

State of California
Regional Water Quality Control Board
Santa Ana Region

September 16, 2016

ITEM: 11

SUBJECT: Stipulated Settlement and Cleanup and Abatement Order No. R8-2016-0016 for City of Ontario, City of Upland and Inland Empire Utilities Agency, Aerojet Rocketdyne Inc., The Boeing Company, General Electric Company, Lockheed Martin Corporation and the United States of America, Former Ontario-Upland Sewage Treatment Plant (Regional Recycling Plant No. 1), City of Ontario

DISCUSSION:

Stipulated Settlement and Cleanup and Abatement Order No. R8-2016-0016 (the Stipulated CAO) concerns a significant area of groundwater, located in the southern part of the City of Ontario, that has been contaminated by trichloroethylene (TCE). The Stipulated CAO has been negotiated with the parties named on the order. Under the terms of the Stipulated CAO, various parties will implement a remedy to address the groundwater contamination and supply replacement water to residences whose private wells have been affected by the groundwater contamination.

Staff will present additional information at the Board meeting regarding this matter and the requirements of the Stipulated CAO.

RECOMMENDATION:

Adopt Stipulated Settlement and Cleanup and Abatement Order No. R8-2016-0016.

**California Regional Water Quality Control Board
Santa Ana Region**

Stipulated Settlement and Cleanup and Abatement Order No. R8-2016-0016

**City of Ontario, City of Upland and Inland Empire Utilities Agency, Aerojet
Rocketdyne Inc., The Boeing Company, General Electric Company, Lockheed
Martin Corporation and the United States of America,
Former Ontario-Upland Sewage Treatment Plant (Regional Recycling Plant No. 1)
City of Ontario**

The California Regional Water Quality Control Board, Santa Ana Region (Santa Ana Water Board or Regional Board), finds that:

Legal and Regulatory Authority.

1. This Order conforms to and implements policies and requirements of the Porter-Cologne Water Quality Control Act (Division 7, commencing with Water Code section 13000) including (1) sections 13267 and 13304; (2) applicable State and federal regulations; (3) all applicable provisions of Statewide Water Quality Control Plans adopted by the State Water Resources Control Board (State Board) and the *Water Quality Control Plan, Santa Ana Basin* (Basin Plan) adopted by the Santa Ana Water Board including beneficial uses, water quality objectives, and implementation plans; (4) State Board policies and regulations, including State Board Resolution No. 68-16 (*Statement of Policy with Respect to Maintaining High Quality of Waters in California*), Resolution No. 88-63 (*Sources of Drinking Water*), and Resolution No. 92-49 (*Policies and Procedures for Investigation and Cleanup and Abatement of Discharges under California Water Code Section 13304*); California Code of Regulations (CCR) Title 23, Chapter 16, Article 11; CCR Title 23, section 3890 et. seq.; and (5) relevant standards, criteria, and advisories adopted by other State and federal agencies.
2. Water Code section 13304 contains the cleanup and abatement authority of the Santa Ana Water Board. Water Code section 13304 states, in pertinent part:

Any person...who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged to waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner.

Replacement water shall meet all applicable federal, state and local drinking water standards and shall have comparable quality to that pumped by the public water system or private well owner prior to the discharge of waste.

3. Water Code section 13267 provides that the Santa Ana Water Board may require dischargers, past dischargers, or suspected dischargers to furnish those technical or monitoring reports as it may specify, provided that the burden, including costs, of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In requiring the reports, the Santa Ana Water Board must provide the person with a written explanation with regard to the need for the reports, and identify the evidence that supports requiring that person to provide the reports.

Factual Background

4. In 1986, the Metropolitan Water District of Southern California sampled 149 private domestic wells in the Chino Groundwater Basin (now Chino North Groundwater Management Zone), in conjunction with the preparation of an environmental impact report for its proposed conjunctive use program. Trichloroethylene (TCE) was detected up to 75 micrograms per liter ($\mu\text{g/L}$) in several wells south of Riverside Drive. The current California drinking water maximum contaminant level (MCL) for TCE is 5 $\mu\text{g/L}$. The Metropolitan Water District notified the Santa Ana Water Board of its findings and the Regional Board initiated an investigation to identify the likely sources of the TCE. Regional Board staff also continued to sample some of the private wells until 2002.
5. TCE is a volatile organic compound that was a popular vapor degreasing and cleaning solvent used by industry beginning in the mid-1940s, until environmental concerns and economic pressures led to the decline in its use in the 1970s. TCE was also an ingredient in consumer products during this timeframe.
6. Information obtained by Regional Board staff indicated that several former tenants at the Airport may have used TCE. In 2005, the Santa Ana Water Board distributed six draft Cleanup and Abatement Orders (2005 Draft CAOs) to Aerojet Rocketdyne Inc., The Boeing Company, General Electric Company, Northrop Grumman Corporation, Lockheed Martin Corporation, and the United States Department of Defense (United States). (Aerojet Rocketdyne Inc., The Boeing Company, General Electric Company, and Lockheed Martin Corporation are hereinafter referenced as “the Companies.”) The Companies and the United States have always disputed the allegations set forth in the 2005 Draft CAOs that they are responsible for the discharge of wastes or the presence of TCE in the groundwater.
7. Regional Board staff also obtained information that some of the former tenants at the Airport, and numerous other industries, discharged their wastewater into the

sewage collection systems owned and operated by the Cities of Ontario and Upland at a time when TCE was a popular solvent used by industry.

8. In 1934, the City of Ontario built the Ontario-Upland Treatment Plant, located at 2450 E. Philadelphia Avenue in the City of Ontario. In 1942, the City of Upland entered into an agreement with the City of Ontario to jointly own the sewer system, treatment plant, and wastewater disposal areas.
9. In the early 1970s, the Chino Basin Municipal Water District assumed operational control of the Ontario-Upland Treatment Plant, which thereafter became known as Regional Recycling Plant No. 1 (RP-1). The Chino Basin Municipal Water District eventually took over ownership of RP-1 from the Cities of Ontario and Upland (the Cities). Upon assuming operational control of RP-1, the Chino Basin Municipal Water District upgraded RP-1 by adding tertiary treatment and constructing a 30,000-foot pipeline to the Prado Flood Control Basin to divert most of the effluent away from the vicinity of RP-1.
10. In 1998, the Chino Basin Municipal Water District changed its name to the Inland Empire Utilities Agency (IEUA).
11. Groundwater data collected by and for the Regional Board from 1986 to the present shows the presence of a plume of volatile organic compounds (VOCs) in groundwater south of the Pomona (60) Freeway that is largely comprised of TCE (the "Plume"). The Plume is located in an area in the central Chino Basin, located generally south of the Pomona Freeway, west of Turner Avenue, east of Grove Avenue, and North of Kimball Avenue (the Site), which is the subject of the Regional Board's 2005 Draft CAOs, the 2012 Draft CAO, and this Stipulated CAO. Notwithstanding this general description, the Site does not include the plume of TCE, its breakdown products, and any other volatile organic compounds emanating from the Chino Airport, as described in Cleanup and Abatement Order R8-2008-0064 and related documents posted to the State Water Resources Control Board's GeoTracker database (or any successor database) for site SL208634049, and any location to which it may migrate. Taken together, the preceding two sentences define the Area of Attainment.
12. The Chino Basin Desalter Authority (CDA) is a Joint Exercise of Powers Agency that manages the production, treatment, and distribution of highly treated potable water to cities and water agencies throughout its service area. Pursuant to Order No. R8-2007-00039, CDA extracts groundwater from the lower Chino Basin and treats the water to remove nitrate and total dissolved solids (TDS) using reverse osmosis, decarbonation and ion exchange at two desalter facilities, Chino I and Chino II. The CDA is in the process of expanding its groundwater production facilities to implement the Chino Basin Optimum Basin Management Program, which includes achieving hydraulic control of the Chino Basin. The expansion includes: (1) constructing three new wells; (2) constructing a pipeline to connect the three new wells to the existing CDA pipeline for the purpose of conveying the

groundwater pumped from the new wells to the Chino II Desalter; and (3) adding a third decarbonator at Chino II (“Planned Expansion Project”).

13. The City of Ontario, City of Upland and IEUA (collectively, the “Settling Agencies”) have collaborated with CDA to develop a remedy to address the Plume by leveraging CDA’s investment in its Planned Expansion Project. This collaborative approach is the most cost-effective way to address the Plume. This Stipulated Settlement and Cleanup and Abatement Order (“Stipulated CAO”) is intended to provide a basis for the Settling Agencies to move forward with a cost-effective remedy.
14. Recent investigations have confirmed that the Plume is migrating south towards CDA’s existing wellfield and towards the sites for the three proposed wells in the Planned Expansion Project. Some CDA wells have been impacted by detectable levels of TCE from the Plume. If the Plume remains unabated, it is anticipated that the TCE impact to CDA’s existing and proposed wells will increase over time.
15. In September 2012, the Regional Board sent draft CAO No. R8-2012-00xx to the Settling Agencies (2012 Draft CAO). The 2012 Draft CAO alleged that the Cities and IEUA, as the former and current owners and operators of RP-1 and wastewater disposal areas, are responsible for the discharge of wastes that resulted in the presence of TCE in groundwater downgradient of RP-1 and the disposal areas. The 2012 Draft CAO required, in part, the preparation and submission of a Feasibility Study and Remedial Action Plan for mitigating the effects of the Plume. The Settling Agencies dispute the allegations of such responsibility.
16. The Plume is located within the Chino North Groundwater Management Zone.
17. Pursuant to the Water Quality Control Plan, Santa Ana Region, the present and potential beneficial uses of groundwater in the Chino North Groundwater Management Zone include domestic and municipal water supply, agricultural water supply, and industrial water supply.
18. The Santa Ana Water Board believes that settling this matter in accordance with the terms set forth in this Stipulated CAO is in the best interest of the people of the State.

Cleanup and Abatement of the Plume

Development of Remedial Investigation, Feasibility Study and Selection of Preferred Remedial Alternatives

- 19.** Beginning in 2007, the Companies began providing replacement water to residences affected by the Plume and are continuing to provide replacement water subject to Regional Board oversight. The City of Ontario and the City of Upland will assume responsibility for providing replacement water in accordance with the terms outlined below.
- 20.** On October 13, 2011, the Companies completed a Remedial Investigation Report for the Plume (Remedial Investigation), which included a Baseline Risk Assessment. On November 19, 2014, the Companies completed a Supplemental Data Report to supplement the Remedial Investigation (Supplemental Report). The Cities of Ontario and Upland provided comments on the Remedial Investigation. Also, the United States installed a groundwater investigation well known as monitoring well 4.
- 21.** In July and August of 2015, the Settling Agencies completed a Feasibility Study and a Remedial Action Plan (RAP) for the Plume. The Feasibility Study identified the following Remedial Action Objectives:

 - A. The numerical goal for TCE in groundwater is the MCL of 5 µg/L. The Area of Attainment is detailed above in Section 11.
 - B. Protect human health and the environment by mitigating the effects of the TCE groundwater plume.
 - C. Supply uninterrupted replacement water service to all residences that are served by private domestic wells at which TCE has been detected above the MCL within the Area of Attainment.
 - D. Monitor TCE concentrations in private domestic wells and public supply wells that may contain TCE above the MCL within and down-gradient of the Area of Attainment.
 - E. Minimize the migration of the TCE Plume in groundwater beyond the southern boundary of the Area of Attainment.
 - F. Minimize the concentration of TCE in the groundwater in un-impacted or less impacted areas within the Area of Attainment.

G. To the extent reasonably practicable, decrease the length of time that TCE impairs the beneficial use of groundwater in the Area of Attainment.

22. Two sets of remedial actions were evaluated in the Feasibility Study. The first set of alternatives address the uninterrupted delivery of replacement water to residences with wells that are currently impacted by the Plume. The second set of remedial actions address remediation of the Plume itself. The Feasibility Study includes a screening and then detailed analysis of these two sets of remedial action alternatives, as summarized in Tables 1 and 2 below.

Table 1: Domestic Water Supply Alternatives Screening Evaluation Summary

	Effective-ness	Implemen-tability	10-Year Cost	20-Year Cost	Con-clusion
Alternative 1 No Action	Not Effective	N/A	None	None	Retained
Alternative 2 Whole House Treatment	Potentially Effective	Easy	Moderate	Moderate	Retained
Alternative 3 Existing Tank Systems and Bottled Water Delivery	Highly Effective	Easy	Low	Low	Retained
Alternative 4 Install Permanent Pipeline	Highly Effective	Difficult	High	High	Not Retained
Alternative 5 Install Temporary Pipeline	Highly Effective	Difficult	Moderate	Moderate	Not Retained
Alternative 6A Construct New Wells; 1 Residence Per Well	Potentially Effective	Easy	Moderate	Moderate	Retained
Alternative 6B Construct New Wells; 3 Residences Per Well	Potentially Effective	Easy	Moderate	Low	Retained
Alternative 7A Hybrid Partial Pipeline and Tank Systems – Most Residences on Pipeline	Highly Effective	Moderate	High	High	Not Retained
* Alternative 7B Hybrid Partial Pipeline and Tank Systems – Half of	Highly Effective	Moderate	Moderate	Moderate	Retained

Residences on Pipeline					
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* = Preferred alternative

Table 2: Plume Remedial Alternatives Screening Evaluation Summary

	Short Term Effective-ness	Long Term Effective-ness	Implement-ability	Cost	Conclusion
Alternative 1 No Action	Not Effective	Not Effective	Easy	Low	Retained
Alternative 2 Limited Action/Monitored Natural Attenuation	Not Effective	Not Effective	Easy	Low	Retained
Alternative 3A GAC Wellhead Treatment for Well CDA I-11	Not Effective	Not Effective	Moderate	Low	Not Retained
Alternative 3B GAC Wellhead Treatment for Well CDA I-11 and Site A	Not Effective	Potentially Effective	Moderate	Moderate	Not Retained
Alternative 3C GAC Wellhead Treatment for Well CDA I-11, Site A and Site 2	Not Effective	Effective	Moderate	Moderate	Retained
Alternative 3D GAC Wellhead Treatment for Well CDA I-11, Site 2, and a northern well at Edison Ave	Effective	Highly Effective	Moderate	High	Retained
Alternative 4A Air Stripping Wellhead Treatment for Well CDA I-11	Not Effective	Not Effective	Difficult	Low	Not Retained
Alternative 4B Air Stripping Wellhead Treatment for Well CDA I-11 and Site A	Not Effective	Potentially Effective	Difficult	High	Not Retained

Alternative 4C Air Stripping Wellhead Treatment for Well CDA I-11, Site A and Site 2	Not Effective	Effective	Difficult	High	Not Retained
Alternative 4D Air Stripping Wellhead Treatment for Well CDA I-11, Site 2, and a northern well at Edison Ave	Effective	Highly Effective	Difficult	High	Not Retained
Alternative 5A Dedicated Pipeline to RO/Decarbonator at Desalter II; northern well at Merrill Ave	Not Effective	Effective	Moderate	Moderate	Retained
* Alternative 5B Dedicated Pipeline to RO/Decarbonator at Desalter II; northern well at Edison Ave	Effective	Highly Effective	Moderate	Moderate	Retained
Alternative 6 In-Situ Remediation	Effective	Effective	Difficult	Very High	Not Retained

* = Preferred alternative

- 23.** The Feasibility Study and RAP selected preferred remedies from both the domestic water supply alternatives and the Plume alternatives by using the National Contingency Plan (NCP) evaluation criteria and process to determine the relative ranking of each retained alternative. The Feasibility Study examined the following nine evaluation criteria: overall protection of human health and the environment; compliance with all applicable or relevant and appropriate requirements (ARARs); long-term effectiveness and permanence; reduction of toxicity, mobility and volume through treatment; short-term effectiveness; implementability; estimated cost; State acceptance; and community acceptance. The first two criteria—overall protection of human health and the environment, and compliance with ARARs—are the threshold criteria that each alternative must meet. The next five criteria were then used as balancing criteria. The final criteria of State and community acceptance were then considered to obtain any preferences or concerns regarding the proposed alternatives.
- 24.** The selected remedy for the domestic water supply, Alternative 7B (Hybrid Partial Pipeline and Tank Systems-Half of Residences on Pipeline), involves the

supply of uninterrupted potable water to each Affected Residence, either through a 11,000 linear foot water supply pipeline or a tank system. Approximately twenty-one Affected Residences will be served by the temporary pipeline, 16 Affected Residences would remain on 15 existing tank systems, and 3 Affected Residences currently on bottled water service would be provided with tank systems. Based upon a detailed evaluation of the NCP criteria, the Feasibility Study and RAP selected this remedy because it is protective of human health and the environment, complies with federal and State requirements that are applicable or relevant and appropriate to the remedial action, is cost-effective, and utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable. This remedy also provides the most flexibility for planning around the future growth of the City of Ontario.

- 25.** The selected remedy for the Plume, Remedial Alternative 5B (Dedicated Pipeline to RO/Decarbonator at Desalter II; northern well at Edison Avenue), (also referred to as the Work) involves: (1) adding a new pipeline connecting CDA's Well I-11 to the proposed Planned Expansion Project pipeline; (2) constructing a new 24-inch pipeline parallel to the existing CDA pipeline on Bellegrave Avenue to connect the Planned Expansion Project's new wells directly to the reverse osmosis and decarbonator treatment processes at Desalter II; (3) modifying the existing decarbonators at Desalter II in a manner designed to remove 95% of the TCE from the influent; (4) moving one of the Planned Expansion Project wells from the vicinity of South Archibald Avenue and Merrill Avenue, to a location approximately one mile north near the intersection of Edison Avenue and Cucamonga Creek ("northern well"); (5) constructing a new pipeline to connect the northern well to the pipeline along Bellegrave Avenue; and (6) installing a new pump to transport water from CDA Well I-11 to the pipeline system leading to Desalter II. Based upon a detailed evaluation of the NCP criteria, the Feasibility Study and RAP selected this remedy because it is protective of human health and the environment, complies with federal and State requirements that are applicable or relevant and appropriate to the remedial action, is cost-effective, and utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable. This remedy also satisfies the statutory preference for treatment as a principal element of the remedy.
- 26.** Each selected remedy is protective of human health and the environment. The drinking water supply remedy will provide domestic replacement water to all Affected Residences south of Riverside Drive until the area is developed and the affected private domestic water supply wells are no longer used to supply water to individual residences. The water supplied to the residences will come from the City of Ontario municipal water supply, therefore there is little residual risk to human health. The Plume remedy will minimize the concentration of TCE in groundwater in un-impacted or less impacted areas and will also remove TCE in the groundwater produced by up to four CDA wells, which will limit potential distribution of TCE to a wider population via the CDA well-field. Because the selected Plume remedy will result in hazardous substances, pollutants, or

contaminants remaining on-site above levels that allow unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

- 27.** Each selected remedy complies with ARARs. The primary ARAR considered for the domestic water supply remedy is draft CAO No. R8-2012-00xx that the Regional Board issued to the Settling Agencies in September 2012. The 2012 Draft CAO required that domestic replacement water service be provided to all residences where the TCE concentration in private domestic wells is equal to or greater than the MCL. The domestic water supply remedy provides replacement water to all Affected Residences, thereby meeting the requirement of the 2012 Draft CAO. The Plume remedy also complies with ARARs. All water served to the public will have TCE concentrations below the MCL. The active removal of TCE from the aquifer at the northern well at Edison Avenue will reduce the mass and concentration of TCE in the aquifer faster than natural attenuation, thereby bringing it into compliance with the groundwater quality objectives set forth in the basin plan.
- 28.** Each selected remedy provides overall effectiveness proportional to its costs. The domestic water supply remedy is cost effective because it is of moderate long-term cost, has a low residual risk to human health, and also has the lowest risk that additional domestic replacement water supply will be necessary in the future. The Plume remedy is also cost effective in comparison to other alternatives, and removes more TCE mass from the aquifer in the short-term, thereby decreasing the timeframe to achieve the Remedial Action Objectives.
- 29.** Each selected remedy utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable. The domestic water supply remedy utilizes a permanent solution to provide all Affected Residences with water from the Ontario municipal water supply. Utilizing treatment technologies that remove TCE via a reverse osmosis and decarbonator treatment train, the Plume remedy will remove the most mass of TCE from the aquifer in the short term, and will reduce the magnitude of the residual risk to human health and the environment to the maximum extent practicable.
- 30.** The selected domestic water supply remedy and the selected Plume remedy are collectively expected to achieve all Remedial Action Objectives.
- 31.** The selected domestic water supply remedy is expected to achieve applicable Remedial Action Objectives because it involves the supply of domestic replacement water to all Affected Residences south of Riverside Drive until the area is developed and the affected domestic water supply wells are no longer used to supply water to individual residences. To measure performance of the remedy, concentrations of TCE will be frequently monitored in private domestic wells located within and down-gradient of the Area of Attainment. Further, the

City of Ontario will continue its Safe Drinking Water Act monitoring of its municipal water supply.

- 32.** The selected Plume remedy is expected to achieve applicable Remedial Action Objectives because it will protect human health and the environment, comply with ARARs, and will clean up the Plume in groundwater to below the MCL of 5 µg/L in the Area of Attainment. The selected Plume remedy will remove TCE from groundwater; minimize the concentration of TCE in the groundwater in un-impacted or less impacted areas; capture TCE contamination in groundwater at the southern edge of the Area of Attainment, thereby minimizing the migration of the Plume; and will treat extracted groundwater for TCE. In doing so, the selected Plume remedy will reduce the volume and mobility of the Plume. With regard to TCE impacts, use of the northern well will also reduce the timeframe for restoring beneficial use of groundwater in the Area of Attainment. The selected remedy provides the best balance of tradeoffs as compared to the other alternatives in terms of the NCP threshold and balancing evaluation criteria.
- 33.** The performance of the selected Plume remedy will be evaluated through eight primary mechanisms:
- (i) Implementation of Plume monitoring as required under Section 55(C) of this Stipulated CAO;
 - (ii) Use of data from the monitoring of private domestic wells and public supply wells located within and down-gradient of the Area of Attainment, as prescribed in the selected domestic water supply remedy;
 - (iii) Use of data from operational monitoring and water quality sampling performed by the CDA;
 - (iv) Use of data from drinking water compliance monitoring performed by the CDA pursuant to their Division of Drinking Water permit;
 - (v) Analysis of the Chino Basin Watermaster's regular groundwater level monitoring program from approximately 900 wells, including the hydraulic control monitoring program that focuses on the CDA well-field;
 - (vi) Analysis of the Chino Basin Watermaster's extensive groundwater quality monitoring program from approximately 750 wells;
 - (vii) Performance of periodic groundwater modeling that is used to define the capture zone created by the existing CDA well-field as specified in the 2014 Regional Board-approved

Revised Chino Basin Management Zone Maximum Benefit Groundwater Monitoring Program; and

- (viii) Detailed analysis and assessment of the state of hydraulic control in the Chino Basin, performed every five (5) years as part of regular groundwater modeling, to compute the annual groundwater underflow in the previous five years and to estimate future underflow based on the pumping plans in the Chino Basin, as specified in the 2014 Regional Board-approved Revised Chino Basin Management Zone Maximum Benefit Groundwater Monitoring Program.

Approval of Remedial Action Plan

- 34. The Remedial Investigation, the Feasibility Study, the Supplemental Report and the Cities' Comments were made available to the public in August of 2015. These documents were, and are, available in an online document repository and at the City of Ontario City Hall. The Notice of Availability of these documents was mailed to residents on August 18, 2015, and published in the Inland Valley Daily Bulletin on August 24, 2015. In addition, two public meetings were held at the Ontario Police Station on September 10, 2015 and September 24, 2015, where comments and input from the public were received. At these meetings, representatives of the Settling Agencies and the Regional Board answered questions about the Plume and the remedial alternatives. The Settling Agencies' responses to these comments are included as an appendix in the final version of the Feasibility Study.
- 35. The Regional Board has reviewed and considered the Remedial Investigation, Risk Assessment, Supplemental Report, the comments on the Remedial Investigation and Supplemental Report and the Feasibility Study. The documents prepared by the Settling Agencies and the Companies are sufficient to characterize the Plume, develop remedial alternatives and select a preferred remedial alternative through the adoption of the RAP.
- 36. The final RAP selecting the remedial actions to be implemented is approved by the Santa Ana Water Board through adoption of this Stipulated CAO. The remedial actions selected in the RAP will protect human health and the environment; comply with federal and State requirements that are applicable or relevant and appropriate to each action; are cost effective; and utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. The selected remedial actions also satisfy the statutory preference under CERCLA section 121 for treatment as a principal element of the remedy (i.e., reduces the toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants as a principal element through treatment).

37. The Regional Board finds that the Remedial Investigation, Risk Assessment, Supplemental Report, Feasibility Study, and RAP, and the process used to develop these documents, are consistent with the National Contingency Plan.

Plume Remedy Funding

38. In order to obtain funding for at least a portion of the Plume remedy, IEUA has initiated the process to apply for grant funding under the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1). Water Code section 79771(c) provides that:

Funding authorized by this chapter shall not be used to pay any share of the costs of remediation recovered from parties responsible for the contamination of a groundwater storage aquifer, but may be used to pay costs that cannot be recovered from responsible parties.

After analyzing the Plume remedy and the sources of available funding to construct it, the Santa Ana Water Board finds that any grant funding awarded to IEUA under Proposition 1 would not be used to pay any share of the costs of remediation recovered from parties responsible for the contamination. Rather, such grant funds would be used to pay for costs that cannot be recovered from responsible parties.

39. The Santa Ana Water Board commenced attempts to identify and coordinate with potentially responsible parties for the Plume over ten years ago. In addition, the Settling Agencies, the Companies and the United States engaged a private third party neutral mediator over two years ago, and since then they devoted substantial time, effort and resources to the mediation. The Santa Ana Water Board began participating directly in the mediation over a year ago. In light of these efforts, and the information obtained over more than a decade of direct involvement, the Santa Ana Water Board finds that the Proposition 1 grant funding IEUA is pursuing would not be used to pay for costs that have been or reasonably could be recovered from responsible parties.
40. Water Code section 79771(b)(5) provides that one of the criteria considered in prioritizing projects for Proposition 1 grant money is whether the "project addresses contamination at a site for which the courts or the appropriate regulatory authority has not yet identified responsible parties, or where the identified responsible parties are unwilling or unable to pay for the total cost of cleanup" The Santa Ana Water Board finds that the Plume remedy addresses contamination at a site where responsibility of the potentially responsible parties is contested, and conclusively determining responsibility could require extensive and protracted litigation. Moreover, the Santa Ana Water Board is satisfied, and hereby so finds, that identified responsible parties are unwilling and/or unable to pay for the total cost of the Plume remedy. The Santa Ana Water Board finds that available information indicates reasonable efforts

have already been made by the Settling Agencies, the Companies and the Santa Ana Water Board itself, to require the responsible parties to pay for the total cost of the cleanup and recovering additional costs for cleanup is infeasible. The United States and the Companies make no representations nor warranties as to findings 38 through 40.

Effect of Stipulated CAO

- 41.** Because the Plume remedy will result in hazardous substances remaining within the Plume above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of remedial action to ensure that the remedy is protective of human health and the environment.
- 42.** In exchange for the work performed and to be performed by the Settling Agencies, the prior work performed by the United States and the Companies, and the payments to be made by the United States and the Companies, the Santa Ana Water Board agrees to release the Settling Agencies, the United States and the Companies from all claims or causes of action under the Porter-Cologne Water Quality Control Act, CWC § 13000 et seq. (Porter-Cologne), the Carpenter-Presley-Tanner Hazardous Substances Account Act, California Health and Safety Code, § 25300 et seq. (HSAA), any other State statutes or common law (including claims based on nuisance or trespass), the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601-9675 (CERCLA), and the federal Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq. (RCRA), regarding the Plume. However, the Settling Agencies, the United States and the Companies do not admit any liability arising out of the Regional Board's allegations, nor does the work to be performed by the Settling Agencies in accordance with this Stipulated CAO or the prior work performed by the United States and the Companies constitute an admission of any liability under the foregoing statutes and State law by any of the Settling Agencies, the United States or the Companies.
- 43.** The Parties also agree that this Stipulated CAO constitutes an administrative settlement pursuant to CERCLA section 113(f)(2), 42 U.S.C. § 9613(f)(2) and that the Settling Agencies, the United States and the Companies have, as of the Effective Date, resolved their liability, if any, to the Santa Ana Water Board, for the Matters Addressed in this Stipulated CAO as defined in Section 59 herein.
- 44.** The Parties further agree that this Stipulated CAO constitutes an administrative settlement pursuant to CERCLA section 113(f)(3)(B), 42 U.S.C. §9613(f)(3)(B), and that the Settling Agencies, the United States and the Companies are entitled, as of the Effective Date, to protection from contribution actions, or claims or

counterclaims arising from or related to the Matters Addressed in this Stipulated CAO, as provided by CERCLA section 113(f)(2).

- 45.** The Parties also acknowledge that entry into this Stipulated CAO is intended to protect the Settling Agencies, the United States and the Companies from any claims by any non-settling party, regardless of whether they are brought pursuant to Section 107 of CERCLA, Section 113 of CERCLA, or any other theory, as any claims against the Settling Agencies, the United States or the Companies arising out of facts alleged herein are in the nature of contribution claims arising out of a common liability, whether framed in terms of federal or State statute or common law.
- 46.** On June 22, 2015, the Settling Agencies and the CDA executed a Joint Facility Development Agreement, whereby the Settling Agencies will fund the incremental capital design and construction costs for the Work and the CDA will operate and maintain the completed Work until only monitored natural attenuation is necessary to restore beneficial uses in the Area of Attainment. The Regional Board has reviewed this Joint Facility Development Agreement and finds that such agreement provides sufficient assurances that the Work will be implemented in accordance with this Stipulated CAO. The Joint Facility Development Agreement is attached hereto as Exhibit A.
- 47.** In January 2011, CDA adopted an Initial Study/Mitigated Negative Declaration (IS/MND) for its Planned Expansion Project. CDA collaborated with the Settling Agencies to incorporate the Work into the Planned Expansion Project. CDA, as the lead agency under CEQA, prepared an Addendum to the IS/MND to determine whether the Work required the preparation of supplemental environmental review to the IS/MND under CEQA standards (Pub Res Code section 21166; CEQA Guidelines section 15162 and 15164). CDA determined that no additional CEQA environmental review was required for the Work based on information in the Addendum. On June 4, 2015, CDA approved the Work and the IS/MND Addendum. As a result, the environmental review for the Work has been completed and the statute of limitations for any CEQA claims in connection with the Work has now expired. In approving this Stipulated CAO, the Settling Agencies and Companies rely on the approved IS/MND and Addendum for the analysis of the environmental impacts of the approval.
- 48.** The issuance of this Stipulated CAO is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, section 21000 et seq.), pursuant to California Code of Regulations (CCR), title 14, section 15321, subdivision (a)(2). The implementation of this Stipulated CAO is also an action to assure the restoration of the environment and is exempt from the provisions of the California Environmental Quality Act (California Public Resources Code, section 21000 et seq.), in accordance with CCR title 14, sections 15308 and 15330.

49. The Parties have negotiated this Stipulated CAO in good faith and implementation of the Work will expedite the cleanup of the Plume and will avoid prolonged and complicated litigation between the Parties.
50. The Regional Board believes and hereby finds this Stipulated CAO is procedurally and substantively fair, reasonable and is in the public interest. The Regional Board believes and hereby finds the prior work and Work performed and the amount of response and oversight costs to be funded by the Settling Agencies herein, and the prior work performed and payments to be made by the United States and the Companies, while necessarily imprecise, is roughly correlated with an acceptable measure of comparative fault relative to the aggregate liability of the Settling Agencies, the United States and the Companies under CERCLA.
51. Any person affected by this action of the Santa Ana Water Board may petition the State Water Resources Control Board (State Board) to review the action in accordance with Water Code section 13320 and Title 23, CCR, section 2050 through 2068. The State Board, Office of Chief Counsel, must receive the petition within 30 days of the Effective Date of this Stipulated CAO.

With the consent of the Parties to this Stipulated CAO, **IT IS HEREBY ORDERED** that, pursuant to Water Code sections 13267 and 13304, the Settling Agencies, the United States and the Companies shall comply with the provisions of this Stipulated CAO as follows:

52. PARTIES BOUND

This Stipulated CAO shall apply to and be binding upon the Santa Ana Water Board, upon each of the Settling Agencies, upon the United States and upon each of the Companies, and each of their respective successors and assigns. Any change in legal status of a Party, including but not limited to any transfer of real property, shall in no way alter such Party's responsibilities under this Stipulated CAO.

53. DEFINITIONS

Unless otherwise expressly provided herein, terms used in this Stipulated CAO that are defined in the Porter-Cologne Water Quality Control Act and CERCLA or in regulations promulgated thereunder shall have the meaning assigned to them in the Porter-Cologne Water Quality Control Act and CERCLA or in such regulations.

"Affected Residence" means a residence or location in the Area of Attainment currently supplied water by a tank system or provided with bottled water, and a residence or location in the Area of Attainment supplied water by a private domestic well that in the future exceeds the MCL for TCE.

"ARAR" means applicable or relevant and appropriate requirement.

“**CAO**” means Cleanup and Abatement Order.

“**CERCLA**” means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601-9675.

“**CDA**” means the Chino Basin Desalter Authority.

“**Companies**” means Aerojet-General Corporation, The Boeing Company, General Electric Company, and Lockheed Martin Corporation.

“**Days**” means calendar days, including Saturdays, Sundays, and holidays, except as otherwise specifically provided herein.

“**IEUA**” means the Inland Empire Utilities Agency.

“**National Contingency Plan**” means the National Oil and Hazardous Substances Pollution Contingency Plan codified at 40 C.F.R. Part 300, which provides a framework for responding to hazardous substance releases.

“**Oversight Costs**” means those future costs that the Regional Board may incur in monitoring and supervising the Settling Agencies’ performance of the Work pursuant to this Stipulated CAO, including but not limited to reviewing deliverables submitted, ensuring that the timeframes for completing the Work are met, and otherwise overseeing compliance with the Stipulated CAO.

“**Parties**” means the City of Ontario, the City of Upland, IEUA, the United States, Aerojet Rocketdyne Inc., The Boeing Company, General Electric Company, Lockheed Martin Corporation, and the Santa Ana Water Board.

“**Performance Standards**” means the cleanup levels and other measures of achievement of the remedial action objectives, as set forth in the Remedial Action Plan.

“**Plume**” means the plume of groundwater contaminated with VOCs, including, but not limited to TCE, in the Chino North Groundwater Management Zone, as depicted generally on the map attached as Exhibit B.

“**Porter-Cologne**” means the Porter-Cologne Water Quality Control Act, California Water Code, Division 7, §§ 13000 et seq.

“**Regional Board or Santa Ana Water Board**” means the California Regional Water Quality Control Board, Santa Ana Region.

“**Remedial Action**” means the remedial actions selected in the Remedial Action Plan.

“Remedial Action Plan” or “RAP” means the final remedy selection document approved by this Stipulated CAO that identifies the preferred alternative for a remedial action, and sets forth the specific remedial action objectives and the timeframes for completion of the selected remedial action.

“Response Costs” means any costs, including but not limited to, direct and indirect costs, that the Regional Board may incur in connection with the Plume that are not Oversight Costs.

“Settling Agencies” means the City of Ontario, the City of Upland, and IEUA.

“Stipulated CAO” means this agreement and order and all appendices attached hereto.

“United States” means the United States of America and all of its departments, agencies, components and instrumentalities.

“Work” means capital funding and construction of the selected Remedial Action for the Plume pursuant to the Remedial Action Plan.

54. EFFECTIVE DATE

This Stipulated CAO becomes effective and binding upon all Parties on the date when the Santa Ana Water Board adopts the Stipulated CAO and it is signed by all Settling Agencies, the United States and the Companies.

55. PERFORMANCE OF THE REMEDIES

A. Domestic Water Supply Remedy.

- (i) On October 15, 2015, the City of Ontario received written correspondence from the State of California, State Water Resources Control Board, Division of Drinking Water, stating that the proposed alternative water supplies would not require a water supply permit, provided a new public water system or State small water system is not created in the process. The domestic water supply remedy does not meet the threshold for requiring a water supply permit or a small water system permit.
- (ii) Within thirty (30) days from the effective date of this Stipulated CAO, the City of Ontario and City of Upland will take over providing alternative water supply to Affected Residences.

- (iii) Within ninety (90) days from the effective date of this Stipulated CAO, the City of Ontario and City of Upland will submit to the Regional Board a Workplan for those consenting Affected Residences currently receiving bottled water to be provided a water tank system or connected to the City's municipal water supply system. The Workplan will outline the approach to provide such water service with the following timeframes from the Regional Board's approval of the Workplan:
 - (1) Water service from existing water mains – 3 months
 - (2) Water tank systems – 6 months
 - (3) Water service from new water mains – 18 months
- (iv) Within seven (7) days of notice of sampling of a residential domestic supply well, whose concentration of TCE is at or above 4 µg/L, the City of Ontario and City of Upland shall provide bottled water to the residence until such time as a water tank system or connection to the City of Ontario's municipal water supply system can be achieved.
- (v) Changes to the alternative water supply remedy are subject to approval by the Regional Board and may require submittal of a workplan outlining the proposed changes. Upon the Regional Board's written approval, the domestic water supply remedy shall be deemed complete and the City of Ontario and City of Upland shall have no further obligations to implement the domestic water supply remedy pursuant to this Stipulated CAO, except as provided below in Section 55(C).

B. Plume Remedy.

Design Reports

- (i) Within five hundred twenty five (525) days from the effective date, IEUA shall submit to the Regional Board for the Executive Officer's approval (or his or her delegate's approval) a Design Report for the Northern Well to be constructed ("Northern Well Design Report") as part of the Plume remedy Work.
- (ii) Within six hundred (600) days from the effective date, IEUA shall submit to the Regional Board for the Executive Officer's approval (or his or her delegate's approval) a Design Report

for all pipelines to be constructed (“Pipeline Design Report”) as part of the Plume remedy Work.

- (iii) Within six hundred (600) days from the effective date, IEUA shall submit to the Regional Board for the Executive Officer’s approval (or his or her delegate’s approval) a Design Report for the modification of CDA decarbonators (“Decarbonator Design Report”).
- (iv) Each Design Report shall comply with the general reporting requirements set forth in Section 56.
- (v) All Design Reports shall include, but not be limited to, the following information:
 - (1) A detailed description of design specifications and locations;
 - (2) A detailed description of all activities that are needed or planned to complete construction of the design described in the report;
 - (3) An implementation schedule; and
 - (4) Where applicable, certification from the State Board Division of Drinking Water that approves the design criteria.

Completion of Construction

- (vi) Within nine hundred (900) days from the effective date, IEUA shall complete construction of all elements in the Northern Well Design Report.
- (vii) Within eight hundred fifty (850) days from the effective date, IEUA shall complete construction of all elements in the Pipeline Design Report.
- (viii) Within nine hundred fifty (950) days from the effective date, IEUA shall complete construction of all elements in the Decarbonator Design Report.
- (ix) Nothing in this Stipulated CAO shall be deemed to interfere with the Joint Facility Development Agreement executed on June 22, 2015, between the Settling Agencies and the CDA, or modify the obligations of the parties thereunder.

Certification of Construction Completion

- (x) For each Design Report above, IEUA shall submit a Completion of Construction request to the Regional Board for a Certification of Construction Completion. The Regional Board will review IEUA's request in accordance with Section 57.
- (xi) If the Regional Board concludes that construction of the Work in a specific Design Report is not complete, the Regional Board shall notify IEUA of the deficiencies. Such notice must include a description of the activities that IEUA must perform to complete the Plume remedy Work for the specific Design Report, and an implementation schedule.
- (xii) If the Regional Board concludes, based on the initial or any subsequent Completion of Construction request, that a specific Design Report is complete, the Regional Board shall issue a Certification of Work Completion to IEUA.
- (xiii) Upon the Regional Board's issuance of all three Certifications of Construction Completion, the Plume remedy Work shall be deemed complete and IEUA shall have no further obligations to construct or implement the Plume remedy Work pursuant to this Stipulated CAO, except as provided below in Section 55(C) and (E).

C. Plume Monitoring Reports. The City of Ontario and the City of Upland shall be responsible for coordinating and conducting any and all ongoing monitoring of the Plume, unless the Regional Board orders or directs another public agency to conduct such monitoring. If the City of Ontario and the City of Upland are instructed to monitor the Plume, then the City of Ontario and City of Upland shall jointly submit an annual Plume Monitoring Report to the Regional Board by December 31 of each year, until the Regional Board provides written authorization to discontinue the submittal of such Plume Monitoring Reports. Each Plume Monitoring Report shall comply with the general reporting requirements set forth in Section 56. Each Plume Monitoring Report shall include concentrations of TCE at all monitoring well locations. Within five years after initiation of remedial action, IEUA shall conduct the review required by statute and this Order to ensure that the remedy is, or will be, protective of human health and the environment and submit a report of its findings to the Regional Board.

D. Chino Basin Desalter Authority. Upon issuance of the third and final Certification of Construction Completion as set forth in Section 55(B)(xiii), pursuant to the Joint Facility Development Agreement executed on

June 22, 2015, between the Settling Agencies and the CDA, the CDA will continue maintaining and operating the Remedial Action in a manner consistent with the RAP until the Regional Board provides written authorization to discontinue operation of all or a portion of the Remedial Action. Notwithstanding the foregoing, the Parties acknowledge that CDA may suspend such operation if necessary to avoid a violation of the CDA's water supply permit(s), applicable drinking water standards, air quality regulations and/or other permit requirements applicable to the operation of Chino II Desalter (hereinafter "Applicable CDA Requirements").

E. Enforcement of the Remedial Action. In the event CDA discontinues its operation of the Remedial Action prior to receiving written authorization from the Regional Board, for reasons other than avoiding a violation of Applicable CDA Requirements, then the Parties shall proceed as follows:

- (i) If the Regional Board determines that (a) CDA is in breach of the Joint Facility Development Agreement; and (b) the Settling Agencies must enforce CDA's compliance with its obligations under the Joint Facility Development Agreement, then the Regional Board shall provide written notification to the Settling Agencies of such determination.
- (ii) Upon receiving such written notification from the Regional Board, the Settling Agencies agree to enforce CDA's obligation to maintain and operate the Remedial Action and the Regional Board agrees to support the Settling Agencies' efforts to enforce such obligations.
- (iii) The Regional Board reserves its authority to take any and all enforcement actions against CDA not expressly governed by the terms and conditions of this Stipulated CAO.

F. Request for Extension of Time. If for any reason, the Settling Agencies are unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Stipulated CAO and approved by the Executive Officer, the Settling Agencies may request, in writing, an extension of the time specified. The extension request must be submitted at least 10 days in advance of the deadline in question and shall include justification for any delay including a description of the good faith effort performed to achieve compliance with that deadline. The extension request shall also include a proposed time schedule to achieve compliance with the new proposed deadlines. Any modification to this Stipulated CAO, including but not limited to extensions of deadlines, shall be in writing and approved by the Executive Officer or his or her delegate.

56. REPORTING REQUIREMENTS

A. Signatory Requirements. All Design Reports required under Section 55(B) shall be signed and certified by IEUA or by a duly authorized representative of IEUA. All Plume Monitoring Reports required under Section 55(C) shall be signed and certified by City of Ontario or by its duly authorized representative. All other reports required under this Stipulated CAO shall be signed and certified by each Settling Agency or by a duly authorized representative of each Settling Agency. A person is a duly authorized representative if: (1) the authorization is made in writing by the Settling Agency and (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated activity. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

B. Certification. Include the following signed certification with all reports submitted pursuant to this Stipulated CAO:

I certify under penalty of perjury under the laws of the State of California that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

C. Duty to Use Registered Professionals. The Settling Agencies shall provide documentation that all Design Reports and Completion of Construction requests under this Stipulated CAO are prepared under the direction of appropriately qualified professionals. California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of registered professionals. The responsible registered professional shall sign and affix his/her registration stamp to the report, plan, or document.

D. Report Submittals. All reports required under this Stipulated CAO shall be submitted in both hard copy and electronically to:

Santa Ana Regional Water Quality Control Board
Attn: Kurt Berchtold, Executive Officer
3737 Main Street, Suite 500
Riverside, CA 92501-3348
Phone: (951) 782-4130
kberchtold@waterboards.ca.gov

57. REGIONAL BOARD OVERSIGHT

A. The Regional Board shall provide oversight over the requirements of this Stipulated CAO.

B. The Regional Board shall review all reports and deliverables submitted pursuant to this Stipulated CAO. After review of any Design Report or Completion of Construction request that is required for Regional Board approval, the Regional Board shall, within ninety (90) calendar days: (1) approve the submission, in whole or in part; (2) approve the submission upon specified conditions; (3) disapprove the submission, in whole or in part; or (4) any combination of the foregoing. The Regional Board shall provide written notice of its decision to Settling Agencies and any further actions the Settling Agencies must take, if any.

C. In the event a Settling Agency disputes the Regional Board's decision on any report or deliverable, or disputes any Regional Board act or failure to act in regards to implementing this Stipulated CAO, nothing in this Stipulated CAO prevents a Settling Agency from later petitioning the State Board to review the Regional Board's decision. Upon such petition, the Regional Board will not assert that the Settling Agency has previously waived or forfeited its right to petition the Regional Board's adverse decision under Water Code section 13320.

58. PAYMENTS FOR OVERSIGHT COSTS

The Settling Agencies have agreed to pay the Regional Board Oversight Costs by executing the Oversight Cost Agreement, attached hereto as Exhibit C.

59. MATTERS ADDRESSED

The "Matters Addressed" in this Stipulated CAO are all response actions taken or to be taken pursuant to the RAP and further identified in the Remedial Investigation and Feasibility Study, and all Oversight Costs and any Response Costs incurred or to be incurred, at or in connection with the Plume, by the Settling Agencies, the United States, the Companies, the Regional Board, or any other person.

60. RELEASE AND COVENANTS

A. Resolution of and Release from Liability. Except as provided below, the Santa Ana Water Board does hereby release and forever discharge the Settling Agencies, the United States and the Companies, and each of their respective past and present employees, officers, officials, directors, agents, successors, and assigns, from any and all claims, causes of action, damages, costs, and liabilities whatsoever, in law or in equity, known or unknown, asserted or unasserted, foreseen or unforeseen, that the Santa Ana Water Board may now have, or may later claim to have, under Porter-Cologne, the HSAA, or any

other State statutes or common law (including claims based on nuisance or trespass), CERCLA or RCRA in connection with, or in any way related to, the Plume and/or Matters Addressed in this Stipulated CAO. Notwithstanding the foregoing, the Regional Board or State Water Resources Control Board may issue further orders to the Settling Agencies as may be necessary to address either or both of the following circumstances, should such circumstances occur: (1) CDA breaches its obligation under the Joint Facility Development Agreement to continue operation of the Remedial Action, and such breach is not cured by implementation of the procedures set forth in Section 55(E) herein to enforce CDA's obligations; or (2) there is a failure of the Domestic Water Supply Remedy that cannot be cured by enforcement of the terms of this CAO. This release shall survive the termination of this Stipulated CAO.

B. Covenants by Santa Ana Water Board. Except as provided below), the Santa Ana Water Board covenants not to sue or to take administrative action against the Settling Agencies, the United States and the Companies under Porter-Cologne, the HSAA, any other State statutes or common law (including claims based on nuisance or trespass), CERCLA or RCRA in connection with, or in any way related to, the Plume and/or the Matters Addressed herein. Notwithstanding the foregoing, the Regional Board or State Water Resources Control Board may issue further orders to the Settling Agencies as may be necessary to address either or both of the following circumstances should such circumstances occur: (1) CDA breaches its obligation under the Joint Facility Development Agreement to continue operation of the Remedial Action, and such breach is not cured by implementation of the procedures set forth in Section 55(E) herein to enforce CDA's obligations; or (2) there is a failure of the Domestic Water Supply Remedy that cannot be cured by enforcement of the terms of this CAO. This covenant not to sue shall take effect upon the Effective Date and shall survive the termination of this Stipulated CAO. This covenant not to sue extends only to the Settling Agencies, the United States and the Companies and does not extend to any other person.

C. Covenants by Settling Agencies, the United States and the Companies. Except for the United States' reservation in subdivision D, below, and the Settling Agencies' expressly reserved right under Sections 57(C) and 63(A) to file a petition under Water Code section 13320, their right to seek judicial review of the resolution of that petition under Water Code section 13330, and their right to dispute the Regional Board's Oversight Cost as provided in the Oversight Cost Agreement, the Settling Agencies, the United States and the Companies covenant not to sue and agree not to assert any claims or causes of action against the Regional Board in connection with the Plume and/or the Matters Addressed herein. This covenant not to sue shall take effect upon the Effective Date and shall survive termination of this Stipulated CAO.

D. Reservation by the United States. The covenant not to sue set forth in subsection C does not include any release by the United States for

any claims or actions regarding the Site brought by or on behalf of the United States Environmental Protection Agency (EPA) or a natural resource trustee. This Stipulated CAO shall not constitute and shall not be deemed or construed to be a settlement or modification of claims by the United States Environmental Protection Agency (EPA), and shall not in any way bar or affect the rights of EPA, or the Department of Justice on behalf of EPA or a natural resources trustee, to make or assert such claims, causes of action, suits or demands, or to take or seek such actions as EPA, or the Department of Justice on behalf of EPA or a natural resources trustee, deems appropriate with respect to the release, threatened release or presence of hazardous substances, toxic substances, contaminants, pollutants or wastes at the Site.

61. EFFECT OF SETTLEMENT

A. Resolution of Liability. The Parties agree that this Stipulated CAO constitutes an administrative settlement with the Santa Ana Water Board, as an agency of the State of California pursuant to which each of the Settling Agencies, the United States and each of the Companies has, as of the Effective Date, resolved its liability to the State within the meaning of CERCLA sections 113(f)(2) and 113(f)(3)(B) regarding the “Matters Addressed” in this Stipulated CAO.

B. Contribution Protection. The Parties agree that this Stipulated CAO constitutes an administrative settlement with the Santa Ana Water Board as an agency of the State pursuant to which each of the Settling Agencies, the United States and each of the Companies is entitled, as of the Effective Date, to protection from contribution actions, claims or counterclaims as provided by CERCLA section 113(f)(2), or as may be otherwise provided by law, regarding the “Matters Addressed” in this Stipulated CAO.

C. Other Claims Barred. The Parties agree that entry into this Stipulated CAO shall bar any and all claims for contribution or indemnity against the Settling Agencies, the United States or the Companies arising out of the facts alleged herein. Such claims by any non-settling party are barred regardless of whether they are brought pursuant to Section 107 of CERCLA, Section 113 of CERCLA, or any other theory, as any claims against the Settling Agencies, the United States or the Companies arising out of facts alleged herein are in the nature of contribution claims arising out of a common liability, whether framed in terms of federal or state statute or common law.

62. GENERAL PROVISIONS

A. Duty to Comply. Failure to comply with the terms or conditions of this Stipulated CAO may result in additional enforcement action to

compel compliance or seek civil penalties for non-compliance. Specifically, the Regional Board may issue an order establishing a time schedule under Water Code section 13308 to compel compliance with the terms of this Stipulated CAO; the Regional Board may seek the imposition of administrative civil liability pursuant to Water Code sections 13308 or 13350(a)(1) for failure to comply with the terms of this Stipulated CAO; and the Regional Board may refer the matter to the Attorney General of the State of California to seek relief in superior court under Water Code section 13304(a) to compel compliance with this Stipulated CAO and/or under Water Code section 13350(d)(1) to impose civil penalties for violation of the terms of this Stipulated CAO. Notwithstanding any other provision of this Stipulated CAO, the Settling Agencies, the United States and the Companies may oppose and defend against any action by the Regional Board and/or the Attorney General under this Section 63(A) by any means, including but not limited to the filing of a petition under Water Code section 13220 and seeking judicial review of the resolution of any such petition under Water Code section 13330.

B. Force Majeure.

- (i) For the purposes of this Stipulated CAO, “Force Majeure” is defined as any event arising from causes beyond the control of the Settling Agencies, any entity controlled by Settling Agencies, or Settling Agencies’ contractors, that delays or prevents the performance of any obligation under this Stipulated CAO despite the Settling Agencies’ best efforts to fulfill the obligation. “Force Majeure” does not include financial inability to complete the Work.
- (ii) If any event occurs or has occurred that may delay the performance of any obligation under this Stipulated CAO for which the Settling Agencies intend or may intend to assert a claim of Force Majeure, the Settling Agencies shall notify the Regional Board’s Executive Officer within seven (7) business days of when the Settling Agencies first knew that the event might cause a delay. Within fourteen (14) business days thereafter, Settling Agencies shall provide to the Regional Board a written justification of the reasons for the delay; the anticipated duration of the delay; and all actions taken or to be taken to prevent or minimize the delay.
- (iii) If the Regional Board agrees that the delay or anticipated delay is attributable to a Force Majeure, the Regional Board will extend the time for performance of the obligation(s) affected by the Force Majeure, for such time as is necessary to complete the obligation(s). If the Regional Board does not agree that the delay or anticipated delay has been or will be

caused by a Force Majeure, the Regional Board will notify the Settling Agencies in writing of its decision within fourteen (14) business days after receiving the written justification above.

C. Notices and Submissions.

- (i) All notices, deliverables, approvals, requests, demands and other communications (collectively, "Notices") which the Parties are required or desire to serve upon or deliver to the other Party shall be in writing and shall be sent by U.S. mail, electronic mail, or courier, and addressed as set forth below:

To the Regional Board:

Name: Kurt Berchtold
Address: 3737 Main Street, Suite 500
Email: kberchtold@waterboards.ca.gov
Phone: (951) 782-4130

To the City of Ontario:

Attn: City Manager
Al C. Boling
City of Ontario
City Hall
303 East "B" Street
Ontario, CA 91764
(909) 395-2396
Aboling@ci.ontario.ca.us

To the City of Upland:

Attn: City Manager
City of Upland
City Hall
460 N. Euclid Avenue
(909) 931-4106
rbutler@ci.upland.ca.us

To IEUA:

Attn: General Manager
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708
(909) 993-1730
jgrindstaff@ieua.org

To the United States:

Leslie M. Hill
United States Department of Justice
Environment & Natural Resources Division Environmental Defense
Section
P.O. Box 7611
Washington, D.C. 20044
(202) 514-0375
Fax: (202) 514-8865
Email: leslie.hill@usdoj.gov

and

Edwin Oyarzo
TPS/ACR Attorney
U.S. Air Force
50 Fremont Street, Suite 2450
San Francisco, CA 94105
Tel: (415) 977-8844
Email: edwin.oyarzo@us.af.mil

and

Alarice R. Hansberry
Assistant District Counsel
U.S. Army Corps of Engineers, Sacramento District
1325 J Street
Sacramento, CA 95814
Tel: (916) 557-5293
Email: Alarice.R.Hansberry@usace.army.mil

To Aerojet Rocketdye Inc.:

William E. Hvidsten
Aerojet Rocketdyne Inc.
Senior Counsel, Environmental
2001 Aerojet Road
Rancho Cordova, CA 95742-6418
(916) 351-8524
william.hvidsten@Rocket.com

To The Boeing Company:

The Boeing Company
Attn: Steve Shestag

Director of Remediation
Environment Health & Safety
2201 Seal Beach Boulevard
MC 110-SB33
P.O. Box 2515
Seal Beach, CA 90740-1515
steven.l.shestag@boeing.com

To General Electric Company:

Randy McAlister
Executive Manager, Environmental Remediation
GE Global Operations, Environment, Health & Safety
3135 Easton Turnpike
Fairfield, CT, 06828
(203) 373-3855
randall.mcalister@ge.com

To Lockheed Martin Corporation:

Gene S. Matsushita
Senior Manager – Environmental Remediation
Lockheed Martin Corporation
2550 North Hollywood Way, Suite 406
Burbank, CA 91505
(818) 847-0197
gene.s.matsushita@lmco.com

- (ii) All Notices sent pursuant to this Stipulated CAO are effective upon receipt.

D. Amendment. This Stipulated CAO, and any provisions herein, may not be amended unless by written instrument signed by all Parties and their counsel, except for changes of address or to the party notified in Section 63(C).

E. No Admission of Liability or Waiver. The Parties expressly understand and agree that this Stipulated CAO is not to be construed as, nor does it constitute, an admission, evidence, or indication, in any degree, of liability by any Party for any claim, asserted or un-asserted, nor shall it be considered or interpreted as an assumption of any liability under applicable law.

F. No Third Party Rights. Nothing in this Stipulated CAO shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Stipulated CAO.

G. Good Faith. Each Party agrees to exercise good faith and diligence to implement this Stipulated CAO.

H. Governing Law. This Stipulated CAO shall in all respects be interpreted, enforced, and governed by and under the laws of the State of California and, to the extent CERCLA applies, the laws of the United States.

I. Authority. The undersigned hereby represent and warrant that they are authorized to execute this Stipulated CAO on behalf of the entity or individual for which they are signing and may bind that entity or individual to the promises and obligations of this Stipulated CAO.

J. Counterparts. This Stipulated CAO may be executed in counterparts, with each counterpart being interpreted as an original, and all of which, taken together, shall constitute one and the same instrument.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 16, 2016.

Kurt V. Berchtold
Executive Officer

IN WITNESS WHEREOF, the Parties have agreed to the foregoing and hereby execute this Stipulated CAO.

[signatures appear on following page]

**CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD,
SANTA ANA REGION**

Date: _____

By: _____
Kurt V. Berchtold
Executive Officer

CITY OF ONTARIO

Date: _____

By: _____
Al C. Boling
City Manager

CITY OF UPLAND

Date: _____

By: _____
City Manager

INLAND EMPIRE UTILITIES AGENCY

Date: _____

By: _____
P. Joseph Grindstaff
General Manager

UNITED STATES

Date: _____

By: _____
Leslie M. Hill
Trial Attorney

AEROJET ROCKETDYNE INC.

Date: _____

By: _____

THE BOEING COMPANY

Date:_____

By:_____

GENERAL ELECTRIC COMPANY

Date:_____

By:_____

LOCKHEED MARTIN CORPORATION

Date:_____

By:_____

2700436.1

Exhibit A

**JOINT FACILITY DEVELOPMENT AGREEMENT BETWEEN
INLAND EMPIRE UTILITIES AGENCY, CITY OF ONTARIO,
CITY OF UPLAND, AND CHINO BASIN DESALTER AUTHORITY**

This Joint Facility Development Agreement (“Agreement”) is made and entered into as of June 22, 2015, by and among the INLAND EMPIRE UTILITIES AGENCY (“IEUA”), a municipal water district, the CITY OF ONTARIO (“Ontario”), a municipal corporation, the CITY OF UPLAND (“Upland”), a municipal corporation, and the CHINO BASIN DESALTER AUTHORITY (“CDA”), a joint exercise of powers authority, for the purpose of implementing plume mitigation measures which include constructing and operating a remediation facility to remove volatile organic compounds, including trichloroethylene (collectively, “TCE”), from the South Archibald Plume (as defined below) consistent with and in addition to the Chino Basin Optimum Basin Management Program (“OBMP”). IEUA, Ontario, Upland, and CDA are sometimes individually referred to herein as “Party” and collectively as the “Parties.” IEUA, Ontario, and Upland are also sometimes collectively referred to as the “RP-1 Parties.”

RECITALS

A. Groundwater data collected by the Santa Ana Regional Water Quality Control Board (“Regional Board”) shows the presence of a TCE plume in the groundwater south of the Ontario International Airport and covering an area approximately 15,000 feet long by 6,000 feet wide (“South Archibald Plume”). The South Archibald Plume has impacted or will likely impact existing CDA wells. The South Archibald Plume is generally depicted on the map attached as Exhibit A.

B. CDA extracts and treats groundwater from the lower Chino Basin and distributes the treated water to certain of its member agencies. CDA owns and operates a desalter facility in Jurupa Valley (“Desalter II”), which extracts and treats the groundwater with reverse osmosis, decarbonation and ion exchange processes. CDA is in the process of expanding the capacity of Desalter II by: (1) constructing three new wells; (2) constructing a pipeline to connect the three new wells to the existing CDA pipeline for the purpose of conveying the groundwater pumped from the new wells to Desalter II; and (3) adding a third decarbonator (“Planned Expansion Project”).

C. The Parties, along with Western Municipal Water District and Jurupa Community Services District, entered into a Memorandum of Understanding in May 2013 to work together to develop a project to address the South Archibald Plume that meets the needs of the region in a fiscally responsible and timely manner (“Plume Cleanup Solution”).

D. The Plume Cleanup Solution proposed by the RP-1 Parties is intended to achieve the objective of the 2013 Memorandum of Understanding by integrating additional improvements into the Planned Expansion Project that would remove TCE from the South Archibald Plume (“Cleanup Project”). The Cleanup Project is depicted on the map attached as Exhibit B, and is further defined in Section 2(a) below.

E. The RP-1 parties funded several reports prepared on behalf of, and under the direction of, CDA to evaluate the technical and fiscal merit of the Cleanup Project. In addition, the RP-1 Parties provided technical data and analysis requested by CDA to evaluate the Cleanup Project.

F. The Parties are public agencies with an interest in the sustainable health of the groundwater basin and protecting and maintaining a high quality groundwater supply for the communities served by them. The Parties desire to collaborate on the development and construction of the Cleanup Project. The RP-1 Parties will fund all incremental design and construction costs (over and above the Planned Expansion Project costs) for the Cleanup Project ("Cleanup Project Costs"). Subject to Sections 4(b) and 4(c), CDA will operate and maintain the Cleanup Project in connection with the operation of Desalter II, and Cleanup Project Costs do not include the cost of operating and maintaining the Cleanup Project after completion of construction thereof.

G. In 2005, the Regional Board sent draft Cleanup and Abatement Orders to Aerojet-General Corporation, the Boeing Company, General Electric Company, Lockheed Martin Corporation (collectively "ABGL") and the United States regarding the South Archibald Plume.

H. In September 2012, the Regional Board sent a draft Cleanup and Abatement Order ("draft CAO") to the RP-1 Parties. The draft CAO required, in part, the preparation and submission of a Feasibility Study and Remedial Action Plan for mitigating the effects of the South Archibald Plume.

I. The Cleanup Project is intended to respond to the Regional Board's request for construction and implementation of a remedy to mitigate the effects of the South Archibald Plume in compliance with the draft CAO. This Cleanup Project objective is in addition to, and complementary to, the Parties' interest in the health of the groundwater basin and a high quality groundwater supply.

J. CDA has not received any notice, cleanup and abatement order (draft or otherwise), or other request or order from the Regional Board or other governmental entity relating to the South Archibald Plume and is not a party to negotiations with ABGL relating to the South Archibald Plume.

K. Recent investigations have confirmed that the South Archibald Plume is migrating south towards CDA's existing wellfield and towards the sites for the three proposed wells in the Planned Expansion Project. Some CDA well sites have already been impacted by detectable levels of TCE from the South Archibald Plume. If the Cleanup Project is not constructed, it is anticipated that the TCE impact to CDA's existing and proposed wells will increase over time.

L. In late 2014, the CDA contracted with MWH to complete an evaluation assessing the technical merit of the proposed Cleanup Project ("MWH Report"). The MWH Report concluded that under various operational scenarios, the Cleanup Project consistently resulted in reduced TCE in final product water when compared to the no-project alternative. Yorke Engineering was retained to study the potential impacts of the Cleanup Project on TCE emissions from Desalter II (the "Yorke Study"). The Yorke Study concluded that the Cleanup Project

would not necessitate additional air pollution control equipment under South Coast Air Quality Management District rules.

M. Notwithstanding the Regional Board's draft CAO and ABGL's allegations and contentions, each of the Parties denies any responsibility or liability for the South Archibald Plume.

NOW THEREFORE, in consideration of the above recitals and for adequate consideration, the Parties agree as follows:

TERMS

1. Cleanup Project Feasibility Study and Remedial Action Plan.

(a) The RP-1 Parties shall be responsible for funding and completing the Feasibility Study and the Remedial Action Plan required for Regional Board approval of the Cleanup Project, including coordinating, completing and funding all public outreach, public review and/or public comments relating to the Cleanup Project.

(b) The Parties will coordinate with each other regarding public statements made regarding the Cleanup Project. The Parties intend that planned public statements will be made available to the other Parties within a reasonable time prior to the publication of such statements. "Planned public statements" is intended to include, without limitation, press releases and press conferences and, whenever feasible, staff reports to be presented during public meetings of the Parties' governing boards.

(c) The RP-1 Parties will keep CDA routinely and appropriately apprised of meetings or correspondence regarding the Cleanup Project, including finalization of the Feasibility Study and the Remedial Action Plan for the Cleanup Project and correspondence from the Regional Board. The Parties anticipate periodic meetings as appropriate during the course of design and construction of the Project.

(d) The RP-1 Parties shall be responsible for making a good faith effort, and exercising reasonable diligence, to obtain approval of the Cleanup Project from the Regional Board.

(e) CDA shall cooperate with and support the RP-1 Parties' efforts to obtain the Regional Board's approval of the Cleanup Project, at no cost to CDA.

2. Design, Development and Construction of the Cleanup Project.

(a) The Cleanup Project consists of: (i) constructing a new 24-inch pipeline parallel to the existing CDA pipeline on Bellegrave Avenue connecting the Planned Expansion Project's new wells directly to the reverse osmosis and decarbonator treatment processes at Desalter II; (ii) modifying the existing decarbonators at Desalter II in a manner designed to remove 95% of the TCE from the influent; (iii) moving one of the Planned Expansion Project wells from the vicinity of South Archibald Avenue and Merrill Avenue, north approximately one mile to a location near the intersection of Edison Avenue and Cucamonga Creek (the "Northern

Well”) and the incremental costs associated with the elevated levels of TCE expected during the development of the Northern Well; (iv) constructing a new pipeline to connect said Northern Well to the pipeline along Bellegrave Avenue; (v) adding a new pipeline connecting CDA’s Well I-11 to the Planned Expansion Project pipeline at its anticipated new well at Site 2; (vi) modifying pumping equipment to transport water from CDA Well I-11 to the pipeline system leading to Desalter II; and (vii) equipping CDA’s Well II-10, Well II-11 and the Northern Well with variable frequency drives and associated equipment required to adjust well output for cleanup of the South Archibald Plume. The component of the Cleanup Project described in clause (vii) of the immediately preceding sentence is referred to herein as the “VFD Component.”

(b) Subject to force majeure, CDA shall be responsible for undertaking all Cleanup Project management and construction activities within the schedule, including milestone deadlines, as required by the Regional Board (the “Cleanup Project Schedule”); provided, CDA shall have the right to approve the Cleanup Project Schedule, in CDA’s reasonable discretion, prior to being bound by the Cleanup Project Schedule.

(c) The Parties shall fully cooperate with one another in developing and implementing the Cleanup Project as described above and depicted in Exhibit B. CDA shall design and construct the Cleanup Project in a manner that incorporates the Cleanup Project into the Planned Expansion Project. CDA shall also act as the project manager for the design and construction of the Cleanup Project unless, within 90 days of the effective date of this Agreement, CDA provides the RP-1 Parties with notice that it has elected to have IEUA serve as the project manager.

(i) CDA will keep the RP-1 Parties reasonably and appropriately apprised of the construction contracting process, including the final design of the Cleanup Project, the request for bids, the construction bids submitted, the award of the construction contract, and any bid protests or other challenge to the contracting process;

(ii) CDA will obtain express approval from a designated representative of the RP-1 Parties prior to awarding each contract for the design and/or construction of the Cleanup Project and prior to approving any material change orders, including all change orders that will cause the Cleanup Project Costs for the applicable contract to exceed the contract price plus the planned contingency amount; and

(iii) If, upon completion of the Cleanup Project’s construction bidding process, the estimated total Cleanup Project Costs exceed the sum of \$10 million plus a reasonable construction contingency not to exceed ten percent (10%), the Parties shall consult with each other to reassess the scope and viability of the Cleanup Project before awarding any construction contracts; however, prior to award of the first construction contract for the Cleanup Project, each RP-1 Party shall have the right to terminate this Agreement.

(d) CDA agrees to construct the Cleanup Project by awarding construction contract(s) in accordance with the process described in this Section 2 and by performing its obligations under said contract(s).

(e) CDA shall be responsible for obtaining all regulatory approval(s) of the Cleanup Project and the Planned Expansion Project, other than approvals specified in Section 1(d). However, to the extent the Cleanup Project causes the cost of obtaining such regulatory approvals to be increased over the cost for the Planned Expansion Project regulatory approvals, the additional incremental cost of regulatory approvals for the Cleanup Project shall be funded by the RP-1 Parties as Cleanup Project Costs.

(f) The Parties anticipate that CDA will be the lead agency for the evaluation of the environmental impacts, if any, of the Cleanup Project pursuant to the California Environmental Quality Act ("CEQA") and evaluation and clearance of the Cleanup Project pursuant to the National Environmental Policy Act ("NEPA"); provided that CDA shall coordinate closely with the RP-1 Parties in connection with such evaluation and clearance. The RP-1 Parties shall save, protect, pay for, defend (with counsel acceptable to CDA), indemnify and hold harmless CDA from and against any and all liabilities, suits, actions, claims, demands, damages, losses, costs or expenses (including, without limitation, consultants' fees, investigation and laboratory fees, attorneys' fees and costs) which may now or in the future be incurred or suffered by CDA by reason of, resulting from, or in connection with, CDA's compliance with CEQA and/or NEPA as lead agency in connection with CDA's approval of the Cleanup Project (collectively referred to herein as "CEQA/NEPA Liabilities"). The foregoing indemnity obligation shall survive the termination of this Agreement. At the request of the RP-1 Parties, CDA shall cooperate with and assist the RP-1 Parties in the defense of any such CEQA/NEPA Liabilities; provided that CDA shall not be obligated to incur any expense in connection with such cooperation or assistance.

(g) CDA shall own the Cleanup Project, including the new pipelines, the Northern Well, and the modified decarbonators.

3. Funding and Financial Responsibilities for the Cleanup Project

(a) Upon approval by the Parties of the Cleanup Project design and award of the first construction contract (with the approval of the RP-1 Parties), the RP-1 Parties shall fund all Cleanup Project Costs through completion of construction of the Cleanup Project at no cost to CDA. Without limiting the generality of the foregoing and notwithstanding anything to the contrary herein or in any other agreement between or among any of the Parties hereto, the Parties expressly agree that CDA shall have no obligation to fund any costs of design or construction of the Cleanup Project and that once the first construction contract for any portion of the Cleanup Project has been awarded, the RP-1 Parties shall be obligated to fund design and construction of the Cleanup Project through completion. Whether CDA performs project management for the Cleanup Project and the Planned Expansion Project by using CDA staff or by retaining a third-party construction management company, the RP-1 Parties shall be responsible for all management costs attributable to the Cleanup Project's design and construction but the RP-1 Parties shall not be responsible for management costs attributable to the Planned Expansion Project.

(i) This Agreement does not obligate the RP-1 Parties to fund CDA's O&M Costs (as defined in Section 4) or costs associated with the Planned Expansion Project.

(b) The RP-1 Parties shall be responsible for: (i) pursuing grants, as appropriate, for the design and construction of Cleanup Project; and (ii) executing and administrating all grant-related activities and/or grant requirements for the Cleanup Project, except those that are the responsibilities of CDA under 3(d). Notwithstanding any provision herein, securing grants shall not be a condition precedent to the performance of any of the RP-1 Parties' obligations under this Agreement. Any grants obtained by the RP-1 Parties will be applied to reduce the RP-1 Parties' obligation to fund Cleanup Project Costs under Section 3(a).

(c) The CDA shall fully cooperate with the RP-1 Parties in pursuit and administration of grants and shall work collaboratively with the RP-1 Parties to minimize the RP-1 Parties' Cleanup Project Costs.

(d) Prior to award of each contract for design and/or construction of the Cleanup Project, (1) CDA shall submit a request for payment of the entire contract amount, plus a reasonable contingency not to exceed ten percent (10%) of the contract amount, to the RP-1 Parties and (2) the RP-1 Parties shall deposit the full requested amount into the Cleanup Project Account (defined below) within the time set forth in Section 3(d)(v) below. The same procedure shall apply to change orders in excess of the available contingency (i.e. monies already held by CDA) under each contract. Notwithstanding the foregoing provisions of this Section 3(d), the RP-1 Parties shall pay for the VFD Component of the Cleanup Project in accordance with Section 3(d)(vi) below.

(i) CDA shall open and maintain a separate, interest-bearing account at Citizen's Business Bank or another financial institution mutually acceptable to the Parties (referred to herein as the "Cleanup Project Account") and shall deposit all moneys received from the RP-1 Parties under this Section 3 into the Cleanup Project Account and hold such moneys in the Cleanup Project Account until CDA disburses such moneys to pay for Cleanup Project Costs in accordance with this Agreement. All interest earned in the Cleanup Project Account shall be and remain the property of the RP-1 Parties in proportion to the amount of their respective deposits into the Cleanup Project Account. Disbursements from the Cleanup Project Account for Cleanup Project Costs shall not require the prior approval of the RP-1 Parties. CDA shall keep separate records for the Cleanup Project, including without limitation all deposits into and withdrawals from the Cleanup Project Account and all payments disbursed to consultants and/or contractors, and/or reimbursements to CDA, for Cleanup Project Costs in accordance with this Agreement.

(ii) CDA will endeavor to structure the bidding and award process so that the deadline to award each contract is at least forty-five (45) days following the receipt of bids and will provide all bids received for each contract to the RP-1 Parties' designated representatives promptly upon receipt to enable the RP-1 Parties to provide input regarding the bids.

(iii) CDA shall provide statements to the RP-1 Parties on a quarterly basis regarding: (A) the total contract price for each contract and change order awarded in connection with the Cleanup Project (and the corresponding deposits made to CDA by the RP-1 Parties), (B) the amount of Cleanup Project Costs actually disbursed by CDA to contractors and/or consultants; and (C) the estimated total Cleanup Project Costs to be incurred by the end of

the following quarter, including whether the Cleanup Project Costs are expected to exceed \$8 million or \$10 million by the end of the following quarter. The RP-1 Parties shall have the right to audit CDA's determination of the costs, expenses, credits and all other accounting pursuant to this Section 3(d)(i), and CDA will cooperate with any such audit by providing information and documentation requested by the RP-1 Parties to perform such audit.

(iv) Except as specifically otherwise provided in this Agreement, the RP-1 Parties' obligations under this Agreement are joint, including obligations for payment of all Cleanup Project Costs.

(v) Upon CDA's delivery to the RP-1 Parties of a demand for payment pursuant to Section 3(d), the RP-1 Parties shall have twenty (20) Business Days to deliver the requested amount to the Cleanup Project Account. In the event the full amount requested by CDA is not deposited within such time frame, CDA shall deliver notice to the RP-1 Parties of the deficiency and the RP-1 Parties shall have ten (10) additional Business Days to deposit the remaining amounts into the Cleanup Project Account. In the event the full amount requested by CDA in accordance with Section 3(d) is not deposited into the Cleanup Project Account within the time periods described in this paragraph, CDA shall not be required to award the subject contract and CDA shall return the moneys received from the RP-1 Parties for such contract, if any, to the RP-1 Parties from which such money was received. In such event of non-payment by the RP-1 Parties, CDA shall terminate any previously-awarded design contracts at the earliest time permitted by the terms of such contracts, except design contracts that are necessary for the completion of a previously-awarded construction contract. Notwithstanding the preceding sentence, CDA shall have the right to complete any previously-awarded construction contracts for the Cleanup Project and any design contracts necessary for the completion of any previously-awarded construction contracts for the Cleanup Project (collectively, the "Ongoing Contracts") and the RP-1 Parties shall remain responsible for the cost to complete all such Ongoing Contracts including any cost overruns. In the event CDA exercises its right to complete an Ongoing Contract, upon completion of all Ongoing Contracts and CDA's acceptance of the completed components of the Cleanup Project constructed pursuant to such Ongoing Contracts, this Agreement shall automatically terminate.

(vi) The RP-1 Parties shall pay for the VFD Component by depositing the lump sum amount of \$250,000 into the Cleanup Project Account within twenty (20) Business Days prior to the award by CDA of the contract for the equipping of Well II-10, Well II-11 and/or the Northern Well, whichever contract is awarded first. The lump sum amount set forth in the immediately preceding sentence shall constitute the full obligation of the RP-1 Parties with respect to the costs of the VFD Component.

4. Operation and Maintenance of the Cleanup Project.

(a) As used herein, the term "O&M Costs" shall mean the total of all direct and indirect expenses and replacement costs incurred by CDA in the operation and maintenance of the Cleanup Project and CDA's facilities, including, but not limited to, operating labor, repair labor, payroll taxes, employee benefits, training costs, permits, consultants (engineers, auditors, attorneys, and inspectors), materials, insurance, communications, utilities cost, supplies, chemicals, tools, vehicles, minor modifications, tests and sampling, contaminant handling and

disposal, costs of repairs, modification and replacement of facilities and equipment used for remediation, together with all necessary expenses in connection therewith.

(b) CDA shall maintain and operate the Cleanup Project, including pumping groundwater from the Northern Well to the Desalter II in a manner consistent with the Remedial Action Plan as approved by the Regional Board, provided, however, that CDA may suspend such operation to avoid violation of CDA's water supply permit(s), applicable drinking water standards, air quality regulations and/or other permit requirements applicable to the operation of Desalter II, to the extent such regulations and requirements are in effect from time to time (the "Applicable Requirements").

(c) Neither CDA nor the RP-1 Parties shall have any obligation under this Agreement to construct new or additional facilities to avoid violation of the Applicable Requirements and, in the event CDA is unable to avoid a violation of the Applicable Requirements due (in whole or in part) to its operation of the Cleanup Project facilities, CDA shall have the right, in its reasonable discretion, to stop operating all or a portion of the Cleanup Project facilities for the shortest period of time required to avoid non-compliance with the Applicable Requirements. CDA shall resume operation of all or a portion of the Cleanup Project facilities if and when they may be operated in compliance with such laws, regulations, standards or permit conditions. The Parties recognize, however, that the suspension of operations described in this paragraph may be permanent.

(d) CDA shall fully cooperate with the RP-1 Parties and the Regional Board in operating and maintaining Desalter II and its facilities, and shall provide information or data to the RP-1 Parties necessary to comply with Regional Board reporting requirements, if any.

(e) In the event CDA's O&M Costs attributable to the Cleanup Project are higher than projected by the MWH Report and related analysis conducted in development of the Cleanup Project, the Parties may enter into good-faith negotiations to identify actions that will avoid, decrease or apportion among the Parties the higher than projected O&M Costs.

5. Future Plume Monitoring Efforts.

(a) The Parties acknowledge that after construction of the Cleanup Project is completed, the Regional Board may require further monitoring of the TCE contamination in or around the current area of the South Archibald Plume as part of the Cleanup Project ("Future Plume Monitoring").

(b) The RP-1 Parties shall be responsible for coordinating, conducting and funding any and all Future Plume Monitoring that are not otherwise completed by CDA, ABGL, the United States or Watermaster.

(c) CDA shall not be responsible for coordinating, conducting or financing Future Plume Monitoring, but shall cooperate with the RP-1 Parties and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient, for the RP-1 Parties to conduct Future Plume Monitoring. Nothing in this Agreement is intended to relieve the CDA of any of its monitoring requirements that are independent of the Future Plume Monitoring relating to the Cleanup Project.

6. Effective Date. This Agreement shall become effective and binding upon the Parties on the first day following the execution of the Agreement by all Parties.

7. Term. The term of this Agreement shall commence on the Effective Date and continue through the date the Regional Board provides written authorization to terminate operation of the Cleanup Project.

8. Alternative Drinking Water Supplies. Nothing in this Agreement shall be interpreted to make CDA responsible for supplying alternative drinking water to the communities affected by TCE from the South Archibald Plume.

9. Denial of Responsibility. The Parties each deny any responsibility for the South Archibald Plume.

10. Cooperation of Parties. The Parties shall fully cooperate with one another, and shall undertake reasonable additional actions and sign additional documents as may be necessary, appropriate or convenient to attain the purposes of this Agreement, including the procurement of funding and minimizing expenses to reduce each Party's respective obligations to contribute to Cleanup Project Costs, O&M Costs, and/or costs associated with Future Plume Monitoring; provided that this Section is not intended to modify the allocation among the Parties of the responsibility to pay Cleanup Project Costs, O&M Costs or Future Plume Monitoring costs otherwise set forth in this Agreement.

11. Consideration. Each of the Parties will receive good and valuable consideration in exchange for the obligations they assume under this Agreement, as explained in the recitals and in this Section 11. First, since each of the Parties has an interest in the sustainable health of the groundwater basin and protecting and maintaining a high quality groundwater supply for the communities served by them, the Cleanup Project's benefit to these interests is consideration. Second, the fact that the Cleanup Project responds to the Regional Board's allegations against the RP-1 Parties is consideration for the RP-1 Parties' obligations under this Agreement even though the RP-1 Parties deny responsibility for the South Archibald Plume. Third, CDA is anticipated to benefit from the Cleanup Project because if the Cleanup Project is not constructed, it is anticipated that the TCE impact to CDA's existing and proposed wells will increase over time.

12. Regional Board Settlement and Approval Condition Precedent. The Regional Board's Settlement with the RP-1 Parties and approval of the Cleanup Project is an express condition precedent to the rights and obligations of all Parties under this Agreement. If, after making a good faith effort and exercising reasonable diligence to obtain approval of the Cleanup Project from and Settlement with the Regional Board, any of the RP-1 Parties determine that such approval cannot be obtained, the objecting RP-1 Party will provide notice to all Parties. Upon such notice that the condition precedent in this Section 12 cannot be satisfied, this Agreement shall be deemed null and void and none of the Parties will have any rights or obligations whatsoever under this Agreement.

13. Notice. All notices or other communications required to be given pursuant to this Agreement shall be in writing, and, except as otherwise provided herein, shall be effective upon

personal delivery or three (3) days after deposit in the United States mail, with first-class postage fully paid, addressed as follows:

IEUA: Attn: General Manager
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

with a copy to: Attn: Gregory J. Newmark
Meyers, Nave, Riback, Silver & Wilson
633 W. 5th Street, Suite 1700
Los Angeles, CA 90071

Ontario: Attn: City Manager
City Hall
303 East "B" Street
Ontario, CA 91764

with a copy to: Attn: Gene Tanaka and John Holloway
Best Best & Krieger LLP
2001 N. Main Street, Suite 390
Walnut Creek, CA 94596

Upland: Rod Butler, City Manager
City of Upland
P.O. Box 460
Upland, CA 91786

with a copy to: Attn: Richard Adams II
City Attorney
Jones & Mayer
3777 N. Harbor Boulevard
Fullerton, CA 92835

CDA: Attn: Curtis Paxton, General Manager/CEO
Chino Basin Desalter Authority
2151 S. Haven Avenue, Suite 202
Ontario, CA 91761
Tel (909) 218-3729 Fax
(909) 218-3777
cpaxton@chinodesalter.org

with a copy to:

Attn: Allison E. Burns, General Counsel
Stradling Yocca Carlson & Rauth
660 Newport Center Drive, Suite 1600
Newport Beach, CA 92626
Tel (949) 725-4000
Fax (949) 823-5187
aburns@sycr.com

14. Exclusion from Scope of Agreement. Notwithstanding any provision to the contrary, this Agreement does not address and has no effect on any claims, demands, action, causes of action and rights, in law or in equity, in the nature of an administrative proceeding or otherwise (known, unknown, contingent, accrued, inchoate or otherwise), which the Parties have or may have, now or in the future, against parties who may be responsible for the South Archibald Plume.

15. Dispute Resolution

(a) In the event of a dispute regarding this Agreement, which cannot be resolved by good faith negotiations, including a dispute concerning a Party's financial obligations, the Parties will submit the dispute to non-binding mediation in the Los Angeles Office of Judicial Arbitration and Mediation Services, Inc. ("JAMS"). The Parties will share in the cost of such mediation.

(b) If mediation is not successful in resolving the dispute or the Parties elect to waive mediation, then each Party shall have the right to pursue any and all remedies such Party may have available to it in law or equity.

(c) The provisions of this Section 15 will not apply to prevent any Party from initiating or maintaining any suit necessary to prevent irreparable harm, including but not limited to loss of its claim due to passage of the relevant statute of limitations for that claim, that could otherwise occur during the time necessary to pursue the dispute resolution procedures set forth herein.

16. Miscellaneous.

(a) Incorporation of Recitals. The recitals set forth above are incorporated herein and made an operative part of this Agreement.

(b) Entire Agreement. With the exception of any agreements among the RP-1 Parties regarding the Cleanup Project, this Agreement contains the entire understanding between the Parties with respect to its subject matter, and supersedes all prior agreements, oral or written, and all prior or contemporaneous discussions or negotiations between the Parties.

(c) Amendment. This Agreement cannot be amended except in writing signed by all Parties.

(d) **No Waiver.** Any failure or delay on the part of any Party to exercise any right under this Agreement shall not constitute a waiver of the right, and shall not preclude such Party from exercising or enforcing the right, or any other provision of this Agreement, on any subsequent occasion.

(e) **Headings; Section References.** Captions and headings appearing in this Agreement are inserted solely as reference aids for ease and convenience; they shall not be deemed to define or limit the scope or substance of the provisions they introduce, nor shall they be used in construing the intent or effect of such provisions.

(f) **Severability.** If any provision of this Agreement is determined by a court to be invalid or unenforceable as written, the provision shall, if possible, be enforced to the extent reasonable under the circumstances and otherwise shall be deemed deleted from this Agreement. The other provisions of this Agreement shall remain in full force and effect so long as the material purposes of the Agreement and understandings of the Parties are not impaired.

(g) **Binding Effect; Assignment.** This Agreement shall be binding on and inure to the benefit of the Parties, and their respective successors and permitted assigns. Each Party shall have the right to assign its rights and all of its obligations under this Agreement with the written consent of the other Parties, provided, however, that the other Parties shall not unreasonably withhold such consent.

(h) **Governing Law.** This Agreement is a contract governed in accordance with the laws of the State of California.

(i) **Counterparts.** This Agreement may be executed in counterparts, each of which will be deemed an original. A photocopy, PDF, or fax reproduction of an original copy of the Agreement shall be of the same binding effect as the original

(j) **Authority.** The persons signing below represent and warrant that they have the requisite authority to bind the Party on whose behalf they are signing.

(k) **No Inducement or "Drafting Party".** Each of the Parties have had the opportunity to, and have to the extent each deemed appropriate, obtained legal counsel concerning the content and meaning of this Agreement. Each of the Parties agrees and represents that no promise, inducement or agreement not expressed in this Agreement has been made to effectuate this Agreement, and that this Agreement represents the entire agreement between the Parties. Each of the Parties' respective legal counsel have reviewed and approved this Agreement. The rule of construction that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement.

(l) **No Third Party Rights.** Except as expressly provided herein, nothing in this Agreement shall be deemed to create any rights in favor of, or to inure to the benefit of, any third parties, or to waive or release any defense or limitation against third party claims.

(m) **Relationship of Parties.** Nothing contained herein shall be deemed or construed to create the relationship of principal and agent, or partnership or joint venture, or any association between the Parties, and none of the provisions contained in this Agreement or any

act of the Parties shall be deemed to create any relationship other than as specified herein, nor shall this Agreement be construed, except as expressly provided herein, to authorize any Party to act as the agent for the other.

[Signatures follow on the next page]

The Parties have executed this agreement, effective as of the date set forth in Section 7 above.

INLAND EMPIRE UTILITIES AGENCY

By: 
P. Joseph Grindstaff
General Manager

Date: 6/17/15

CITY OF UPLAND

By: _____
Rod B. Butler
City Manager

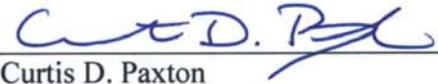
Date:

CITY OF ONTARIO

By: _____
Al C. Boling
City Manager

Date:

CHINO BASIN DESALTER
AUTHORITY

By: 
Curtis D. Paxton
General Manager/CEO

Date: 6/4/15

The Parties have executed this agreement, effective as of the date set forth in Section 7 above.

INLAND EMPIRE UTILITIES AGENCY

By: _____
P. Joseph Grindstaff
General Manager

Date:

CITY OF UPLAND

By: Rod B. Butler
Rod B. Butler
City Manager

Date: 6/18/2015

CITY OF ONTARIO

By: _____
Al C. Boling
City Manager

Date:

CHINO BASIN DESALTER
AUTHORITY

By: Curtis D. Paxton
Curtis D. Paxton
General Manager/CEO

Date: 06/04/2015

The Parties have executed this agreement, effective as of the date set forth in Section 7 above.

INLAND EMPIRE UTILITIES AGENCY

By: _____
P. Joseph Grindstaff
General Manager

Date:

CITY OF UPLAND

By: _____
Rod B. Butler
City Manager

Date:

CITY OF ONTARIO

By: _____
Al C. Boling
City Manager

Date: 6/16/15

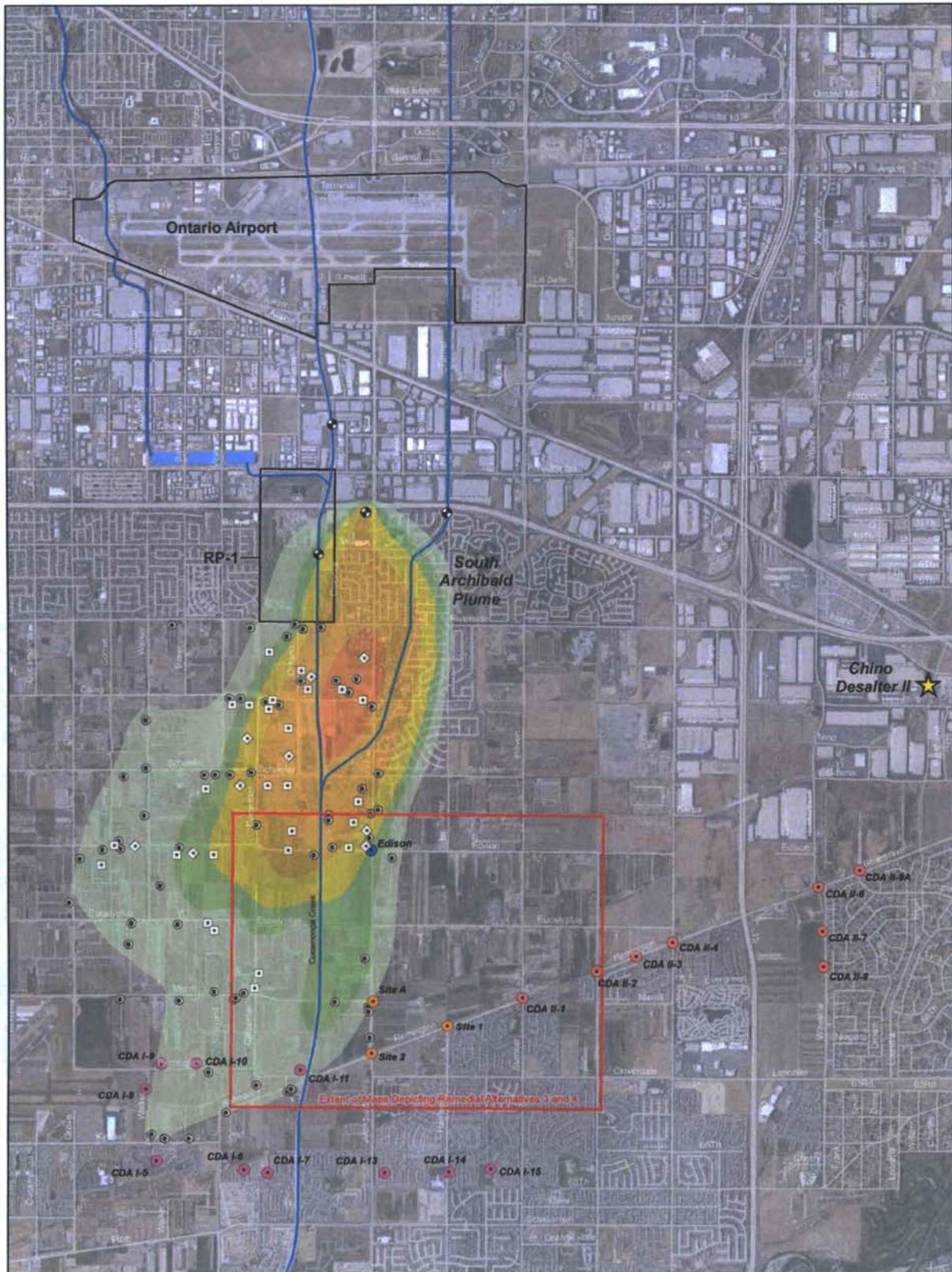
CHINO BASIN DESALTER
AUTHORITY

By: _____
Curtis D. Paxton
General Manager/CEO

Date:

EXHIBIT A

SOUTH ARCHIBALD PLUME



Basemap Source: Bing 2012, ESRI

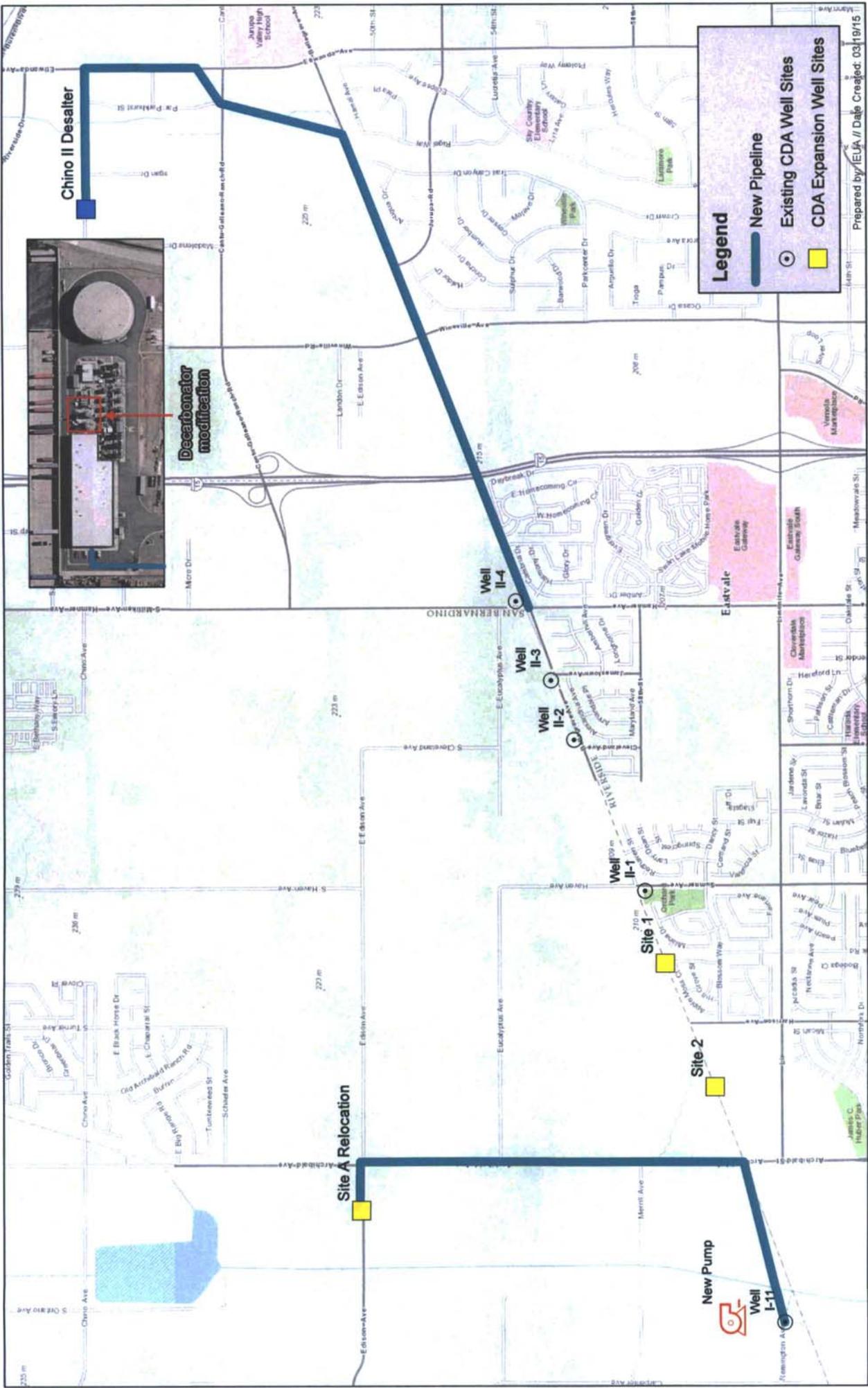
- | | | |
|--|--|---|
| <ul style="list-style-type: none"> ■ Ely Basins — Drainage Channel Well Tank System Location Bottled Water Service Nested Monitor Well | <p>CDA Wells</p> <ul style="list-style-type: none"> ● Edison Well ● Existing Desalter I Well ● Existing Desalter II Well ● Proposed Desalter II Well | <p>Groundwater TCE Concentration (ug/L)</p> <ul style="list-style-type: none"> > 0 and ≤ 5 >5 and ≤ 10 >10 and ≤ 20 >20 and ≤ 50 >50 and ≤ 100 |
|--|--|---|

Note:
All Locations Approximate



EXHIBIT B

PROPOSED CLEANUP PROJECT



Decarbonator modification

Chino II Desalter

Site A Relocation

New Pump Well L-11



Well II-4

Well II-3

Well II-2

Well II-1

Site 1

Site 2

Legend

New Pipeline

Existing CDA Well Sites

CDA Expansion Well Sites

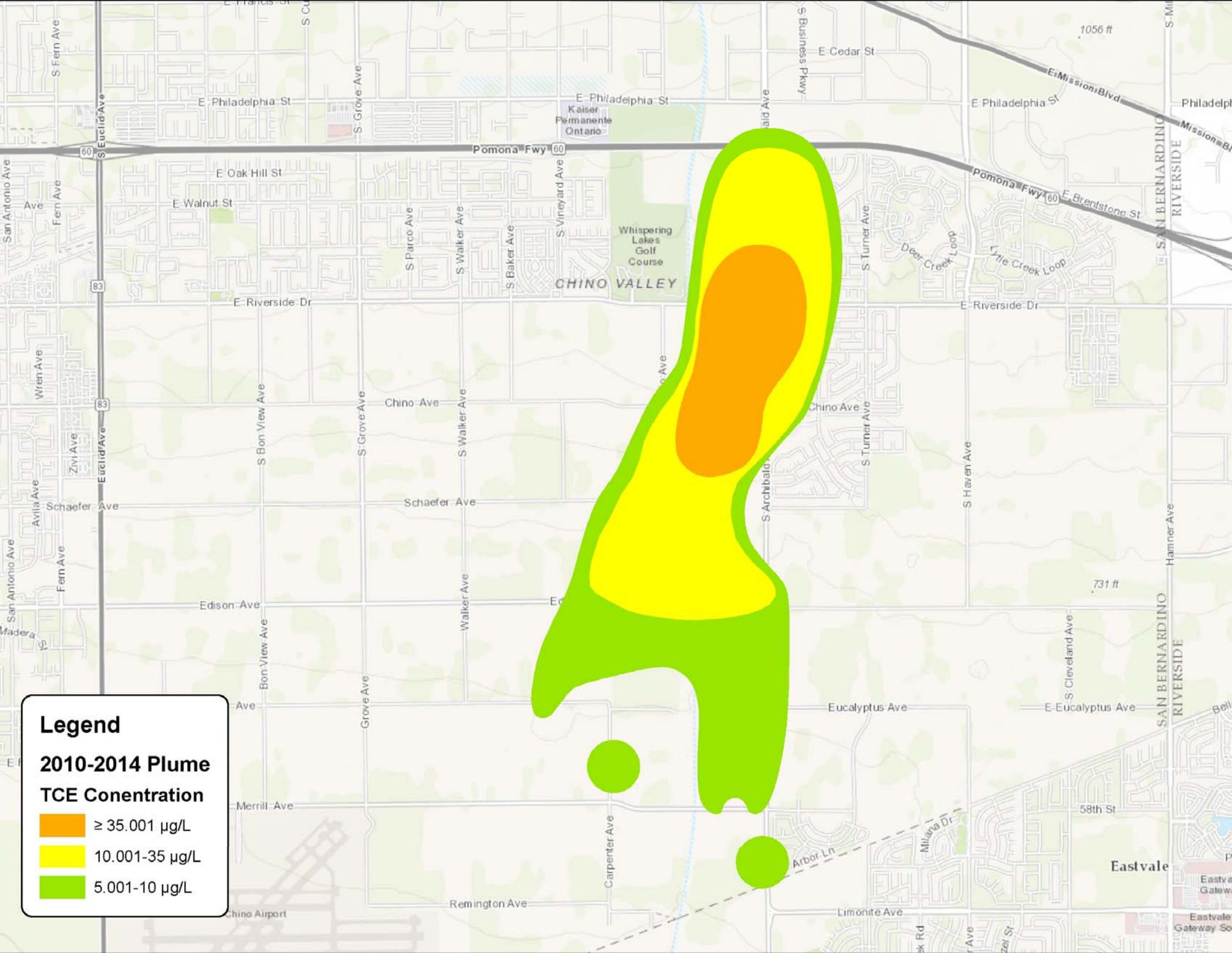
Prepared by IEUA // Date Created: 03/19/15



**Chino Desalter Authority (CDA)
South Archibald Plume Project**



Exhibit B



Legend

2010-2014 Plume TCE Concentration

- Orange: $\geq 35.001 \mu\text{g/L}$
- Yellow: $10.001\text{-}35 \mu\text{g/L}$
- Green: $5.001\text{-}10 \mu\text{g/L}$

Exhibit C

**ACKNOWLEDGMENT OF RECEIPT OF
OVERSIGHT COST REIMBURSEMENT ACCOUNT LETTER**

I, Gene Tanaka, acting within the authority vested in me as an authorized representative of **Cities of Ontario, Upland and Inland Empire Utilities** acknowledge that I have received and read a copy of the attached REIMBURSEMENT PROCESS FOR REGULATORY OVERSIGHT and the cover letter dated June 16, 2015, concerning cost reimbursement for Regional Board staff costs involved with oversight of cleanup and abatement efforts at the South Archibald trichloroethylene (TCE) plume, Central Chino Basin, Ontario California. The site is located in the vicinity of the intersection of East Riverside Drive and South Archibald Avenue, Ontario, California.

I understand the reimbursement process and billing procedures as explained in the letter. The undersigned is willing to participate in the cost recovery program and pay all subsequent billings in accordance with the terms in your letter and its attachments, and to the extent required by law. I also understand that signing this form does not constitute any admission of liability, but rather an intent to pay for costs associated with oversight, as set forth above, and to the extent required by law. Billings for payment of oversight costs should be mailed to the following individual and address:

BILLING CONTACT Gene Tanaka

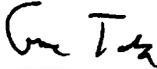
BILLING ADDRESS Best Best & Krieger LLP

2001 N. Main Street, Suite 390

Walnut Creek, CA 94596

TELEPHONE NO. (925) 977-3300

RESPONSIBLE PARTY'S SIGNATURE



(Signature)

Attorney for City of Ontario

(Title)

DATE: June 30, 2015

Staff: