	a) Discharges from short-term recycled water projects (without permanent recycled water delivery and/or distribution systems, not to exceed 365 days) b) Discharges from permanent recycled water projects (with permanent recycled water delivery and/or distribution systems, limited to the period prior to the discharge being authorized and regulated under WDRs, WRRs, and/or MRPs, not to exceed 365 days)
8	Discharges/ disposal of solid wastes to land	a) Discharges of plant crop residues to land b) Discharge/application of amendments and mulches to soil c) Discharges of inert wastes to solid waste disposal facilities only accepting inert wastes d) Discharges of soils containing wastes to temporary waste piles e) Discharge/disposal/reuse of soils characterized as inert from contaminated sites to land
9	Discharges of slurries to land	a) Discharges of on-site drilling mud to land b) Discharges of concrete grinding residues to land
10	Discharges of emergency/ disaster related wastes	a) Incidental discharges of oil and oily water within a response area during an oil spill response in marine waters b) Discharges of disaster related wastes to temporary waste piles and surface impoundments c) Discharges of mass mortality waste to temporary waste piles and emergency landfills d) Other discharges of emergency/disaster related wastes
11	Aerially discharged wastes over land	a) Discharges of wastes related to fireworks displays over land b) Other wastes discharged aerially over land that may adversely affect the quality of the groundwaters of the state, but determined to be "low threat" by the San Diego Water Board

For each conditional waiver, General Waiver Conditions were developed that are applicable to a discharger or discharge operation, or all specific types of discharge within a discharge classification. Specific Waiver Conditions were developed that are applicable to specific types of discharge within a discharge classification, when specific conditions were determined to be necessary. The General and Specific Waiver Conditions for Conditional Waiver Nos. 1 through 11 are given in the following pages.

CONDITIONAL WAIVER NO. 1 – DISCHARGES FROM ON-SITE DISPOSAL SYSTEMS

Conditional Waiver No. 1 is for discharges of effluent from on-site disposal systems which are a source of pollutants that can infiltrate to groundwater. Discharges of effluent from on-site disposal systems include domestic wastewater (sewage) and graywater, but not industrial wastewater, which is discharged to the subsurface, located within the property that generated the waste stream.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 1:

- Discharges from conventional septic tank/subsurface disposal systems for residential units
- Discharges from conventional septic tank/subsurface disposal systems for commercial/industrial establishments
- Discharges from alternative individual sewerage systems
- Discharges from conventional septic tank/subsurface disposal systems for campgrounds
- Discharges from on-site graywater disposal systems

In order to be eligible for Conditional Waiver No. 1, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges from on-site disposal systems include the following:

1.I.A. General Waiver Conditions for On-site Disposal Systems

1.II.A. Specific Waiver Conditions for On-site Septic and Sewerage Systems
1.II.B. Specific Waiver Conditions for On-site Graywater Systems

Discharges from on-site disposal systems that comply with the general and specific waiver conditions in Conditional Waiver No. 1 are not expected to pose a significant threat to the quality of waters of the state.

1.I.A. General Waiver Conditions for On-site Disposal Systems

1. Prevent the direct or indirect discharge of effluent from on-site disposal systems to any surface waters of the state (including ephemeral streams and vernal pools).
2. Effluent from on-site disposal systems must be discharged to the subsurface and cannot surface or pond.
3. Effluent from on-site disposal systems must not adversely affect the quality or beneficial uses underlying groundwater.
4. Effluent from on-site disposal systems must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
5. Effluent from on-site disposal systems must be discharged at least 5 feet above highest known historical or anticipated groundwater level.
6. Effluent from on-site disposal systems must by discharged at least 100 feet away from any surface water body.
7. Effluent from on-site disposal systems must not adversely impact the quality or beneficial uses of groundwater in any water wells.
8. On-site disposal systems must be designed and operated in accordance with applicable regulatory requirements and/or standards as provided in the Specific Conditions.
9. The owner/operator of an on-site disposal system must comply with local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies. Copies of any approvals, permits, certifications, and/or licenses must be available on site for inspection.
10. The owner/operator of an on-site disposal system must maintain and operate the system in accordance with the design approved by the authorized local agencies.
11. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
12. On-site disposal systems can only accept domestic wastes and/or wastewater.

1.II.A. Specific Waiver Conditions for On-site Septic and Sewerage Systems

1. For existing on-site septic or sewerage systems, the following conditions apply:
   a) Existing on-site septic or sewerage systems serving campgrounds must not allow connections from recreational vehicles.
   b) Owners/operators of existing on-site septic or sewerage systems that cause a condition of contamination, pollution, or nuisance must cease the use of the system and repair or replace it with a compliant system, or permanently remove the system from operation.
   c) After adoption of State Water Board on-site wastewater treatment system (OWTS) regulations, any existing on-site septic or sewerage systems that is replaced, requires major repair, pools or discharges to the surface of the ground, or has the reasonable potential to cause a violation of water quality objectives, to impair present or future beneficial uses of water, to cause pollution, nuisance, or contamination of waters of the state must be brought into compliance with new OWTS regulations. Owners/operators of on-site septic or sewerage systems that cannot bring their system into compliance must cease the use of the system and replace it with a compliant system, or permanently remove the system from operation.
2. For new on-site septic or sewerage systems, the following conditions apply:
   a) New on-site septic or sewerage systems installed at campgrounds must not allow connections from recreational vehicles.
   b) New on-site septic or sewerage systems must comply with the conditions set forth in the section entitled *Guidelines for New Community and Individual Sewerage Facilities* in Chapter 4 (Implementation) of the Basin Plan.
   c) New on-site septic or sewerage systems proposed to be constructed in areas where groundwater water quality objectives have been exceeded must be evaluated for potential adverse effects on groundwater quality and beneficial uses to determine if regulating the system with individual WDRs is more appropriate.
   d) New on-site septic or sewerage systems proposed to be constructed within areas designated as Zone A, as defined by the California Department of Public Health's Drinking Water Source Assessment and Protection Program, must be constructed with an adequate setback from the drinking water supply source that will be protective of drinking water quality.
   e) Six (6) months after adoption of State Water Board OWTS regulations, applications received by the authorized local agency for the construction of new on-site septic or sewerage systems must be in compliance with new OWTS regulations for design and installation.

1.II.B. Specific Waiver Conditions for On-site Graywater Systems

1. An on-site graywater system must be permitted by the city, county, or other authorized local agency that has jurisdiction over the installation. The on-site graywater system must be designed and installed, at a minimum, according to the California Plumbing Code (CPC) Graywater Standards.[3] If the city, county, and/or other authorized local agencies have additional requirements, the graywater system must be designed and installed to comply with those requirements.
2. On-site graywater systems proposed to be constructed in areas where groundwater water quality objectives have been exceeded must be evaluated for potential adverse effects on groundwater quality and beneficial uses to determine if regulating the system with individual WDRs is more appropriate.
3. New on-site graywater systems proposed to be constructed within areas designated as Zone A, as defined by the California Department of Public Health's Drinking Water Source Assessment and Protection Program, must be constructed with an adequate setback from the drinking water supply source that will be protective of drinking water quality.

[3] California Code of Regulations Title 24 (also known as the California Building Standards Administrative Code) Part 5 (also known as the California Plumbing Code) Appendix G

CONDITIONAL WAIVER NO. 2 – "LOW THREAT" DISCHARGES TO LAND

Conditional Waiver No. 2 is for "low threat" discharges to land, which can percolate to groundwater. "Low threat" discharges include liquid wastes containing pollutant concentrations that are not expected to adversely impact the quality of waters of the state under ambient conditions. "Low threat" discharges may include potable water or uncontaminated groundwater. Potable water and uncontaminated groundwater are not considered waste when initially discharged. However, when this water comes into contact with pollutants and transports those pollutants in surface runoff or leaches those pollutants into the soil and groundwater, it becomes a waste. "Low threat" discharges to land are not expected to contain significant concentrations of pollutants that can adversely affect the quality of underlying groundwater.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 2:

- Discharges from the construction and test pumping of water wells to land
- Discharges of air conditioner condensate or non-contact cooling water to land
- Swimming pool discharges to land
- Discharges from short-term construction dewatering operations to land
- "Low Threat" discharges to land and/or groundwater, which may include the following:
  - Groundwater pumped from drinking water wells
  - Groundwater from foundation drains, crawl space pumps, and footing drains
  - Discharges from flushing water lines
  - Discharges from washing vehicles, pavement, buildings, etc.
  - Infiltration from residential/commercial/industrial/recreational facility landscape and lawn irrigation using groundwater or municipal supply water
  - Infiltration from structural infiltration-based best management practices (BMPs)

In order to be eligible for Conditional Waiver No. 2, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to "low threat" discharges to land include the following:

2.I.A. General Waiver Conditions for "Low Threat" Discharges of Water to Land

2.II.A. Specific Waiver Conditions for Air Conditioner Condensate and Non-contact Cooling Water Discharges to Land
2.II.B. Specific Waiver Conditions for Swimming Pool Discharges to Land
2.II.C. Specific Waiver Conditions for Pumping of Groundwater from Wells to Land
2.II.D. Specific Waiver Conditions for Dewatering Operations Discharged to Land
2.II.E. Specific Waiver Conditions for Discharges from Washing Vehicles, Pavement, Buildings, etc. to Land
2.II.F. Specific Waiver Conditions for Discharges from Irrigated Lawns and Landscaping Using Groundwater or Municipal Supply Water
2.II.G. Specific Waiver Conditions for Discharges from Structural BMPs that Require Infiltration

"Low threat" discharges to land that comply with the general and specific waiver conditions in Conditional Waiver No. 2 are not expected to pose a threat to the quality of waters of the state.

2.I.A. General Waiver Conditions for "Low Threat" Discharges of Water to Land

1. Prevent the direct or indirect discharge of "low threat" discharges to any surface waters of the state (including ephemeral streams and vernal pools).
2. "Low threat" discharges must not cause the migration of contaminants such as chlorinated solvents, hydrocarbons, or other toxic or hazardous substances to groundwater.
3. "Low threat" discharges must not come in contact with any material that consists of or is contaminated with chlorinated solvents, hydrocarbons, or other toxic or hazardous substances prior to discharge to land.

4. Any products used to condition or treat "low threat" discharges prior to discharging to land must be in accordance with manufacturer's instructions and guidelines, and must reliably attenuate before infiltrating to underlying groundwater.
5. "Low threat" discharges to land must not adversely affect the quality or beneficial uses of underlying groundwater.
6. "Low threat" discharges to land must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
7. "Low threat" discharges to land must not adversely impact the quality or beneficial uses of groundwater in any water wells.
8. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
9. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

2.II.A. Specific Waiver Conditions for Air Conditioner Condensate and Non-contact Cooling Water Discharges to Land

1. Discharges must not contain contact cooling water.
2. Discharges of air conditioner condensate and non-contact cooling water to land must not exceed an average of 1,200 gallons per day for any continuous 365-day period, unless the discharger has filed a Notice of Intent containing information about the operator, location, and planned period of and average daily volume of discharge.

2.II.B. Specific Waiver Conditions for Swimming Pool Discharges to Land

1. Discharges of water from each swimming pool to land must not exceed 50,000 gallons during any continuous 365-day period, unless the discharger has filed a Notice of Intent containing information about the swimming pool location and volume, planned period of and frequency of discharge.

2.II.C. Specific Waiver Conditions for Pumping of Groundwater from Wells to Land

1. The discharge of groundwater pumped from any well that is used in a soil and/or groundwater contamination investigation or corrective action may not be discharged to land, unless the discharger has filed a Notice of Intent containing monitoring data demonstrating that the quality of the proposed discharge would not cause the groundwater at the disposal site to exceed water quality objectives.
2. For multiple applications of groundwater from wells pumped to land over a 365-day period, or a continuous 24-hour (or longer) application of groundwater from wells pumped to land within a 365-day period, the discharger must file a Notice of Intent containing information about the operator, location, planned period of and frequency of discharge, and measures that will be taken to minimize or eliminate the discharge of pollutants that might affect surface water and groundwater quality. Sufficient information demonstrating compliance with waiver conditions must be submitted before the discharge may begin.
3. Groundwater cannot originate from an area that contains any contaminated soil or groundwater.

2.II.D. Specific Waiver Conditions for Dewatering Operations Discharged to Land

1. The discharge of groundwater pumped from any well or excavation that is used in a soil and/or groundwater contamination investigation or corrective action may not be discharged to land, unless the discharger has filed a Notice of Intent containing monitoring data demonstrating that the quality of the proposed discharge would not cause the groundwater at the disposal site to exceed water quality objectives.
2. For dewatering operations that discharge an average of 5,000 gallons per day for any continuous 180-day period, the discharger must file a Notice of Intent containing information about the operator, location, planned period and rate of discharge, and measures that will be taken to minimize or eliminate the discharge of pollutants that might affect groundwater

quality. Sufficient information demonstrating compliance with waiver conditions must be submitted before the discharge may begin.

3. Groundwater cannot originate from an area that contains any contaminated soil or groundwater.

2.II.E. Specific Waiver Conditions for Discharges from Washing Vehicles, Pavement, Buildings, etc. to Land

1. Discharges of wash water and similar intermittent discharges must not exceed an average of 1,200 gallons per day for any continuous 30-day period, unless the discharger has filed a Notice of Intent containing information about the operator, location, and planned period of and average daily volume of discharge.

2.II.F. Specific Waiver Conditions for Discharges from Irrigated Lawns and Landscaping Using Groundwater or Municipal Supply Water

1. Products applied to lawns and landscaping must be in accordance with manufacturer's instructions and guidelines, and must reliably attenuate before infiltrating to underlying groundwater.

2.II.G. Specific Waiver Conditions for Discharges from Structural BMPs that Require Infiltration.

1. Installation of structural BMP that utilizes infiltration must comply with the design criteria of the municipality regulated by MS4 WDRs (NPDES storm water permit), **or**, for any discharge that exceeds an average of 1,200 gallons per day for any continuous 365-day period, the discharger must file a Notice of Intent containing documentation demonstrating that the quality of the proposed discharge from infiltration will not cause the groundwater at the disposal site to exceed water quality objectives.
2. Installation of structural BMPs that require infiltration must comply with local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.

CONDITIONAL WAIVER NO. 3 – DISCHARGES FROM ANIMAL OPERATIONS

Conditional Waiver No. 3 is for discharges from animal operations, which contain pollutants that can percolate to groundwater or runoff to surface waters. Discharges from animal operations include discharges resulting from animal activities and wastes, and storm water runoff which can also transport pollutants from animal operations to surface waters and groundwater.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 3:

- Discharges from small animal feeding operations (less than 300 animal units, where 1 animal unit is equivalent to one cow or 1,000 animal pounds)
- Discharges from medium animal feeding operations (300 to 999 animal units)
- Discharges of storm water runoff
- Discharge/application of manure to soil as an amendment or mulch
- Discharges from grazing lands

In order to be eligible for Conditional Waiver No. 3, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges from animal operations include the following:

3.I.A. General Facility Design and Management Waiver Conditions
3.I.B. General Manure Management Waiver Conditions
3.I.C. General Waiver Conditions for Application of Manure from Animal Operations as a Fertilizer, Amendment, or Mulch to Soil
3.I.D. General Inspection and Reporting Waiver Conditions

3.II.A. Specific Waiver Conditions for Small Animal Feeding Operations
3.II.B. Specific Waiver Conditions for Medium Animal Feeding Operations
3.II.C. Specific Waiver Conditions for Grazing Operations

Discharges from animal operations that comply with the general and specific waiver conditions in Conditional Waiver No. 3 are not expected to pose a threat to the quality of waters of the state.

3.I.A General Facility Design and Management Waiver Conditions

1. Animal operations must comply with any local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.
2. Animal operations must implement management measures (MMs) and/or best management practices (BMPs) to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are provided in *Equestrian-Related Waste Quality Best Management Practices* available from the County of San Diego Department of Agriculture, Weights and Measures, and/or the *Field Office Technical Guide* available from the Natural Resource Conservation Service (NRCS), or other sources.
3. Animal operations must prevent direct contact of animals with surface water bodies. Animals should not be allowed to graze directly adjacent to or within stream banks. Animal operations should maintain a buffer zone or riparian filter strip between the animals and any surface waters of the state. The buffer zone must adequately minimize the discharge of pollutants from an animal operation. There should be no direct exposure of a surface water body to an animal.

3.I.B. General Manure Management Waiver Conditions

1. Animal operations must prevent the direct or indirect discharge of animal wastes (manure, urine, soiled bedding) to any surface waters of the state (including ephemeral streams and vernal pools).

2. Animal operations must properly manage the wastes (i.e., manure, urine, soiled bedding) generated by the animals at the facility in accordance with the following guidelines:
   a) Animal wastes should be collected and disposed of regularly (at least once every two weeks).
   b) Animal wastes can be stored temporarily (no longer than two weeks) on site until disposal, unless animal wastes are composted on site. The amount of animal wastes stored in temporary storage area must not exceed the capacity of the storage area. If animal wastes exceed, or threaten to exceed the capacity of the temporary storage area, the animal wastes should be disposed of immediately.
   c) Areas adjacent to temporary storage area for animal wastes should be graded to prevent storm water and surface runoff from reaching the storage area.
   d) Temporary storage area should be on an impervious surface (e.g., concrete pad or plastic tarp) to prevent leaching of pollutants to groundwater.
   e) Temporary storage area should protected with a roof or cover, or at a minimum be covered with plastic sheeting if precipitation is forecast within the next 24 hours, to prevent direct contact between precipitation and animal wastes.
   f) A buffer zone of at least 100 feet should be maintained between the temporary storage area for animal wastes and any surface water body unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
   g) If animal wastes are used as a fertilizer, soil amendment, or mulch on grazing lands, application of animal wastes to soil must comply with the conditions in 3.I.C.

3.I.C. General Waiver Conditions for Application of Manure from Animal Operations as a Fertilizer, Amendment, or Mulch to Soil

1. If fresh and/or uncomposted manure is applied as a fertilizer, amendment, or mulch to soil, manure must be applied to the same property where the manure was generated.
2. Dried, processed, or composted manure may be applied as a fertilizer, amendment, or mulch to soil on sites other than the property where the manure was generated. Dried, processed, or composted manure may also be applied as a fertilizer, amendment, or mulch to soil on the same property where the manure was generated. Use of dried, processed, or composted manure on or off the property where the manure was generated must comply with the waiver conditions in 3.I.C.
3. A buffer zone of at least 100 feet should be maintained between the manure applied to soil and any surface waters of the state, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.
4. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the NRCS, University of California Cooperative Extension (UCCE), and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.
5. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
6. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

3.I.D. General Inspection and Reporting Waiver Conditions

1. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
2. Animal operations must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

3.II.A. Specific Waiver Conditions for Small Animal Feeding Operations

1. Small animal feeding operations (AFOs) must not discharge any pollutants to waters of the United States through any man-made conveyance, or directly to waters of the United States which originate outside of and pass over, across or through the facility or otherwise come into direct contact with the animals confined in the operation.
2. Small AFOs must be operated and maintained in accordance with the regulations in California Code of Regulations Title 27 sections 22562 through 22565.

3.II.B. Specific Waiver Conditions for Medium Animal Feeding Operations

1. Medium AFOs must not discharge any pollutants to waters of the United States through any man-made conveyance, or directly to waters of the United States which originate outside of and pass over, across or through the facility or otherwise come into direct contact with the animals confined in the operation.
2. Medium AFOs must be operated and maintained in accordance with the regulations in California Code of Regulations Title 27 sections 22562 through 22565.
3. Medium AFO facility owners or operators must file a Notice of Intent with the San Diego Water Board containing, at a minimum, the following information:
   a) Property owner name and address
   b) AFO owner/operator name and address
   c) Number and types of animals
   d) Map of the AFO facility showing the locations of manure stockpiles, nearby surface water bodies, and/or water wells
   e) Description of existing and planned MMs/BMPs for the prevention of erosion and discharges of animal wastes that could affect the quality of waters of the state.

   Sufficient information demonstrating compliance with general and specific waiver conditions must be submitted in order for the medium AFO facility to be eligible for a conditional waiver.

3.II.C. Specific Waiver Conditions for Grazing Operations

1. Grazing operations must manage grazing fields to allow lands to revegetate and minimize topsoil erosion.
2. Owners of pasture and range lands used for grazing, must implement MMs/BMPs to minimize or eliminate any discharge that could adversely affect the quality or beneficial uses of waters of the state.

List of References

The following list of references provides additional information that is available regarding appropriate MMs/BMPs for minimizing pollutants in runoff and other discharges from animal operations.

1. Equestrian-Related Waste Quality Best Management Practices, County of San Diego Department of Agriculture, Weights and Measures
   http://www.sdcounty.ca.gov/awm/docs/equestrian_bmp.pdf

2. Electronic Field Office Technical Guide (eFOTG), United States Department of Agriculture, Natural Resources Conservation Service
   http://www.nrcs.usda.gov/technical/efotg/

3. Agricultural Management Measures, State Water Resources Control Board
   http://www.swrcb.ca.gov/nps/docs/guidance/agricmms.pdf

4. California Nonpoint Source Encyclopedia, State Water Resource Control Board
   http://www.swrcb.ca.gov/nps/docs/encyclopedia/agriculture.pdf

CONDITIONAL WAIVER NO. 4 – DISCHARGES FROM AGRICULTURAL AND NURSERY OPERATIONS

Conditional Waiver No. 4 is for discharges from agricultural and nursery operations, which contain pollutants that can percolate to groundwater or runoff to surface waters. Discharges from agricultural and nursery operations include discharges resulting from growing operations, irrigation return flows, and storm water runoff which can also transport pollutants from agricultural and nursery operations to surface waters and groundwater.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 4:

- Discharges of plant crop residues to land
- Discharges of storm water runoff
- Discharge/application of amendments or mulches to soil
- Discharges of agricultural irrigation return water
- Discharges of nursery irrigation return water

In order to be eligible for Conditional Waiver No. 4, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges from agricultural and nursery operations include the following:

4.I.A. General Facility Design and Management Waiver Conditions
4.I.B. General Enrollment and Education Waiver Conditions
4.I.C. General Waiver Conditions for Application of Compost as a Fertilizer, Amendment, or Mulch to Soil
4.I.D. General Waiver Conditions for Application of Products Used in Agricultural and Nursery Operations
4.I.E. General Inspection and Reporting Requirements

4.II.A. Specific Waiver Conditions for Agricultural Operations
4.II.B. Specific Waiver Conditions for Nursery Operations

Discharges from agricultural and nursery operations that comply with the general and specific waiver conditions in Conditional Waiver No. 4 are not expected to pose a threat to the quality of waters of the state.

4.I.A. General Facility Design and Management Waiver Conditions

1. Agricultural and nursery operations must comply with any local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses.
2. Agricultural and nursery operations must implement management measures (MMs) and/or best management practices (BMPs) to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are available in the State Water Board's Nonpoint Source (NPS) Program Plan and/or available from University of California Cooperative Extension (UCCE), Natural Resources Conservation Service (NRCS), and/or regional resource conservation districts (RCDs).

4.I.B. General Enrollment and Education Waiver Conditions

1. Agricultural and nursery operators must perform a self assessment to identify the pollutants present on the site and assess the potential for runoff and/or infiltration to adversely affect the quality or beneficial uses of the waters of the state. Annual self assessments must be available on site for inspection. If an agricultural or nursery operator does not have proof available during an inspection, the operator must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection. Self assessment questionnaires are available from the UCCE.
2. Agricultural and nursery operators must complete at least 2 hours of water quality management related training annually. Training may include formal classroom training or meetings with a training component. Proof of training must be available on site for inspection.

Agricultural and nursery operators who do not have proof available during an inspection must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection.

3. Agricultural and nursery operators must be in regular contact with the local Farm Bureau, UCCE, NRCS, and/or regional RCDs so they can be informed of the latest MMs/BMPs and developments with water quality issues. Proof of contact (e.g., newsletter addressed to facility, NRCS conservation plan, UCCE self assessment) must be available on site for inspection. Agricultural and nursery operators who do not have proof available during an inspection must submit proof to the inspecting agency and the San Diego Water Board within 45 days from the date of inspection.
4. Agricultural and nursery operations must implement MMs/BMPs to minimize or eliminate the discharge of pollutants that may adversely impact the quality or beneficial uses of waters of the state. Recommended MMs/BMPs are available in the State Water Board's NPS Program Plan and/or available from UCCE, NRCS, and/or regional RCDs.
5. Agricultural and nursery operators shall maintain records pertaining to the water quality management efforts for the operation. The records shall include the following information:
   a) Site map showing locations of MMs/BMPs and nearby surface water bodies and/or water wells
   b) List of hazardous materials kept on the property
   c) Location and amount of waste materials (e.g., green wastes, trash) generated and composted and/or reused on site, or disposed of off site
   d) Pesticide use reports and records
   e) Fertilizer, soil amendment, and mulch use records
   f) Irrigation management records (i.e., water use, irrigation system, irrigation schedule, etc.)
   g) Equipment maintenance records
   h) List of MMs/BMPs implemented to minimize and/or eliminate runoff to surface waters and/or infiltration to groundwater
   i) Owner, operator, and employee education and training records
   j) Inspection reports
   k) Self assessments
   l) Contacts with Farm Bureau, UCCE, NRCS, regional RCDs, and/or other organizations
   m) Copies of any permits, licenses, and certifications required for the operation
   n) Water quality monitoring data (if any)

   Recommended water quality record keeping documentation is available from the UCCE. Water quality management records must be available on site for inspection.
6. **No later than December 31, 2010**, agricultural and nursery operations must form or join a monitoring group. The function of the monitoring group is to perform water quality monitoring and report the results to the San Diego Water Board. Monitoring groups will be allowed to divide the costs associated with the water quality monitoring and reporting requirements in 4.I.E among its members. Individual operations not in a monitoring group will be solely responsible for the costs associated with the water quality monitoring and reporting requirements in 4.I.E.
7. **No later than January 1, 2011**, owners/operators of agricultural and nursery operations must file a Notice of Intent, as either an individual operation or as part of a monitoring group, with the San Diego Water Board.
8. A Notice of Intent submitted by a monitoring group on behalf of its members must contain the following information:
   a) Identify the representative(s) authorized to sign reports submitted on behalf of the group.
   b) An electronic list of landowners and/or operators participating in the monitoring group including: (a) assessor parcel number(s), (b) parcel size, (c) parcel owner or operator name, (d) types of crops grown on each parcel, (e) number of irrigated acres, and (f) parcel owner or operator mailing address.
   c) A detailed map of the area included within the monitoring group, preferably in GIS format, identifying individual parcels and/or districts that are participating in the monitoring group.
   d) A detailed description of irrigation, storm water runoff, nutrient, pesticide, erosion control, composting, and other site-specific MMs/BMPs that have been implemented by each

participant in the monitoring group, which must be provided as a written description, on a map, and/or using pictures.

Monitoring group members are not eligible for this waiver until a complete Notice of Intent is filed. The monitoring group must inform the San Diego Water Board when any member ceases to participate in the monitoring group within 30 days of the cessation of participation. Any member who ceases to participate in a monitoring group must file a Notice of Intent as an individual agricultural or nursery operation, in accordance with waiver condition 4.I.B.9, within 30 days of ceasing to participate in the monitoring group.

9. A Notice of Intent filed by an individual agricultural or nursery operation must contain the following information:
   a) Information about the agricultural or nursery operation including: (a) assessor parcel number(s), (b) parcel size, (c) parcel owner and operator name(s), (d) types of crops grown on each parcel, (e) number of irrigated acres, and (f) parcel owner and operator mailing address(es).
   b) A detailed map of the operation, preferably in GIS format, with locations of operation boundaries, nearby surface waters and water wells.
   c) A detailed description of irrigation, storm water runoff, nutrient, pesticide, erosion control, composting, and other site-specific MMs/BMPs that have been implemented by the operation, which must be provided as a written description, on a map, and/or using pictures.

   An individual agricultural or nursery operation is not eligible for this waiver until a complete Notice of Intent is filed.

4.I.C. General Waiver Conditions for Application of Compost as a Fertilizer, Amendment, or Mulch to Soil

1. Prevent the direct or indirect discharge of amendments or mulches to any surface waters of the state (including ephemeral streams and vernal pools).
2. Plant crop residues may be utilized as soil amendment or mulch.
3. Amendments or mulches applied to soil cannot include any of the following additives, unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.
4. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the NRCS, UCCE, and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.
5. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
6. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

4.I.D. General Waiver Conditions for Application of Products Used in Agricultural and Nursery Operations

1. Prevent the direct or indirect discharge of products used in agricultural or nursery operations to any surface waters of the state (including ephemeral streams and vernal pools).
2. The application of any products used in agricultural or nursery operations that contain pollutants that may be transported in surface runoff to surface waters or may infiltrate to groundwater must be applied in accordance with manufacturer instructions and guidelines, and must not have an adverse effect on the quality of any waters of the state.
3. Excessive amounts of any products used in agricultural or nursery operations spilled to land must be contained and properly disposed.
4. Any products used in agricultural or nursery operations applied to land must not adversely impact the quality or beneficial uses of groundwater in any water wells.

4.I.E. General Inspection and Reporting Waiver Conditions

1. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
2. Owners/operators must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.
3. **By March 31, 2011**, each monitoring group and each individual operation not participating in a monitoring group must contact the San Diego Water Board to begin developing a Monitoring and Reporting Program Plan (MRPP) and a Quality Assurance Project Plan (QAPP).
4. **By January 1, 2012**, each monitoring group and each individual operation not in a monitoring group must submit one MRPP/QAPP to the San Diego Water Board. The MRPP/QAPP must include the monitoring locations, frequency of monitoring, constituents of concern to be monitored, documentation of monitoring protocols, and sufficient information about the agricultural and/or nursery operations to demonstrate that the proposed MRPP/QAPP will adequately document water quality and pollutant loadings, and demonstrate compliance with waiver conditions.
5. **By December 31, 2012**, each monitoring group and each individual operation not participating in a monitoring group must submit one Monitoring Program Report (MRP) to the San Diego Water Board consistent with the MRPP/QAPP.

4.II.A. Specific Waiver Conditions for Agricultural Operations

1. Minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of any waters of the state.
2. Agricultural operators cannot alter surface waters of the state on or off the property, unless the proposed alteration has received a Clean Water Act section 401 Water Quality Certification, individual WDRs, or individual waiver from the San Diego Water Board.

4.II.B. Specific Waiver Conditions for Nursery Operations

1. Prevent the direct or indirect discharge of nursery irrigation return water to any surface waters of the United States.
2. Nursery operations must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of any waters of the state.
3. Nursery operators cannot alter surface waters of the state on or off the property, unless the proposed alteration has received a Clean Water Act section 401 Water Quality Certification, individual WDRs, or individual waiver from the San Diego Water Board.

List of References

The following list of references provides additional information that is available regarding appropriate MMs/BMPs for minimizing pollutants in runoff and other discharges from agricultural and nursery operations.

1. Industrial Storm Water Program, State Water Resources Control Board
   http://www.swrcb.ca.gov/stormwtr/industrial.html

2. Construction Storm Water Permit, State Water Resources Control Board
   http://www.swrcb.ca.gov/stormwtr/gen_const.html

3. Agricultural Management Measures, State Water Resources Control Board
   http://www.swrcb.ca.gov/nps/docs/guidance/agricmms.pdf

4. California Nonpoint Source Encyclopedia, State Water Resource Control Board
   http://www.swrcb.ca.gov/nps/docs/encyclopedia/agriculture.pdf

5. Developing a Management Plan for Irrigation Runoff, Dept. of Horticultural Sciences, Texas A&M University
   http://aggie-horticulture.tamu.edu/greenhouse/nursery/environ/wmplan1.html

6. Management Options for Nonpoint Source Pollution for Greenhouse and Container Crops, UC Cooperative Extension, San Diego
   http://commserv.ucdavis.edu/CESanDiego/Stormwater/index.htm

7. BMPs Nurseries And Greenhouses, County of Orange
   http://www.ocwatershed.com/StormWater/documents_bmp_existing_development.asp#ind

8. Electronic Field Office Technical Guide (eFOTG), Natural Resources Conservation Service
   http://www.nrcs.usda.gov/technical/efotg/

9. Grower Resources (including self assessment questionnaires and water quality record keeping notebook), San Diego County University of California Cooperative Extension
   http://cesandiego.ucdavis.edu/Clean%5FWater/Grower_Resources.htm

CONDITIONAL WAIVER NO. 5 – DISCHARGES FROM SILVICULTURAL OPERATIONS

Conditional Waiver No. 5 is for discharges that originate from forest lands, which contains pollutants that can percolate to groundwater or runoff to surface waters. Discharges from forest lands include discharges resulting from timber operations, and storm water runoff which can also transport pollutants from managed forest lands and timber operations to surface waters and groundwater.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 5:

- Discharges of storm water runoff
- Discharges from timber harvesting projects
- Discharges from wildfire suppression and fuels management activities

In order to be eligible for Conditional Waiver No. 5, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges from silvicultural operations include the following:

5.I.A. General Waiver Conditions for Silvicultural Operations

5.II.A. Specific Waiver Conditions for Timber Operations on Federal Lands
5.II.B. Specific Waiver Conditions for Timber Operations on Non-Federal Lands

Discharges from silvicultural operations that comply with the general and specific waiver conditions in Conditional Waiver No. 5 are not expected to pose a threat to the quality of waters of the state.

5.I.A. General Waiver Conditions for Silvicultural Operations

1. Silvicultural operations (including timber harvesting, timber management, vegetative manipulation, fuels management, road construction, and watershed management) must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
2. Silvicultural operations (including timber harvesting, timber management, vegetative manipulation, fuels management, road construction, and watershed management) must comply with any federal, state, or local, state, and federal permitting, licensing, or certification requirements and applicable regulations and ordinances.
3. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.

5.II.A. Specific Waiver Conditions for Timber Operations on Federal Lands

1. The State Water Board and US Environmental Protection Agency (USEPA) must continue to certify the *Water Quality Management Plan for National Forest System Lands in California*.
2. The US Forest Service (USFS) must maintain: (a) a water quality program consistent with the Basin Plan, and (b) a program to monitor the implementation and effectiveness of management measures (MMs) and/or best management practices (BMPs).
3. The USFS must provide the San Diego Water Board copies of the environmental and decision documents containing information documenting that a multi-disciplinary review of the timber harvest proposal has been conducted, and the proposed MMs/BMPs and additional control measures that will be implemented to protect water quality.
4. The USFS must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

5.II.B. Specific Waiver Conditions for Timber Operations on Non-Federal Lands

1. The State Water Board must continue to certify the *Water Quality Management Plan for Timber Operations on Nonfederal Lands*.
2. Timber operations within 150 feet of existing structures (i.e., "FireSafe" treatments) that are conducted pursuant to a Notice of Exemption approved by the California Department of Forestry (CDF) are not required to provide notice to the San Diego Water Board, but must keep

a copy of the approved Notice of Exemption for at least one year (from the approval date) on site for inspection.

3. For timber operations approved by the CDF pursuant to a Notice of Exemption or Notice of Emergency, a copy of the notice must be provided to the San Diego Water Board.
4. For timber operations with a Timber Harvest Plan (THP) or Non-industrial Timber Management Plan (NTMP) approved by the CDF, a copy of the Plan must be provided to the San Diego Water Board.
5. Owners/operators of non-federal forest lands must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

CONDITIONAL WAIVER NO. 6 – DISCHARGES OF DREDGED OR FILL MATERIALS NEARBY OR WITHIN SURFACE WATERS

Conditional Waiver No. 6 is for discharges of dredged or fill materials nearby or within surface waters of the state. Dredged or fill materials are sources of pollutants that can adversely affect the quality of waters of the state.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 6:

- Discharges from sand and gravel mining operations
- Discharges from dredging projects
- Discharges from stream channel alteration projects
- Other projects proposing to discharge dredged or fill materials nearby or within surface waters of the state.

In order to be eligible for Conditional Waiver No. 6, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges of dredged or fill materials nearby or within surface waters include the following:

6.I.A. General Waiver Conditions for Projects that Discharge Dredged or Fill Material Nearby or Within Surface Waters Required to Obtain a Surface Mining Permit and/or Federal Permit (River and Harbors Act section 10 or Clean Water Act section 404 Permit), and Clean Water Act section 401 Water Quality Certification

6.II.A. Specific Waiver Conditions for Sand and Gravel Mining Operations

Discharges of dredged or fill materials nearby or within surface waters that comply with the general and specific waiver conditions in Conditional Waiver No. 6 are not expected to pose a threat to the quality of waters of the state.

6.I.A. General Waiver Conditions for Projects that Discharge Dredged or Fill Material Nearby or Within Surface Waters Required to Obtain a Surface Mining Permit and/or Federal Permit (River and Harbors Act Section 10 or Clean Water Act Section 404 Permit) and Clean Water Act Section 401 Water Quality Certification[4]

1. Operators must comply with measures included in the Surface Mining Permit and/or Federal Permit and Clean Water Act section 401 Water Quality Certification to protect surface water and groundwater quality.
2. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
3. At least one copy of any permits, licenses, and certifications must be available for on site inspection.
4. Operators must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.

6.II.A. Specific Waiver Conditions for Sand and Gravel Mining Operations

1. Sand and gravel mining operations cannot be conducted in flowing streams or other water bodies.

[4] For projects that discharge dredged or fill material nearby or within surface waters NOT required to obtain a Surface Mining Permit or Federal Permit (River and Harbors Act section 10 or Clean Water Act section 404 Permit) and Clean Water Act section 401 Water Quality Certification, the discharger must file a Report of Waste Discharge (RoWD) with the San Diego Water Board.

CONDITIONAL WAIVER NO. 7 – DISCHARGES OF RECYCLED WATER TO LAND

Conditional Waiver No. 7 is for discharges of recycled water to land. Discharges of recycled water may contain pollutants that can adversely affect the quality of waters of the state. The application of recycled water to land may result in pollutants being concentrated in soils, which may adversely impact the quality of the waters of the state when those concentrated pollutants are leached out during rainfall events and/or overuse of irrigation water. This waiver is not available or applicable to recycled water projects and users subject to rules and regulations established by master reclamation permits (MRPs), issued pursuant to Water Code section 13523.1, or otherwise regulated under waste discharge requirements (WDRs) or water reclamation requirements (WRRs), issued pursuant to Water Code sections 13260 and 13523, respectively.

The following types of discharge not regulated or authorized under WDRs, WRRs, and/or MRP may be eligible for Conditional Waiver No. 7:

- Discharges to land from short-term recycled water projects (without permanent recycled water delivery and/or distribution systems, not to exceed 365 days)
- Discharges to land from permanent recycled water projects (with permanent recycled water delivery and/or distribution systems, limited to the period prior to the discharge being authorized and regulated under WDRs, WRRs, and/or MRP, not to exceed 365 days)

In order to be eligible for Conditional Waiver No. 7, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges of recycled water to land include the following:

7.I.A. General Waiver Conditions for Recycled Water Projects

7.II.A. Specific Waiver Conditions for Short-term Recycled Water Projects
7.II.B. Specific Waiver Conditions for Permanent Recycled Water Projects

Discharges of recycled water to land that comply with the general and specific waiver conditions in Conditional Waiver No. 7 are not expected to pose a threat to the quality of waters of the state.

7.I.A. General Waiver Conditions for Recycled Water Projects

1. Prevent all windblown spray and surface runoff of recycled water on to property not owned or controlled by the discharger by implementation of management measures (MMs) and/or best management practices (BMPs).
2. Recycled water discharged to land must not adversely affect the quality or beneficial uses of underlying groundwater.
3. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
4. The use of recycled water must comply with the requirements of California Code of Regulations Title 22 section 60310(a) through (j), unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality and human health.
5. Recycled water cannot be used for groundwater recharge unless sufficient information is provided to demonstrate that it will be protective of water quality and human health.

7.II.A. Specific Waiver Conditions for Short-term Recycled Water Projects

1. The operator of a short-term project proposing to discharge recycled water must file a Notice of Intent containing information about the operator, location of the project, source of the recycled water, planned period of and frequency of discharge of recycled water, and the MMs/BMPs or other measures that will be taken to eliminate or minimize the discharge of pollutants that might affect surface water and groundwater quality.
2. The Notice of Intent must include a letter from the permitted recycled water agency supplying the recycled water stating that the project will comply with recycled water regulations in California Code of Regulations Title 22, Division 4, Chapter 3, Articles 1 through 10. The letter shall also specify any monitoring and/or reporting required by the recycled water agency

to demonstrate compliance with California Code of Regulations Title 22, Division 4, Chapter 3, Reclamation Criteria, Articles 2, 3, 4, 5, and 5.1.

3. Sufficient information demonstrating that the operator will comply with waiver conditions and applicable recycled water regulations must be submitted before the discharge may begin.
4. The Notice of Intent is valid for 365 days after the submittal of a complete Notice of Intent. A new Notice of Intent must be filed with the San Diego Water Board if the short-term project will exceed 365 days. A new Notice of Intent must be received by the San Diego Water Board at least 60 days prior to the expiration of the previous Notice of Intent. If no new Notice of Intent is received 60 days prior to the expiration of the previous Notice of Intent, the short-term recycled water project must cease operation 365 days after a complete Notice of Intent has been submitted.

7.II.B. Specific Waiver Conditions for Permanent Recycled Water Projects

1. A recycled water agency proposing to supply and/or distribute recycled water through permanently installed facilities or structures before receiving WDRs must file a Report of Waste Discharge (RoWD) pursuant to Water Code sections 13260 and 13522.5 containing the following:
   a) Sufficient information for the San Diego Water Board to determine that the project will be consistent with the Water Quality Control Plan for the San Diego Basin and any State Water Resources Control Board recycled water policies, and will comply with all applicable recycled water regulations.
   b) A letter from the California Department of Public Health (CDPH) stating that the project will comply with recycled water regulations in California Code of Regulations Title 22, Division 4, Chapter 3, Articles 1 through 10. The letter shall also specify any provisions, monitoring, and/or reporting required by the CDPH to demonstrate compliance with California Code of Regulations Title 22, Division 4, Chapter 3, Reclamation Criteria, Articles 2, 3, 4, 5, and 5.1.
   c) A list of recycled water end users that will be regulated by the recycled water agency, and the proposed monitoring and reporting program the recycled water agency will implement to demonstrate that the end users are complying with the waiver conditions and applicable recycled water regulations.
2. The recycled water agency must submit sufficient information demonstrating that the recycled water agency and its end users will comply with waiver conditions and applicable recycled water regulations before the discharge may begin.
3. The conditional waiver issued to the recycled water agency is valid for 365 days after a completed RoWD has been submitted, or until WDRs are adopted for the project, whichever occurs first. The San Diego Water Board will adopt WDRs at the earliest possible opportunity. If the WDRs cannot be adopted within 365 days after the completed RoWD has been submitted, the recycled water agency must request an extension of the conditional waiver at least 60 days prior to the expiration of the previous conditional waiver. If no request for an extension is received 60 days prior to the expiration of the previous conditional waiver, the permanent recycled water project must cease the discharge of recycled water 365 days after the completed RoWD was submitted.
4. If a recycled water agency that obtains a waiver in accordance with the waiver conditions in 7.II.B proposes to significantly add to or modify the treatment process (e.g., change the disinfection or filtration processes), then the discharger shall submit a new RoWD containing the information listed in 7.II.B.1 above.

CONDITIONAL WAIVER NO. 8 – DISCHARGES/DISPOSAL OF SOLID WASTES TO LAND

Conditional Waiver No. 8 is for discharges of solid wastes to land, which may be a source of pollutants that can adversely affect the quality of waters of the state.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 8:

- Discharges of plant crop residues to land
- Discharge/application of amendments and/or mulches to soil
- Discharges/disposal of inert wastes to solid waste disposal facilities only accepting inert wastes
- Discharges of soils containing wastes to temporary waste piles
- Discharges/disposal/reuse of soils characterized as inert from known contaminated sites to land

In order to be eligible for Conditional Waiver No. 8, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges of solid wastes to land include the following:

8.I.A. General Waiver Conditions for Discharges of Solid Wastes to Land

8.II.A. Specific Waiver Conditions for Discharges of Plant Crop Residues to Land
8.II.B. Specific Waiver Conditions for Application of Amendments and Mulches to Soil
8.II.C. Specific Waiver Conditions for the Discharge of Soils Containing Wastes to Temporary Waste Piles
8.II.D. Specific Waiver Conditions for Discharges of Inert Wastes to Solid Waste Disposal Facilities Only Accepting Inert Wastes
8.II.E. Specific Waiver Conditions for the Discharge/Disposal/Reuse of Inert Soils and Materials from Contaminated Sites to Land

Discharges of solid wastes to land that comply with the general and specific waiver conditions in Conditional Waiver No. 8 are not expected to pose a threat to the quality of waters of the state.

8.I.A. General Waiver Conditions for Discharges of Solid Wastes to Land

1. Prevent the direct or indirect discharge of solid wastes to any surface waters of the state (including ephemeral streams and vernal pools).
2. Operations or facilities that accept and/or discharge solid wastes to land must comply with local, state, and federal ordinances and regulations and obtain any required permits, certifications, and/or licenses.
3. Solid wastes must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
4. The discharger must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of waters of the state.
5. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.
6. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

8.II.A. Specific Waiver Conditions for Discharges of Plant Crop Residues to Land

1. Plant crop residues must be managed to prevent transport of pollutants to waters of the state.
2. Plant crop residues may be used as feedstock for composting.
3. Plant crop residues cannot be burned and applied to land.
4. Application of any products (e.g., fertilizers, pesticides) to plants or soil must be used in accordance with manufacturer's guidelines and must not have an adverse effect on the quality of any waters of the state.
5. Concentrations of pesticides and/or herbicides or any other pollutants associated with the plant crop residues must not adversely affect the quality or beneficial uses of underlying groundwater.

6. Implement management measures (MMs) and/or best management practices (BMPs) around areas where plant crop residues have been discharged to land to minimize or eliminate runoff and leachate to surface waters and groundwater.

8.II.B. Specific Waiver Conditions for Application of Amendments and Mulches to Soil

1. Amendments or mulches applied to soil cannot include any of the following additives, unless sufficient information is provided to demonstrate that the waste does not pose a potential threat to water quality: (a) municipal solid wastes; (b) sludges, including sewage sludge, water treatment sludge, and industrial sludge; (c) septage; (d) liquid wastes; (e) oil and grease; and (f) hazardous, designated, and any other wastes determined by the San Diego Water Board to pose a potential threat to water quality.
2. The amount of soil amendment or mulch materials that can be applied to soil must be reasonable for the crop or plant, soil, climate, special local situations, management system, and type of soil amendment or mulch. Application rates must take into account storm events during the rainy season (October-May). Application rates must not allow soil amendment or mulch materials to be transported off the property in storm water runoff during the rainy season. Resources are available from the Natural Resource Conservation Service (NRCS), University of California Cooperative Extension (UCCE), and other organizations. A copy of the calculations and/or estimate of the application rate must be available on site for inspection.
3. Apply amendment or mulch materials to soil at site-specific rates appropriate to the season (i.e., dry vs. rainy).
4. Implement MMs/BMPs in areas with soil amendment or mulch materials to minimize or eliminate runoff and leachate to surface waters and groundwater.

8.II.C. Specific Waiver Conditions for the Discharge of Soils Containing Wastes to Temporary Waste Piles

1. For ***any soils containing wastes*** temporarily stored in waste piles, the following conditions apply:
   a) The discharger must submit a signed/completed Section A of the Temporary Waste Pile Certification form within 30 days of the initial discharge of any waste piles to be eligible for this waiver. The property owner must approve and acknowledge the placement of the waste at the site.
   b) The discharger must submit a signed/completed Section B of the Temporary Waste Pile Certification form within 10 working days of completing removal of all waste and restoring the site to its original condition.
   c) Unless otherwise specified in the applicable conditions, no temporary waste piles may remain on a site for longer than 6 months or 180 days.
   d) The temporary discharge of waste must not (a) cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin; (b) cause the occurrence of objectionable tastes and odors in water pumped from basin; (c) cause waters pumped from the basin to foam; (d) cause the presence of toxic materials in waters pumped from the basin; (e) cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0; (f) cause pollution, contamination or nuisance or adversely affect the quality or beneficial uses of groundwater or surface waters of the hydrologic subareas established in the Basin Plan; and/or, (g) cause a violation of any discharge prohibitions in the Basin Plan for the San Diego Region.
   e) The discharger must conduct regular inspections of temporary waste piles and associated MMs/BMPs at least once per week. Corrective actions must be taken as necessary to ensure compliance with the conditions of this waiver.
   f) Surface drainage must be diverted away from the temporary waste piles. For all temporary waste piles, the discharger must implement effective MMs/BMPs to prevent surface water runon and runoff from contacting wastes and to prevent erosion and transport of wastes by surface runoff.
   g) Temporary waste piles must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from any surface water of the state, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality.

h) Temporary waste piles must be protected against 100-year peak stream flows as defined by the County flood control agency.
i) Temporary waste piles must be covered by plastic sheeting (not less than 10 mils thick, unless otherwise specified under the applicable Special Conditions) to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances.
j) Temporary waste piles must be underlain by either plastic sheeting (not less than 10 mils thick, unless otherwise specified under the applicable conditions) or a liner of low permeability that will prevent leachate from infiltrating to groundwater.
k) Solid wastes discharged to temporary waste piles, together with any containment materials used at the temporary waste pile, and any underlying geologic materials impacted by the discharge, shall be removed within 180 days, unless otherwise specified under the applicable Special Conditions. Subsequently, the discharger must remove all wastes, treatment facilities, related equipment, and dispose of those items in accordance with applicable regulations. The site must be restored to its original state within 30 days after the temporary waste pile is removed, unless otherwise specified under the applicable Special Conditions.
l) The discharger must post at least one clearly visible sign listing the following minimum information: a) project name, b) name and address of discharger, c) brief project description, and d) 24-hour contact information – name, address, facsimile, and telephone number for the project for as long as the temporary waste pile remains on the site.

2. For ***soils containing petroleum hydrocarbons*** temporarily stored in waste piles, the following conditions apply:
   a) Soils and associated solid waste containing petroleum hydrocarbons discharged into temporary waste piles shall be limited to a maximum time period of 3 months or 90 days on a site.
   b) Soils and associated solid waste containing petroleum hydrocarbons discharged into temporary waste piles under an initial certification report must be derived from only one source (e.g., one unauthorized release site).
   c) Temporary waste piles must be covered by plastic sheeting (not less than 10 mils thick) to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances.
   d) Temporary waste piles must be underlain by either plastic sheeting (not less than 10 mils thick) or a liner of low permeability that will prevent leachate from infiltrating to groundwater.
   e) In addition to the conditions stated herein, temporary waste piles must conform to applicable provisions in the state's local oversight program (LOP) for Orange, Riverside, or San Diego Counties.
   f) The site must be restored to its original state within 30 days after removal of the temporary waste pile from the site.
3. For ***dredged spoils containing heavy metals*** temporarily stored in waste piles, the following conditions apply:
   a) Dredged spoils and associated solid waste containing heavy metals discharged into temporary waste piles shall be limited to a maximum time period of 9 months or 270 days on a site.
   b) Temporary waste piles must be covered by either a plastic sheeting to adequately prevent rainwater infiltration, control fugitive dust, and other nuisances. Alternative control methods may be utilized if sufficient information is provided to demonstrate that the proposed alternative is protective of water quality and human health.
   c) Temporary waste piles must be underlain by plastic sheeting (not less than 20 mils thick) or a liner of lower permeability that will prevent leachate from infiltrating to groundwater. Sufficient information must be provided to the San Diego Water Board demonstrating that the liner and containment facility has been designed to contain all solid wastes and fluids.
   d) Materials used in containment structures must have the appropriate chemical and physical properties to ensure that such structures do not fail to contain waste because of: the stress of installation, pressure gradients, physical contact with the waste or leachate, or chemical reactions with soil and rock.

e) The site must be restored to its original state within 60 days after removal of the temporary waste pile from the site.

8.II.D. Specific Waiver Conditions for Solid Waste Disposal Facilities Accepting Only Inert Wastes[5]

1. Inert solid waste must not contain hazardous waste, or soluble or decomposable constituents to be considered inert waste.
2. Inert waste cannot contain any "free liquids."[6]
3. Owner/operator of disposal facility must secure the disposal site and prevent unauthorized disposal by the public.
4. Inert wastes exclude any wastes determined by the San Diego Water Board to potentially have an adverse affect on the quality or beneficial uses of waters of the state, even if classified as inert waste.

8.II.E. Specific Waiver Conditions for the Discharge/Reuse of Inert Soils and Materials from Contaminated Sites

1. For ***all waste soils characterized as inert (Tier 1 or Tier 2)***, the following conditions apply:
   a) Inert waste soils from known contaminated sites cannot be transported off site and discharged/disposed/reused directly or indirectly to any surface waters of the state (including ephemeral streams and vernal pools).
   b) Inert waste soils from known contaminated sites cannot contain significant quantities of decomposable waste.
   c) Inert waste soils from known contaminated sites cannot contain any "free liquids."[7]
   d) Inert waste soils that are discharged/disposed/reused at any site cannot have any hydrocarbon, chlorinated solvent, or other contaminant-based odor.
   e) Sites that export or import soils characterized as inert from known contaminated sites for use as fill material or any other purpose must comply with an applicable federal, state, or local permitting requirements, regulations, and/or ordinances pertaining to the use of imported soil.
   f) Sites that export or import soils characterized as inert from known contaminated sites for use as fill material or any other purpose must implement MMs/BMPs to eliminate the potential for erosion and transport of sediment off the site.
   g) This conditional waiver does not authorize the discharge/disposal/reuse of soil characterized as inert from known contaminated sites outside the boundaries of the San Diego Region.
   h) Prior to exporting soil characterized as inert from a known contaminated site, the owner/operator of the export site must file a Notice of Intent with the San Diego Water Board. The Notice of Intent must be filed no less than 3 days prior to the beginning of export shipments. The Notice of Intent must include information about the site owner/operator, map of the site showing the locations of excavations, borings and/or stockpiles, MMs/BMPs that will be taken to prevent discharges of waste soil that could affect surface water and groundwater quality, estimated volumes (can be a range of volumes) of inert waste soil that will be generated for use off the site, estimated number (can be a range) and locations of samples that will be collected for characterization, and name of the certified environmental analytical laboratory that will perform the analysis.
   i) Waste soils from a site with a known or discovered unauthorized release must be characterized and certified as inert in order for the soil to be reused off site. Characterization and certification must include the following minimum requirements:
      i) All waste soils generated during remediation or corrective action must be stockpiled on the site in accordance with the waiver conditions for the discharge of specified soils containing wastes to temporary waste piles. Or, waste soils may be sampled and characterized in-situ prior to transport and disposal or reuse off site

[5] According to California Code of Regulations Title 27 section 20230(a) "Inert waste" is defined as "that subset of solid waste that does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste."

[6] "Free liquids" defined by California Code of Regulations Title 27 section 20164 as "liquid which readily separates from the solid portions of waste under ambient temperature and pressure."

[7] "Ibid.

ii) Waste soil must be segregated into 2 categories:
   (A) Soil that is impacted by the unauthorized release must be characterized as hazardous, designated, and/or non-hazardous waste and handled in accordance with regulatory requirements for the disposal of solid wastes. Waste soils that do not visually appear impacted, but smells impacted, must be treated as impacted soil and cannot be characterized as inert.
   (B) Soil that does not appear to be impacted by the unauthorized release, by visual inspection and odor, must be sampled and analyzed to confirm the soil can be characterized as inert waste soil.

iii) Samples must be collected from the waste soil suspected to be inert for laboratory analysis. The minimum number is samples required to characterize the soil is as follows:

Volume of Soil	Required Number of Samples Analyzed
0 to <500 cy	4 samples per 100 cy (12 minimum)
500 to <5,000 cy	1 additional sample per additional 500 cy
5,000 cy or more	1 additional sample per additional 1,000 cy[8]

cy = cubic yards

iv) Samples must be analyzed by a state-certified analytical laboratory using USEPA approved analytical methods for the following constituents:
   (A) Total concentrations of those Title 22 metals identified as contaminants of concern for the export site. For sites identified with burn ash (i.e., a site where solid waste has been burned at low temperature and the residual burn ash pits and burn ash layers are present in soil), the site shall be investigated and the burn ash will be characterized for disposal purposes according to the protocol established by the lead regulatory agency (e.g., Department of Toxic Substances Control, California Integrated Waste Management Board, or others) to identify contaminants of concern at the site. The soil outside of the area of impact of the burn ash shall be tested for the total concentration of those metals identified as contaminants of concern based on the findings of the burn ash investigation technical study.
   (B) Total petroleum hydrocarbons (by USEPA Method 8015 – full scan if export site includes oil or fuel as potential or actual contaminants of concern)
   (C) Polychlorinated biphenyls (if export site includes PCBs as potential or actual contaminants of concern)
   (D) Volatile and semi-volatile organic compounds (if export site includes volatile and semi-volatile organic compounds as potential or actual contaminants of concern)
   (E) Pesticides (if export site includes a known agricultural area, or pesticides as potential or actual contaminants of concern)
   (F) Other constituents (if contaminated portion of the export site is found to contain other pollutants or contaminants)

j) *If analytical results indicate detectable concentrations of constituents other than Title 22 metals, waste soil cannot be characterized as iner*t.

[8] Volumes greater than 10,000 cubic yards may rely on fewer samples than 1 per each additional 1,000 cubic yards if characterization complies with SW846 methods for selecting appropriate numbers of samples for waste characterization and statistical analyses. The appropriate number of samples is the least number of samples required to generate a sufficiently representative estimate of the true mean concentration of a chemical contaminant of a waste.

2. For reuse of ***Tier 1 inert waste soils (full unrestricted reuse within the San Diego Region)***, the following conditions apply:
   a) Soil cannot contain any detectable concentrations of contaminants other than Title 22 metals.
   b) For those Title 22 metals that have been identified as contaminants of concern for the export Site, samples shall be analyzed by an SW846 method using the reporting limits set forth in the Table provided in Attachment 1. From these data, the 90 percent upper confidence level (UCL) shall be determined. Prior to calculating the 90 percent UCL, one must determine whether the sample set is normally, lognormally or non-normally distributed. If lognormally distributed, one must determine the 90 percent UCL on the lognormal mean. If non-normally distributed, but sufficiently symmetrical, calculate the 90 percent UCL on the median (50^{th} percentile), instead of the mean. See USEPA SW846 Chapter 9 and the USEPA Guidance for Data Quality Assessment for a discussion of waste characterization and statistical analysis; in particular the guidance on testing for normality, calculating a 90 percent UCL, and handling of non-detected values.[9]

[9] See U.S. Environmental Protection Agency, Office of Solid Waste. 1986. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods;* http://www.epa.gov/epaoswer/hazwaste/test/pdfs/chap9.pdf; and USEPA 2002, RCRA Waste Sampling Draft Technical Guidance, EPA 530-D-02-002 (Appendix F). Office of Solid Waste.

Tier 1 Soil Screening Levels

Title 22 Metals	Inert Waste Target[a] (mg/kg)	Residential CHHSL[b] (mg/kg)	e-PRG[c] (mg/kg)	Background[d] Mean (mg/kg)	Tier 1 SSL[e,f] (mg/kg)
Antimony	6.0	30	5.0	0.60	**5.0**
Arsenic	50	0.07	9.9	3.5	**3.5**
Barium	1,000	5,200	283	509	**509**
Beryllium	4.0	150	10	1.28	**4.0**
Cadmium	5.0	1.7	4.0	0.36	**1.7**
Chromium, Total	50	NA	0.4	122	**50**
Chromium, Hexavalent	50	17	NA	NA	**17**
Cobalt	NA	660	20	14.9	**20**
Copper	1,300	3,000	60	28.7	**60**
Lead	15	150	40.5	23.9	**15**
Mercury	2.0	18	0.00051	0.26	**0.26**
Molybdenum	NA	380	2.0	1.3	**2.0**
Nickel	100	1,600	30	57	**57**
Selenium	50	380	0.21	0.058	**0.21**
Silver	NA	380	2.0	0.80	**2.0**
Thallium	2.0	5.0	1.0	0.56	**1.0**
Vanadium	50	530	2.0	112	**50**
Zinc	NA	23,000	8.5	149	**149**

a. Calculated using Central Valley Water Board Designated Level Methodology, where the Water Quality Goal is the lower value of the Federal or State drinking water primary maximum contaminant level, the Environmental Attenuation Factor is 10, and the Leachability Factor is 100.

b. Values taken from the California Environmental Protection Agency's *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties* (CalEPA 2005).

c. Taken from Oak Ridge National Laboratory's *Preliminary Remediation Goals for Ecological Endpoints* (Efroymson, et al 1997)

d. Taken from Kearney Foundation of Soil Science Division of Agriculture and Natural Resources, University of California *Background Concentrations of Trace and Major Elements in California Soil – Special Report* (Bradford, et al 1996).

e. Tier 1 Soil Screening Level for inert waste soils that can be reused without restriction. Tier I SSLs selected based on the following steps: Step 1) Select lower value of Residential CHHSL or e-PRG; Step 2) Select lower value of Step 1 or Inert Waste Target; and, Step 3) Select higher value of Step 2 and Arithmetic Mean Background.

f. These values are not intended to provide clean up levels for soil remaining on-site. Such values should be established based on the contaminants of concern, the site use, and in conjunction with the regulatory agency providing oversight for the remediation effort.

c) An Inert Waste Certification must be filed with the San Diego Water Board by the owner/operator of the export site within 30 days following completion of export activities. The Inert Waste Certification must include the following information:
   i) Generator name and contact information
   ii) Export site location, owner name and contact information
   iii) Map of the export site showing the location of the excavation, borings, stockpiles, and/or samples collected
   iv) Approximate volume of inert waste soil exported from the site
   v) Description of BMPs implemented to prevent discharge of waste soil off the export site during excavation and transport.
   vi) Laboratory analytical data, including number of samples collected, EPA approved analytical methods used, the 90 percent UCL of the data for the contaminants of concern, and name of certified environmental analytical laboratory that performed the analysis.
   vii) The export site owner, principal executive officer, or authorized representative, and a California registered professional engineer or geologist must sign and certify the Inert Waste Certification. The Inert Waste Certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment*."

3. For reuse of ***Tier 2 inert waste soils (only for commercial or industrial development purposes within the San Diego Region)***, the following conditions apply:
   a) Soil cannot contain any detectable concentrations of contaminants other than Title 22 metals.
   b) Samples shall be analyzed by an SW846 method using the reporting limits set forth in the Table provided in Attachment 1. From these data, the 90 percent UCL shall be determined. Prior to calculating the 90 percent UCL, one must determine whether the sample set is normally, lognormally or non-normally distributed. If lognormally distributed, one must determine the 90 percent UCL on the lognormal mean. If non-normally distributed, but sufficiently symmetrical, calculate the 90 percent UCL on the median (50th percentile), instead of the mean. See USEPA SW846 Chapter 9 and the USEPA Guidance for Data Quality Assessment for a discussion of waste characterization and statistical analysis; in particular the guidance on testing for normality, calculating a 90 percent UCL, and handling of non-detected values.[10]

[10] See U.S. Environmental Protection Agency, Office of Solid Waste. 1986. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods;* http://www.epa.gov/epaoswer/hazwaste/test/pdfs/chap9.pdf; and USEPA 2002, RCRA Waste Sampling Draft Technical Guidance, EPA 530-D-02-002 (Appendix F). Office of Solid Waste.

Tier 2 Soil Screening Levels

Pollutant	Inert Waste Target[a] (mg/kg)	Industrial CHHSL[b] (mg/kg)	Background[d]		TTLC[e] (mg/kg)	Tier 2 SSL[f,g] (mg/kg)
			Max (mg/kg)	½ Max (mg/kg)		
Antimony	6.0	380	1.95	0.98	500	**6.0**
Arsenic	50	0.24	11	5.5	500	**5.5**
Barium	1,000	63,000	1,400	700	10,000	**1,000**
Beryllium	4.0	1,700	2.7	1.4	75	**4**
Cadmium	5.0	7.5	1.70	0.85	100	**5**
Chromium, Total	50	100,000	1,579	790	2,500	**790**
Chromium, Hexavalent	50	37	NA	NA	500	**37**
Cobalt	NA	3,200	46.9	23.5	8,000	**3,200**
Copper	1,300	38,000	96.4	48.2	2,500	**1,300**
Lead	15	3,500	97.1	48.6	1,000	**49**
Mercury	2.0	180	0.90	0.45	20	**2**
Molybdenum	NA	4,800	9.6	4.8	3,500	**3,500***
Nickel	100	16,000	509	255	2,000	**255**
Selenium	50	4,800	0.43	0.22	100	**50**
Silver	NA	4,800	8.30	4.2	500	**500***
Thallium	2.0	63	1.10	0.55	700	**2**
Vanadium	50	6,700	288	144	2,400	**144**
Zinc	NA	100,000	236	118	5,000	**5,000***

* None of the analytical results from any samples collected to characterize the waste soil can exceed the Tier 2 Soil Screening Level for this pollutant.

a. Calculated using Central Valley Water Board Designated Level Methodology, where the Water Quality Goal is the lower value of the Federal or State drinking water primary maximum contaminant level, the Environmental Attenuation Factor is 10, and the Leachability Factor is 100.

b. Values taken from the California Environmental Protection Agency's *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties* (CalEPA 2005).

c. Taken from Oak Ridge National Laboratory's *Preliminary Remediation Goals for Ecological Endpoints* (Efroymson, et al 1997).

d. Taken from Kearney Foundation of Soil Science Division of Agriculture and Natural Resources, University of California *Background Concentrations of Trace and Major Elements in California Soil – Special Report* (Bradford, et al 1996).

e. Total Threshold Limit Concentration. Concentrations above the TTLC would be classified as hazardous waste.

f. Tier 2 Soil Screening Level for inert waste soils that can be reused only for commercial or industrial land use designation. Tier II SSLs selected based on the following steps: Step 1) Select lower value of Industrial CHHSL or Inert Waste Target; Step 2) Select higher value of Step 1 or ½ Maximum Background; and, Step 3) Select lower value of Step 2 and Total Threshold Limit Concentration.

g. These values are not intended to provide clean up levels for soil remaining on-site. Such values should be established based on the contaminants of concern, the site use, and in conjunction with the regulatory agency providing oversight for the remediation effort.

c) An Inert Waste Certification must be filed with the San Diego Water Board by the owner/operator of the export site within 30 days following export and placement of the soil. The Inert Waste Certification must include the following information:
   i) Generator name and contact information
   ii) Export site location, owner name and contact information
   iii) Approximate volume of inert waste soil exported from the site
   iv) Description of BMPs implemented to prevent discharge of waste soil off the export site during excavation and transport.
   v) Laboratory analytical data, including number of samples collected, EPA approved analytical methods used, the 90 percent UCL of the data for the contaminants of concern, and name of certified environmental analytical laboratory performing analysis
   vi) Import site owner name and contact information, with a map of the site location showing nearby surface water bodies, approximate depth to groundwater, and BMPs that will be implemented to eliminate the potential for discharge of inert waste soils to surface waters.
   vii) The import site owner, principal executive officer, or authorized representative must provide a signature acknowledging the receipt or planned receipt of the inert waste soil.
   viii) The export site owner, principal executive officer, or authorized representative, and a California registered professional engineer or geologist must sign and certify the Inert Waste Certification. The Inert Waste Certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment*."

d) Tier 2 inert waste soil reused at commercial or industrial development sites must comply with the following conditions:
   i) Tier 2 inert waste soil may only be reused on commercial or industrial sites. It may not be reused at residential, school, or park sites.
   ii) Tier 2 inert waste soil must be placed at least 5 feet above the highest historically known or anticipated level of groundwater. The soil that separates the inert waste soil from groundwater shall have a significant clay content (greater than 5 percent clay material) or an in-situ permeability of less than 10^{-5} cm/sec.
   iii) Tier 2 inert waste shall be placed at least 100 feet from the nearest surface water body.
   iv) Tier 2 inert waste shall be protected against 100-year peak stream flows as defined by the County flood control agency.
   v) Tier 2 inert waste shall be covered by either: 1) engineered materials (e.g. used as road base, fill beneath buildings, bridge abutments), or 2) not less than 2 feet of noncontaminated, clean fill. The cover shall have a permeability of no more than 10^{-5} cm/sec. Placement of a cover on the inert waste soils shall be completed with 30 days of discharging the final load of inert waste soils at the import site.

CONDITIONAL WAIVER NO. 9 – DISCHARGES OF SLURRIES TO LAND

Conditional Waiver No. 9 is for discharges of slurries to land, which may be a source of pollutants that can adversely affect the quality of waters of the state. A slurry typically consists of water and some material to form a liquid mixture.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 9:

- Discharges of drilling muds to land
- Discharges of concrete grinding residues to land

In order to be eligible for Conditional Waiver No. 9, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to discharges of slurries to land include the following:

9.I.A. General Waiver Conditions for Slurries Discharged to Land

9.II.A. Specific Waiver Conditions for Discharges of Drilling Mud to Land

Discharges of slurries to land that comply with the general and specific waiver conditions in Conditional Waiver No. 9 are not expected to pose a threat to the quality of waters of the state.

9.I.A General Waiver Conditions for Slurries Discharged to Land

1. Prevent the direct or indirect discharge of slurries to any surface waters of the state (including ephemeral streams and vernal pools).
2. Slurries must be contained to eliminate the potential for runoff from the site.
3. If slurries are discharged to land for storage, the storage area or sump must be designed to be fully contained and ensure no overflow during discharge with at least 2 feet of freeboard.
4. The floor of the storage area or sump must be at least 5 feet above the highest known historical or anticipated groundwater level.
5. The walls of the storage area or sump must be at least 100 feet away from any surface water body or municipal water well.
6. Slurries cannot contain any toxic or hazardous constituents.
7. Slurries discharged to land must not adversely affect the quality or beneficial uses of underlying groundwater.
8. Slurries must be removed and disposed of at an appropriate disposal facility prior to restoring the storage area or sump to pre-discharge conditions.
9. The storage area or sump must be filled in and restored to pre-discharge conditions.
10. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

9.II.A. Specific Waiver Conditions for Discharge of Drilling Muds

1. Drilling mud cannot be from borings advanced for a soil or groundwater contamination investigation.

CONDITIONAL WAIVER NO. 10 – DISCHARGES OF EMERGENCY/DISASTER RELATED WASTES

Conditional Waiver No. 10 is for discharges of wastes resulting from an emergency or disaster, which may be a source of pollutants that can adversely affect the quality of waters of the state.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 10:

- Incidental discharges of oil and oily water within a response area during an oil spill response in marine waters
- Discharges of disaster related wastes to temporary waste piles and surface impoundments
- Discharges of mass mortality wastes temporary waste piles and emergency landfills
- Other discharges of emergency/disaster related wastes

In order to be eligible for Conditional Waiver No. 10, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to emergency/disaster related waste discharges include the following:

10.I.A. General Waiver Conditions for Discharges of Emergency/Disaster Related Wastes

10.II.A. Specific Waiver Conditions for Incidental Discharges During an Oil Spill Response
10.II.B. Specific Waiver Conditions for Disaster Related and Mass Mortality Wastes Disposed at Regulated Waste Disposal Facilities
10.II.C. Specific Waiver Conditions for Disaster Related and Mass Mortality Wastes Discharged to Temporary Waste Piles Located at Regulated Waste Disposal Facilities
10.II.D. Specific Waiver Conditions for Disaster Related Wastes Discharged to Temporary Waste Piles NOT Located at Regulated Waste Disposal Facilities
10.II.E. Specific Waiver Conditions for Disaster Related Wastes Discharged to Temporary Surface Impoundments NOT Located at Regulated Waste Disposal Facilities
10.II.F. Specific Waiver Conditions for Mass Mortality Wastes Discharged to Emergency Landfills NOT Located at Regulated Waste Disposal Facilities

Discharges of emergency/disaster related wastes that comply with the general and specific waiver conditions in Conditional Waiver No. 10 should minimize the potential impact and should not pose a significant threat to the quality of waters of the state.

10.I.A. General Waiver Conditions for Discharges of Emergency/Disaster Related Wastes

1. This conditional waiver does not become active and available until one of the following occurs:
   a) The Governor of California issues a proclamation, pursuant to Government Code sections 8625 and 8558(b), identifying a portion of the San Diego Region as being in a state of emergency, and applies only to disaster related waste streams from disaster-impacted areas; or
   b) An oil spill incident occurs in the marine waters of the San Diego Region requiring a response authorized by the Administrator of the Office of Spill Prevention and Response; or
   c) A discharge occurs resulting from emergency activities that are waived of the requirements of Water Code sections 13260(a) and (c), 13263(a), and 13264(a), which are described in Water Code section 13269(c)(1) and (2).
2. This conditional waiver is only in effect temporarily and shall expire under the following conditions:
   a) The state of emergency declared by the Governor expires, or
   b) The San Diego Water Board takes action to terminate enrollment of individual or all dischargers/Units temporarily granted a waiver, or
   c) Six (6) months has elapsed since the Governor issued a declaration of the State of emergency for any portion of the San Diego Region, or the oil spill incident occurred, or emergency activities began, unless otherwise directed by the San Diego Water Board.

3. Emergency/disaster related waste management and cleanup activities must minimize or eliminate the discharge of any pollutants that could adversely affect the quality or beneficial uses of the waters of the state.
4. For all temporary waste piles and surface impoundments used to manage emergency/disaster related waste, the following conditions apply:
   a) Prevent the direct or indirect discharge of emergency/disaster related wastes to any surface waters of the state (including ephemeral streams and vernal pools).
   b) Emergency/disaster related waste management operations shall not be performed in a manner that creates, or contributes to a condition of pollution or nuisance.
   c) Emergency/disaster related waste management operations shall not be performed in a manner that creates, or contributes to conditions which violate the waste discharge prohibitions promulgated in the Basin Plan.
   d) Emergency/disaster related wastes shall not be managed in a manner that causes corrosion, decay, or otherwise reduces or impairs the integrity of containment structures at any waste management unit.[11]
   e) Emergency/disaster related wastes shall not be managed in a manner that mixes or commingles other wastes that can produce a violent reaction (including heat, pressure, fire or explosion), that can produce toxic byproducts, or that can produce any reaction products requiring a higher level of containment, or results in the mixture being classified as a restricted waste.[12]
   f) Liquid hazardous wastes or "restricted hazardous wastes"[13] cannot be discharged to municipal solid waste (MSW) landfills, temporary waste piles, or temporary surface impoundments.
   g) Temporary waste piles must be covered to adequately prevent rainwater infiltration and runoff, and control fugitive dust, vectors, odors, blowing litter and scavenging. The cover shall not consist of or contain material classified as a designated waste.[14]
   h) Inert wastes[15] that are suitable for reuse or recycling do not require permanent disposal at a classified waste management or disposal facility (i.e., permitted landfill).
   i) Waste streams must only originate from disaster-impacted areas of the San Diego Region. These waste streams shall be discharged for treatment and permanent disposal **only** into:
      i) Waste management or treatment units (e.g., liquid wastes into wastewater treatment plants) as allowed by waste discharge requirements (WDRs) issued by the San Diego Water Board, or
      ii) Solid waste management units or disposal facilities (e.g., solid wastes into Class III MSW landfills underlain with engineered composite liners and leachate collection systems and that satisfy the requirements of State Water Board Resolution No. 93-62); or
      iii) Emergency landfills established in accordance with the conditions of this waiver; and
      iv) As allowed by valid WDRs issued by the San Diego Water Board for other categories of waste management units.

10.II.A. Specific Waiver Conditions for Incidental Discharges During an Oil Spill Response

1. Incidental discharges[16] are confined to the response area which is defined by the daily work plan approved under the Incident Command System or Unified Command Structure by the Administrator, Federal On-Scene Coordinator, or State On-Scene Coordinator.
2. Oil spill response must be in marine waters.[17]

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[11] Pursuant to California Code of Regulations Title 27 section 20200(b)(1)
[12] Pursuant to California Code of Regulations Title 27 section 20200(b)(2)
[13] Defined in California Health and Safety Code section 25122.7
[14] Defined in California Code of Regulations Title 27 section 20210
[15] Defined in California Code of Regulations Title 27 section 20230
[16] "Incidental discharge" is defined as "the release of oil and/or oily water within the response area in or proximate to the area in which the oil recovery activities are taking place during and attendant to oil spill response activities. Incidental discharges include, but are not limited to, the decanting of oily water; in order to conserve oil storage capacity, and the wash down of vessels, facilities, and equipment used in the response."
[17] "Marine waters" defined in Government Code section 8670.3(i) as "those waters subject to tidal influence"

10.II.B. Specific Waiver Conditions for Disaster Related and Mass Mortality Wastes Disposed at Regulated Waste Disposal Facilities

1. Waste (not otherwise suitable for recycling or reuse) derived from cleanup of emergency/disaster-impacted areas in the San Diego Region and managed under provisions of this waiver shall only be discharged *for permanent disposal into units that are underlain with an engineered composite liner system and a leachate collection meeting the requirements of State Water Board Resolution No. 93-62*.
2. Wastes derived from cleanup of disaster-impacted areas in the San Diego Region and discharged into regulated waste disposal facilities must be isolated, to the extent practicable, from areas of the facility that are not lined.
3. Food wastes, animal carcasses, and other putrescible wastes derived from cleanup of disaster-impacted areas in the San Diego Region shall be discharged for disposal in compliance with conditions of this waiver and covered expeditiously.
4. Inert wastes contained in mixed emergency wastes derived from cleanup of disaster-impacted areas in the San Diego Region, shall be separated and recycled when appropriate and practicable.
5. The discharger is responsible for accurately classifying disaster related waste streams in accordance with the applicable regulatory requirements.[18]
6. The regulated waste disposal facility owner/operator is responsible for properly identifying disaster related waste streams[19] and identifying wastes that may be suitable for use as alternative daily cover (ADC). Solid wastes that may be used as ADC at a regulated disposal facility are as follows:
   a) Solid wastes that are classified as inert wastes.
   b) Solid wastes that meet the criteria for ADC as prescribed in California Code of Regulations Title 27 sections 20690 to 20705, and.
   c) Other solid wastes identified by the Local Enforcement Agency (LEA) as being suitable for use as ADC; so long as the waste could be accepted at a Class III MSW landfill without special permission from the San Diego Water Board.
7. Disposal of large numbers of animal carcasses, and other high moisture waste streams from mass mortality (e.g., natural disaster, agricultural disease, etc.), may cause wastes to exceed moisture holding capacity at regulated MSW landfills. To limit the impacts from such a large an additional moisture content associated with a mass mortality waste load, the owner/operator responsible for the regulated waste disposal facility should implement the following procedures:
   a) Discharge high-moisture wastes (animal carcasses, animal related wastes, etc.) only in areas of the composite lined unit with a considerable thickness of other waste.
   b) Owner/operator must limit the thickness of the high-moisture waste stream (e.g., animal carcasses, animal related wastes, etc.) to no more than 2 feet.
   c) Owner/operator must cover each layer of high-moisture wastes (e.g., animal carcasses, animal related wastes, etc.) with an even thicker layer of absorbent wastes or soil.
   d) For disaster related mass mortality wastes streams that are in a liquid form (e.g. raw eggs, etc.) reduce the moisture content prior to discharge by mixing with an absorbent material (e.g., saw dust, mulch, soil, etc.).
8. Within 60 days after the expiration of this waiver (see 10.I.A) the owner/operator of the a regulated waste disposal facility that accepted waste from disaster-impacted areas in the San Diego Region must submit an amendment to their Report of Waste Discharge (RoWD) (Joint Technical Document) describing the material change to their discharge, pertaining to the temporary acceptance, management, and disposal of waste derived from cleanup of disaster-impacted areas of the San Diego Region.

10.II.C. Specific Waiver Conditions for Disaster Related and Mass Mortality Wastes Discharged to Temporary Waste Piles Located at Regulated Waste Disposal Facilities

1. Owners/operators of regulated waste management or disposal facilities proposing to accept discharges of waste from disaster-impacted areas in the San Diego Region to a temporary

[18] Requirements are provided in California Code of Regulations Title 27, Title 23 Chapter 15, and/or Title 22 Division 4.5.
[19] Pursuant to California Code of Regulations Title 27 section 20200(c)

waste staging area located at a regulated facility must submit a Notice of Intent to the San Diego Water Board within 30 days of the initial discharge of any disaster related wastes. The Notice of Intent must contain the name and contact information of the owner/operator of the regulated waste management or disposal facility property, facility address and contact information, description of temporary waste management unit, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment*."

2. Owners/operators of regulated waste management or disposal facilities must prevent surface runoff/runon from contacting wastes derived from cleanup of disaster-impacted areas in the San Diego Region and shall prevent erosion and transport of soils containing disaster related wastes or waste constituents by surface runoff from all temporary waste piles. The facility owner/operator must implement management measures (MMs) and/or best management practices (BMPs) for storm water conveyance and control.
3. All wastes derived from disaster-impacted areas in the San Diego Region must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from, and at an elevation that is higher than, any surface water of the state.
4. All waste derived from disaster-impacted areas in the San Diego Region must be protected from flooding and inundation, in compliance with the current WDRs for the affected unit, or units, at the regulated facility.
5. Owners/operators of regulated waste management or disposal facilities must manage temporary waste piles for disaster related mass mortality wastes as follows:
   a) Temporary waste piles of mass mortality wastes can only be located in areas underlain by a composite liner system (or approved engineering alternative) and a significant thickness of other types of solid wastes.
   b) Owner/operator must implement a plan to prevent wild animals (e.g., birds, mammals, reptiles, etc.) from coming into contact with mass mortality wastes (e.g., provide and maintain adequate cover for temporary waste piles).
   c) Owner/operator must ensure that all temporary waste piles containing mass mortality wastes are discharged into landfill prior to the end of the working day, unless sufficient information is provided to demonstrate that a proposed alternative is protective of water quality and human health for a given temporary waste pile.
   d) Owner/operator must ensure that all mass mortality wastes are covered with soil or other waste immediately after it is discharged into the landfill.
   e) Owner/operator must ensure that any storm water runoff that comes into contact with the disaster related wastes or containing waste constituents is managed as leachate.
6. Disaster related and mass mortality wastes discharged to temporary waste piles at regulated waste management or disposal facilities temporarily granted a waiver, together with any materials used to contain the temporary waste piles, shall be removed from the site. The site shall be restored to its original state no later than the 60 days after expiration of this waiver (see 10.I.A), or as required by the San Diego Water Board. Alternatively, the facility owner/operator must file an amended RoWD (Joint Technical Document) and obtain amended WDRs from the San Diego Water Board for any waste piles that will continue to exist past the expiration date of this waiver.
7. Owners/operators of regulated waste management or disposal facilities must submit a Notice of Termination to the San Diego Water Board within 10 working days of completing removal of all disaster related wastes and restoring the site to its original condition. The Notice of Termination must contain the name and contact information of the owner/operator ff the regulated facility property, facility address and contact information, description of waste that was temporarily stored/staged in the temporary waste management unit, the final waste disposal location, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "*I certify under penalty of law*

that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

10.II.D. Specific Waiver Conditions for Disaster Related Wastes Discharged to Temporary Waste Piles NOT Located at Regulated Waste Disposal Facilities

1. Any agency, jurisdiction or person proposing to establish a temporary waste pile not located at a regulated facility must submit a Notice of Intent to the San Diego Water Board within 30 days of the initial discharge of any disaster related wastes. The Notice of Intent must contain the name and contact information of the owner/operator the property where the temporary waste pile facility is located, facility address and contact information, description of temporary waste management unit, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*
2. Owners/operators of temporary waste piles not on regulated facilities must ensure that they are sited, designed, constructed, operated, and maintained to ensure compliance the following minimum prescriptive and performance standards:
   a) The bottom of a temporary waste pile must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from, and at an elevation that is higher than, any surface water of the state.
   b) Temporary waste piles must be protected from inundation or washout due of floods with a 100-year return period.
   c) Temporary waste piles cannot be located on a known Holocene fault.
   d) Temporary waste piles cannot be located in areas of potential rapid geologic change (*e.g.,* landslides, debris flows, flashflood areas, *etc.*).
   e) Temporary waste piles must be underlain by a temporary impermeable barrier (*e.g*., heavy gauge plastic) or located in an area covered by a relatively impermeable surface (*e.g.,* asphalt, concrete, *etc.*). The liner must be installed prior to establishing a temporary waste pile to protect all natural geological materials from contact with the waste and from contact with leachate.
   f) Temporary waste piles must be covered daily with either a heavy gage plastic or material that meets the classification criteria for inert wastes. A material that would be classified as a designated waste cannot be utilized for daily cover at a temporary waste staging area. Cover on the temporary waste piles must be designed, installed and maintained to prevent rainwater infiltration and runoff, and control of fugitive dust, vectors, odors, blowing litter and scavenging.
   g) Temporary waste management operations that include wastes with a liquid content exceeding its moisture-holding capacity and/or containing free liquids, shall comply with requirements for temporary surface impoundments (see 10.II.E).
   h) Temporary waste piles must be designed, constructed and operated to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout. Surface drainage from outside of the temporary waste pile shall be diverted from the location of the temporary waste pile through implementation of MMs/BMPs for storm water control and conveyance.
3. Owners/operators of temporary waste piles not on regulated facilities must submit written notification to the San Diego Board at least 30 days prior to initiating the discharge of return water or ponded water contained within the temporary waste pile if the discharge is to a location other than a sanitary sewer system. Based on the San Diego Water Board determination, the discharger may receive: 1) WDRs; 2) a waiver of WDRs, or 3) written

determination that the disposal of the return water or ponded water is not subject to regulation by the San Diego Water Board.

4. Owners/operators of temporary waste piles not on regulated facilities must post at least one clearly visible sign (in English) listing the following minimum information: a) project name, b) brief project description, and c) operator name and phone number. The discharger must post additional signs as necessary (in languages other than English) to more effectively communicate the minimum contact information (listed above) to the local community. The sign(s) shall be maintained as required to keep them legible and shall remain in place while temporary waste piles remain on site.
5. Solid wastes discharged to temporary waste piles not at regulated waste management or disposal facilities temporarily granted a waiver, together with any materials used to contain the temporary waste piles, shall be removed from the site. The site shall be restored to its original state no later than the 60 days after expiration of this waiver (see 10.I.A), or as required by the San Diego Water Board.
6. Owners/operators of temporary waste piles not on regulated facilities must submit a Notice of Termination to the San Diego Water Board within 10 working days of completing removal of all disaster related wastes and restoring the site to its original condition. The Notice of Termination must contain the name and contact information of the owner/operator the property where the temporary waste pile facility was located, facility address and contact information, description of waste that was temporarily stored/staged in the temporary waste management unit, the final waste disposal location, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment*."

10.II.E. Specific Waiver Conditions for Disaster Related Wastes Discharged to Temporary Surface Impoundments NOT Located at Regulated Waste Disposal Facilities

1. Any agency, jurisdiction or person proposing to establish a temporary surface impoundment not located at a regulated facility must submit a Notice of Intent to the San Diego Water Board within 30 days of the initial discharge of any disaster related wastes. The Notice of Intent must contain the name and contact information of the owner/operator the property where the temporary surface impoundment facility is located, facility address and contact information, description of temporary waste management unit, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*
2. Owners/operators of temporary surface impoundments not on regulated facilities must ensure that they are sited, designed, constructed, operated, and maintained to ensure compliance the following minimum prescriptive and performance standards:
   a) The bottom of a temporary surface impoundment must be placed at least 5 feet above the highest historically known or anticipated level of groundwater, and more than 100 feet from, and at an elevation that is higher than, any surface water of the state.
   b) Temporary surface impoundments must be protected from inundation or washout due of floods with a 100-year return period.
   c) Temporary surface impoundments cannot be located on a known Holocene fault.
   d) Temporary surface impoundments cannot be located in areas of potential rapid geologic change (*e.g.,* landslides, debris flows, flashflood areas, *etc.*).
   e) Temporary surface impoundments must be underlain by a temporary impermeable barrier (*e.g*., heavy gauge plastic) or a relatively impermeable surface (*e.g.,* asphalt, concrete,

etc.). The liner must be installed prior to establishing a temporary surface impoundment to protect all natural geological materials from contact with the waste.

f) Berms and containment structures of temporary surface impoundments must be composed of inert materials that will not cause adverse reactions (*e.g.*, corrosion, decay, or otherwise reduce or impair the integrity of the containment structure) when placed in contact with the liquid wastes stored within the temporary surface impoundment.

g) Temporary surface impoundments must be designed, operated and maintained to ensure that liquid wastes are at least 2 feet below the top of the impoundment (measured vertically from the surface of the liquid up to the point on the surrounding lined berm or dike having the lowest elevation), and must be designed and constructed to prevent overtopping as a results of wind conditions likely to accompany precipitation conditions.

h) Direct pipeline discharges of liquid can occur only into temporary surface impoundments with automatic or manually operated fail-safe systems to prevent overfilling.

i) Temporary surface impoundments must be designed and constructed to prevent scouring of containment structures at points of liquid discharge into the impoundments.

j) Temporary surface impoundments must be designed, constructed and operated to limit, to the greatest extent possible, inundation, erosion, slope failure, and washout. Surface drainage from outside of the temporary surface impoundments shall be diverted from the location of the temporary waste pile through implementation of MMs/BMPs for storm water control and conveyance.

3. Owners/operators of temporary surface impoundments not on regulated facilities must submit written notification to the San Diego Board at least 30 days prior to initiating the discharge of return water or ponded water contained within the temporary waste pile if the discharge is to a location other than a sanitary sewer system. Based on the San Diego Water Board determination, the discharger may receive: 1) WDRs; 2) a waiver of WDRs, or 3) written determination that the disposal of the return water or ponded water is not subject to regulation by the San Diego Water Board.
4. Owners/operators of temporary surface impoundments not on regulated facilities must ensure that only disaster related waste streams are discharged into temporary surface impoundments.
5. All visible portions of synthetic liner systems in temporary surface impoundments must be inspected weekly, or daily as necessary, until all free liquid is removed from the surface impoundment as part of closure.[20] If, during the active life of the temporary surface impoundment, the wastes are removed and the bottom of the impoundment is cleaned down to the liner, an inspection shall be made of the bottom of the liner prior to refilling the impoundment.
6. Owners/operators of temporary surface impoundments not on regulated facilities must post at least one clearly visible sign (in English) listing the following minimum information: a) project name, b) brief project description, and c) operator name and phone number. The facility owner/operator must post additional signs as necessary (in languages other than English) to more effectively communicate the minimum contact information (listed above) to the local community. The sign(s) shall be maintained as required to keep them legible and shall remain in place while temporary surface impoundments remain on site.
7. Solid wastes discharged to temporary surface impoundments not at regulated waste management or disposal facilities, together with any materials used to contain the temporary surface impoundments, shall be removed from the site. The site shall be restored to its original state no later than the 60 days after expiration of this waiver (see 10.I.A), or as required by the San Diego Water Board.
8. Owners/operators of temporary surface impoundments not on regulated facilities must submit a Notice of Termination to the San Diego Water Board within 10 working days of completing removal of all disaster related wastes and restoring the site to its original condition. The Notice of Termination must contain the name and contact information of the owner/operator the property where the temporary surface impoundment facility was located, facility address and contact information, description of waste that was temporarily stored/staged in the temporary waste management unit, the final waste disposal location, certification, and

[20] Pursuant to California Code of Regulations Title 27 section 21400(a)

signature of the owner, operator, and/or authorized representative. The certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment*."

10.II.F. Specific Waiver Conditions for Mass Mortality Wastes Discharged to Emergency Landfills NOT Located at Regulated Waste Disposal Facilities

1. Any agency, jurisdiction or person proposing to establish an emergency landfill not located at a regulated facility must submit a Notice of Intent to the San Diego Water Board within 30 days of the initial discharge of any disaster related wastes. The Notice of Intent must contain the name and contact information of the owner/operator the property where the emergency landfill facility is located, facility address and contact information, description of emergency waste management unit, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*
2. Owners/operators of emergency landfills not on regulated facilities must ensure that they are sited, designed, constructed, operated, and maintained to ensure compliance the following minimum prescriptive and performance standards:
   a) The bottom of an emergency landfill must be placed at least 10 feet above the highest historically known or anticipated level of groundwater, and more than 500 feet from any surface water of the state.
   b) Emergency landfills must be protected from inundation or washout due of floods with a 100-year return period.
   c) Emergency landfills cannot be located on a known Holocene fault.
   d) Emergency landfills cannot be located in areas of potential rapid geologic change (*e.g.,* landslides, debris flows, flashflood areas, *etc.*).
   e) Emergency landfills cannot be located in areas underlain by fractured bedrock aquifer or highly permeable soils (*e.g.,* gravels, sands, and loamy sands) or in facilities that are characterized by such deposits (*e.g.,* gravel quarry).
   f) For disaster related mass mortality wastes streams that are in a liquid form (*e.g.* raw eggs, *etc.*) reduce the moisture content prior to discharge by mixing with an absorbent material (*e.g.,* saw dust, mulch, soil, *etc.*).
   g) The thickness of each layer of mass mortality wastes must be limited to less than 2 feet.
   h) Lime (or another liquid abatement material) must be added to each layer to help reduce the generation of liquid by the mass mortality wastes.
   i) Each layer of lime-covered mass mortality wastes must be covered by at least 3 feet of soil before adding another layer of mass mortality wastes.
   j) Mass mortality wastes must be discharged for disposal in compliance with the conditions of this waiver and covered at the end of each working day
   k) The final layer of disaster related mass mortality wastes discharged into the emergency landfill must be overlain by a final layer of not less than 3 feet of soil; or alternatively the unit may be covered by a relatively impermeable engineered surface (*e.g.,* asphalt, concrete, *etc*.). The final soil layer shall be placed in a mound configuration so that the final soil layer: 1) Overlaps the mass mortality wastes by several feet on each edge of the emergency landfill; 2) is at least 3 feet thick over all portions of the mass mortality wastes; and 3) is sloped to provide good drainage that does not impair the integrity of the emergency landfill.

l) Owner/operator should also evaluate, implement, and document other effective waste isolation (and waste moisture reducing methods) in conjunction with the procedures identified above

3. The emergency landfill must be designed, constructed and operated to limit, to the greatest extent possible, ponding, infiltration, inundation, erosion, slope failure, and washout. The owner/operator must protect the integrity of the final cover from adverse impacts by erosion by installing and maintaining MMs/BMPs, including:
   a) Installation of runon control features on the upgradient side of the emergency landfill to divert offsite storm water from the emergency landfill.
   b) Installation of an effective runoff collection and conveyance ditch.
   c) Grading and maintenance of the final cover to eliminate ponding of water over the emergency landfill.
   d) Installation and maintenance of erosion control measures on the cover of the emergency landfill (*e.g.,* install straw mulch and/or a vegetative cover).
   e) Installation of a deer fence around the perimeter of the emergency landfill to discourage access by digging of carnivores.
4. Owners/operators of emergency landfills not on regulated facilities must post at least one clearly visible sign (in English) listing the following minimum information: a) clearly identify the area as an emergency landfill for animal and agricultural wastes, b) a warning against trespass, c) a description of the reason for the emergency landfill (e.g., Exotic Newcastle, Avian Flu, etc.), the type(s) of waste buried at the site (e.g., types of carcasses, egg wastes, manure, etc.), and d) the name and telephone number of the current property owner. The facility owner/operator must post additional signs as necessary (in languages other than English) to more effectively communicate the minimum contact information (listed above) to the local community. The sign(s) shall be maintained as required to keep them legible and shall remain in place while the emergency landfill remains on site.
5. Owners/operators of emergency landfills not on regulated facilities must submit Notice of Termination to the San Diego Water Board within 10 working days of completing removal of all disaster related wastes and restoring the site to its original condition. The Notice of Termination must contain the name and contact information of the owner/operator the property where the temporary waste pile facility was located, facility address and contact information, description of waste that was temporarily stored/staged in the temporary waste management unit, the final waste disposal location, certification, and signature of the owner, operator, and/or authorized representative. The certification must include the statement, "*I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment*."
6. Owners/operators of emergency landfills not on regulated facilities must submit a RoWD to the San Diego Water Board and apply for WDRs (using Form 200). The RoWD and application for WDRs must be provided to the San Diego Water Board within 6 months of creating the emergency landfill for disposal of disaster related mass mortality wastes. At a minimum, the RoWD shall include the following information:
   a) A short description of the emergency conditions that made the emergency landfill necessary.
   b) The identity, physical address, mailing address and telephone number of the current land owner.
   c) Photographs taken to document the location of the emergency landfill, practices used for placement of wastes and soil layers, and the appearance of the emergency landfill after installation of the final cover.
   d) A map showing the location and perimeter of the emergency landfill, its location relative to local topographical, geographical, biological, and cultural features (e.g. roads, streams, etc.), and provide Geographical Information System (GIS) data as available.
   e) A simple cross section of the emergency landfill and a description of the construction (depth, thickness of layers and final cover).

f) An estimate of the amount of wastes (*e.g.,* in pounds or tons) discharged into the emergency landfill.
g) A description of measures taken to ensure that wastes and waste constituents do not migrate outside the emergency landfill.
h) Any other site-specific or discharger related information requested by the San Diego Water Board.

CONDITIONAL WAIVER NO. 11 – AERIALLY DISCHARGED WASTES OVER LAND

Conditional Waiver No. 11 is for discharges of wastes that have been discharged aerially over land, which may be a source of pollutants that can adversely affect the quality of waters of the state.

The following types of discharge not regulated or authorized under waste discharge requirements (WDRs) may be eligible for Conditional Waiver No. 11:

- Discharges of wastes related to fireworks displays over land
- Other wastes discharged aerially over land that may adversely affect the quality of the waters of the state, but determined to be "low threat" by the San Diego Water Board

In order to be eligible for Conditional Waiver No. 11, discharges must comply with certain conditions to be protective of water quality. Waiver conditions applicable to wastes discharged aerially over land include the following:

11.I.A. General Waiver Conditions for Aerially Discharged Wastes Over Land

11.II.A. Specific Waiver Conditions for Discharges of Waste Related to Fireworks Displays Over Land

Wastes discharged aerially over land that comply with the general and specific waiver conditions in Conditional Waiver No. 11 are not expected to pose a threat to the quality of waters of the state.

11.I.A. General Waiver Conditions for Aerially Discharged Wastes Over Land

1. Aerially discharged wastes cannot be discharged directly over and/or into surface waters of the state (including ephemeral streams and vernal pools).
2. Aerially discharged wastes must not cause or threaten to cause a condition of contamination, pollution, or nuisance.
3. Aerially discharged wastes must not impact the quality of groundwater in any water wells or surface water in any drinking water reservoirs.
4. Dischargers must comply with any local, state, and federal ordinances and regulations and obtain any required approvals, permits, certifications, and/or licenses from authorized local agencies.
5. Discharger must submit a Notice of Intent or technical and/or monitoring program reports when directed by the San Diego Water Board.

11.II.A. Specific Waiver Conditions for Discharges of Waste Related to Fireworks Displays Over Land

1. No more than one fireworks display may be conducted from a launch site or within 1.0 mile of another launch site within a 48-hour period.[21] If the organizer will have more than one fireworks display within a 48-hour period, the organizer must file a Notice of Intent containing information about the fireworks to be used, location of launch area and nearby water bodies and groundwater basins, surrounding land uses, planned period of and frequency of discharge, copies of any permits obtained from other public agencies, and measures that will be taken to minimize or eliminate the discharge of pollutants that might affect surface water and groundwater quality. Sufficient information must be submitted before the discharge may begin.
2. All fireworks-related debris must be cleaned up from land surface areas.
3. Launch areas and deposition areas of fireworks displays may not be located within areas designated as Zone A for groundwater source area protection, as defined by the California Department of Public Health's Drinking Water Source Assessment Protection Program. This condition may be waived if the owner or operator of a groundwater drinking water source, through a permit, specifically allows the fireworks display launch area and/or deposition area within an area designated as Zone A for groundwater source area protection.
4. Launch areas and deposition areas of fireworks displays may not be located within areas designated as Zone A for surface water source protection, as defined by the California

[21] This condition is intended to alleviate spatial and temporal accumulation of fireworks-related chemical contaminants.

Department of Public Health's Drinking Water Source Assessment Protection Program. This condition may be waived if the owner or operator of a surface water source reservoir or intake structure, through a permit, specifically allows the fireworks display launch area and/or deposition area within an area designated as Zone A for surface water protection.

5. The fireworks display must be permitted by all relevant public agencies that require permits for fireworks displays (e.g., fire departments, municipal governments, law enforcement, water supply agencies). Copies of any permits must be available on site for inspection.
6. The San Diego Water Board and/or other local regulatory agencies must be allowed reasonable access to the site in order to perform inspections and conduct monitoring.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 Sky Park Court, Suite 100
San Diego, California 92123-4340

NOTICE OF INTENT

TO COMPLY WITH
CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS
FOR SPECIFIC TYPES OF DISCHARGE WITHIN
THE SAN DIEGO REGION

I. PROPERTY/FACILITY INFORMATION

Property/Facility Name:			
Property/Facility Contact:			
Property/Facility Address:			
City:	County:	State:	Zip:
Telephone:	Fax:	Email:	
Assessor Parcel Number(s):		Hydrologic Area/Subarea:	

II. PROPERTY/FACILITY OWNER INFORMATION

Property/Facility Owner Name:			
Property/Facility Owner Mailing Address:			
City:	County:	State:	Zip:
Telephone:	Fax:	Email:	

III. PROPERTY/FACILITY OPERATOR INFORMATION

Property/Facility Operator Name:			
Mailing Address:			
City:	County:	State:	Zip:
Telephone:	Fax:	Email:	

IV. CONDITONAL WAIVER FOR NOTICE OF INTENT

Mark (☒) the conditional waiver proposed for the discharge:

- ☐ Conditional Waiver 1 - Discharges from on-site disposal systems
- ☐ Conditional Waiver 2 - "Low threat" discharges to land
- ☐ Conditional Waiver 3 - Discharges from animal operations
- ☐ Conditional Waiver 4 - Discharges from agricultural and nursery operations
- ☐ Conditional Waiver 5 - Discharges from silvicultural operations
- ☐ Conditional Waiver 6 - Discharges of dredged or fill materials nearby or within surface waters
- ☐ Conditional Waiver 7 - Discharges of recycled water to land
- ☐ Conditional Waiver 8 - Discharges/disposal of solid wastes to land
- ☐ Conditional Waiver 9 - Discharges/disposal of slurries to land
- ☐ Conditional Waiver 10 - Discharges of emergency/ disaster related wastes
- ☐ Conditional Waiver 11 - Aerially discharged wastes

EXAMPLE

V. DESCRIPTION OF DISCHARGE

Describe the discharge (i.e., source(s) of discharge, pollutants of concern, period and frequency, etc.). Use additional pages as needed. Provide a map of the property/facility if necessary.

VI. DESCRIPTION OF MANAGEMENT MEASURES AND BEST MANAGEMENT PRACTICES

Describe what management measures (MMs) and best management practices (BMPS) will be implemented to minimize or eliminate the discharge of pollutants to waters of the state. Use additional pages as needed. Provide a map of the property/facility showing locations of MMs/BMPs if necessary.

VII. ADDITIONAL INFORMATION

Please provide additional information, as needed or required, about the discharge and/or how the discharger intends to comply with the waiver conditions of the conditional waiver. Use additional pages as needed.

EXAMPLE

VIII. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature (Owner or Authorized Representative)	Date
Print Name	Title
Telephone Number	Email

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 Sky Park Court, Suite 100
San Diego, California 92123-4340

TEMPORARY WASTE PILE CERTIFICATION

[SECTION A]

I. TEMPORARY WASTE PILE GENERATOR INFORMATION

Generator Name:			
Generator Contact and Title:			
Generator Mailing Address:			
City:	County:	State:	Zip:
Telephone:	Fax:	Email:	

II. WASTE INFORMATION

Local Oversight Program Case No.: San Diego Water Board File No.:

Waste Type: (check all that apply) ☐ Gasoline ☐ Diesel ☐ Other Petroleum Hydrocarbons ☐ Other Impacted Dredged Spoils ☐ Other:

Contaminant Concentrations *(Use additional pages as needed)*:

Mean	Mean + 80%CI	Mean	Mean + 80%CI	Mean	Mean + 80%CI	Mean	Mean + 80%CI
Mean	Mean + 80%CI	Mean	Mean + 80%CI	Mean	Mean + 80%CI	Mean	Mean + 80%CI
Mean	Mean + 80%CI	Mean	Mean + 80%CI	Mean	Mean + 80%CI	Mean	Mean + 80%CI

Waste Pile Quantity (yd^3):

Description of Containment Method:

III. TEMPORARY WASTE PILE SITE NFORMATION

Site Property Owner Name:			
Site Address:			
City:	County:	State:	Zip:
Telephone:	Fax:	Email:	
Assessor Parcel Number(s):		Hydrologic Area/Subarea:	

IV. PROPERTY OWNER ACKNOWLEDGMENT

I hereby acknowledge receipt of the waste soil described in section II and that I have reviewed any associated reports. By signing this form I acknowledge that the Generator of this waste has certified that all 8.II.D waiver conditions have been met.

Signature (Owner or Authorized Representative) Date

Print Name Title

V. GENERATOR CERTIFICATION

I hereby certify that the information provided regarding soil characterization is a complete and accurate representation of the subject soil, and that the soil is not hazardous waste as defined by California Code of Regulations Title 22 and by the U.S. Environmental Protection Agency (Code of Federal Regulations Title 40), and that all 8.II.D waiver conditions have been met.

Generator Signature Date

Print Name Title

DRAFT

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 Sky Park Court, Suite 100
San Diego, California 92123-4340

TEMPORARY WASTE PILE CERTIFICATION
[SECTION B]
and
NOTICE OF TERMINATION

I. FINAL WASTE DISPOSAL INFORMATION

Final Disposition of Waste:	☐ Off-site/Landfill Disposal	☐ On-site Reuse/Disposal	
	☐ Off-site Reuse/Disposal	☐ Other: _____	
Property Owner/Discharger Name:			
Property Owner/Discharger Contact and Title:			
Property Owner/Discharger Mailing Address:			
City:	County:	State:	Zip:
Telephone:	Fax:	Email:	
Assessor Parcel Number(s):		Hydrologic Area/Subarea:	
Date(s) Waste Disposed:			
Quantity of Waste Disposed: (in cubic yards for each disposal date)			
Disposal Location(s): (for each disposal date)			

EXAMPLE

II. FINAL DISPOSAL CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature (Owner or Authorized Representative)	Date
Print Name	Title

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 Sky Park Court, Suite 100
San Diego, California 92123-4340

INERT WASTE CERTIFICATION

I. INERT WASTE SOIL GENERATOR INFORMATION

Generator Name:			
Generator Contact and Title:			
Generator Mailing Address:			
City:	County:	State:	Zip:
Telephone:	Fax:	Email:	

II. INERT WASTE SOIL EXPORT SITE INFORMATION

Export Site Property Owner Name:			
Export Site Address:			
City:	County:	State:	Zip:
Local Oversight Program Case No.:			
San Diego Water Board File No.:			

III. EXPORTED INERT WASTE SOIL INFORMATION *(Use additional pages as needed.)*

Date(s) Inert Waste Soil Exported:
Quantities of Inert Waste Soil Exported: (in cubic yards for each date of export)
☐ Mark the box (☒) if the inert waste soil was temporarily stockpiled prior to export. If the box is marked, please provide a copy of the Temporary Waste Pile Certification Section A form as required under 8.II.D waiver conditions.
Provide a map of the export site showing the location of the nearby surface water bodies and/or water wells, excavation(s), stockpile(s), samples collected for characterization. Include approximate extent and depths of excavation(s), extent and height of stockpile(s), and depth of samples collected.

IV. DESCRIPTION OF EXPORT SITE BEST MANAGEMENT PRACTICES

Describe what management measures (MMs) and best management practices (BMPS) were implemented at the export site to minimize or eliminate the discharge of pollutants to waters of the state. Use additional pages as needed. Provide a map of the property/facility showing locations of MMs/BMPs if necessary.

EXAMPLE

V. INERT WASTE SOIL CHARACTERIZATION

Name of Certified Analytical Laboratory:			
Certified Analytical Laboratory Contact:			
Certified Analytical Laboratory Address:			
City:	County:	State:	Zip:
Telephone:	Fax:	Email:	
Number of samples collected for characterization:			
☐ Mark the box (☒) to confirm that no samples collected to characterize waste soil as inert contained detectable concentrations of constituents other than Title 22 metals, as required by waiver condition 8.II.F.1.j.			

Title 22 Metals Contaminant of Concern	EPA Approved Analytical Method	90% UCL Concentration (mg/kg)*

Use additional pages if there are additional contaminants of concern. Attach copy of laboratory analytical report.
* If molybdenum, silver, and/or zinc exceed the Tier 2 SSLs, then the waiver does not apply and a Report of Waste Discharge (RoWD) must be submitted to the San Diego Water Board.

VI. ENROLLMENT FOR REUSE OF TIER 1 or TIER 2 INERT WASTE SOIL

Mark the box (☒) next to the tier that the inert waste soil has been characterized, as supported with data provided in section V.

☐ **Tier 1** (Complete section X) Management of Tier 1 inert waste soils must comply with waiver conditions 8.II.F.1 and 8.II.F.2.	☐ **Tier 2** (Complete sections VII through X) Management of Tier 2 inert waste soils must comply with waiver conditions 8.II.F.1 and 8.II.F.3.

VII. TIER 2 INERT WASTE SOIL IMPORT SITE INFORMATION

Import Site Property Owner Name:			
Import Site Address:			
City:	County:	State:	Zip:
Telephone:	Fax:	Email:	
Assessor Parcel Number(s):		Hydrologic Area/Subarea:	
Provide a map of the import site showing the location of the nearby surface water bodies and/or water wells, and approximate depth to groundwater.			

EXAMPLE

VIII. DESCRIPTION OF IMPORT SITE BEST MANAGEMENT PRACTICES

Describe what management measures (MMs) and best management practices (BMPS) were implemented at the import site to minimize or eliminate the discharge of pollutants to waters of the state. Use additional pages as needed. Provide a map of the property/facility showing locations of MMs/BMPs if necessary.

IX. PROPERTY OWNER ACKNOWLEDGMENT

Mark all the boxes (☒) to acknowledge that the applicable Tier 2 inert waste soil waiver conditions have been or will be met:

- ☐ Import site is designated for commercial or industrial land use.
- ☐ Inert waste soil placed at least 5 feet above highest historically known or anticipated level of groundwater.
- ☐ Soil that separates inert waste soil from groundwater has clay content greater than 5 percent and/or in situ permeability of less than 10^{-5} cm/sec.
- ☐ Inert waste soil placed at least 100 feet from the nearest surface water body.
- ☐ Inert waste soil is protected against 100-year peak storm flows as defined by the county flood control agency.
- ☐ Inert waste soil covered by either: 1) engineered materials (e.g. used as road base, fill beneath buildings, bridge abutments), or 2) not less than 2 feet of noncontaminated, clean fill. The cover has a permeability of no more than 10^{-5} cm/sec.
- ☐ Placement of a cover on the inert waste soils completed within 30 days of discharging the final load of inert waste soils at the import site.

I acknowledge the receipt or planned receipt of the waste soil described in sections V and VI and that the soil will be managed pursuant to the restrictions set forth in waiver conditions 8.II.F.3.

Signature (Owner or Authorized Representative) | Date

Print Name | Title

X. GENERATOR AND CONSULTANT CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Print Name (Generator)	Print Name (Consultant)
Signature (Generator)	Signature (Consultant)
Title (Generator)	Title and Professional Registration No. (Consultant)
Date	Date

EXAMPLE