CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION SETTLEMENT AGREEMENT AND STIPULATION FOR ENTRY OF ADMINISTRATIVE CIVIL LIABILITY ORDER R5-2017-0534 IN THE MATTER OF CMO, INC. MITCHEL AND BACON LEASES CHICO MARTINEZ OIL FIELD, KERN COUNTY

This Settlement Agreement and Stipulation for entry of Administrative Civil Liability Order (Stipulated Order or Order) is entered into by and between the Assistant Executive Officer of the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), on behalf of the Central Valley Water Board Prosecution Team (Prosecution Team), and CMO, Inc. (CMO or Discharger) (collectively known as the Parties) and is presented to the Central Valley Water Board, or its delegee, for adoption as an order by settlement, pursuant to Government Code section 11415.60.

Recitals

- CMO is the owner and operator of the Mitchel and Bacon leases (Leases) in the Chico Martinez Oil Field in western Kem County. The Leases are in Section 35, T28S, R20E, MDB&M.
- 2. On 21 January 2014, Central Valley Regional Water Quality Control Board staff (Staff) received by telephone a complaint alleging that oil field produced water was discharging on the Leases.
- 3. On 11 February 2014, Staff met with the complainant at a location near the Leases to discuss the complaint prior to inspecting the Leases. During the meeting, the complainant provided Staff with two CD-ROMs that contain a video and photographs. The three-minute long video shows a vacuum truck discharging fluid onto a lease road and visual evidence of discharged fluid on lease roads and in an ephemeral stream channel. At about 2 minutes into the video, an unidentified male states that he is on a CMO lease, the date is January 21st, and it had not rained in nearly two months.
- 4. On 11 February 2014, Staff inspected the Leases.
 - A) During the inspection, Staff observed oil and produced water in three unlined impoundments (disposal ponds) used by CMO for the disposal of produced water by evaporation and percolation. Staff collected water samples from the third disposal pond. The analytical results reported by the state-certified laboratory are: specific conductance (EC), 6,600 micromhos per centimeter (μmhos/cm); total dissolved solids (TDS), 3,700 milligrams per liter (mg/L); chloride, 1,500 mg/L; and boron, 32 mg/L.

During the inspection, Staff observed at several locations on the Leases what appeared to be recent discharges of produced water to land. At one location,

tire tracks were observed and it appeared that vacuum truck(s) drove around on lease roads to discharge produced water. At another location, it appeared that a truck had stopped to discharge produced water because the discharged water created an erosional scour feature that led downslope to an ephemeral stream channel. The erosional scour was photographed and included in the Inspection Report, described below.

- B) During the inspection, Staff collected water samples from a small pool of ponded produced water on a lease road. The analytical results reported by the state-certified laboratory are: EC, 7,700 μS/cm; TDS, 4,300mg/L; chloride, 1,400 mg/L; and boron, 38 mg/L. The EC, chloride, and boron results for produced water samples exceed their respective maximum limits of 1,000 μmhos/cm; 200 mg/L; and 1 mg/L in the *Water Quality Control Plan for the Tulare Lake Basin*, Second Edition, revised July 2016 (Basin Plan).
- On 28 February 2014, Staff issued to CMO a Notice of Violation (NOV) with an attached Inspection Report. The NOV was issued for the failure to submit a Report of Waste Discharge for the discharge of produced water to the ponds and on the basis of improper discharges of produced water to land surrounding the disposal ponds.
 - A) The NOV stated the discharge exceeds the maximum salinity limits in the Basin Plan, poses a threat to the beneficial uses of underlying groundwater, and CMO is in violation of CWC section 13350. The NOV required CMO to submit a document by 10 March 2014 that stated the discharge of produced water to the disposal ponds and to land had ceased.
 - B) The Inspection Report stated that according to the complainant, vacuum trucks have been transporting produced water from the disposal ponds and discharging to land for approximately 1½ years. This is consistent with Staff's observation of scour during the inspection and the complainant's statement.
- 6. On 27 March 2014, Staff received an electronic (e-mail) response from CMO with attached correspondence stating that "as of the receipt of the violation, the discharging of water throughout the property has fully ceased." CMO further stated that offered its "...sincere apologizes for any infractions... (from) the apparent negligence of our prior management."
- 7. On 2 April 2014, the Assistant Executive Officer issued a Section 13267 Order directing CMO to submit a report that describes produced water disposal practices. The Order required CMO to contact Staff by 8 April 2014 to schedule a meeting, and required submittal of a technical report by 16 May 2014.
- On 15 April 2014, CMO met with Staff to discuss the 2 April 2014 Order and produced water disposal practices. At the meeting, CMO submitted the Report

of Waste Discharge (RWD) previously electronically submitted on 27 March 2014. CMO was told the RWD did not include the appropriate filing fee and was technically deficient because the information required in Section VI of the RWD was not included.

- On 13 May 2014, Staff received the Section 13267 Response Chico Martinez Oil Field report (13267 Response), prepared on 10 May 2014 by EnviroTech Consultants, Inc. (EnviroTech) on behalf of CMO, in response to the 2 April 2014 Order. The 13267 Response addressed the information required in the 2 April 2014 Order. The information included, but was not limited to, the following:
 - A) On 20 February 2014, produced water from a clarifier tank was sampled and TDS, chloride, and boron concentrations were 4,700; 2,200; and 41 mg/L, respectively.
 - B) On 28 April 2014, Water Well # 2 was sampled with the static water level at a depth of 384.54 feet beneath ground surface. The TDS, chloride, and boron concentrations were 3,420; 1,000; and 15.4 mg/L, respectively.
 - C) Appendix G included the total volume of produced water discharged to the disposal ponds for each month from March 2010 through March 2014. The total discharge volumes were less than 15,000 barrels for each month from March 2010 through September 2012. The total discharge volumes increased from 20,159 barrels in October 2012 to 83,349 barrels in May 2013. During June and July 2013, discharge volumes further increased to approximately 117,000 barrels for each month. From August 2013 through February 2014, the total discharge volumes increased still further to a range from 130,491 barrels to 150,714 barrels per month.
 - D) Section 2 of the 13267 Response stated the following:
 - CMO installed a second steam generator "in or around" May of 2013 resulting in increased production followed by high water levels in the disposal ponds by mid-summer 2013.
 - ii. To alleviate rising water levels in the disposal ponds, the spreading of produced water on lease roads by third party contractors, using vacuum trucks, commenced in July of 2013 and ended in early February 2014.
 - iii. The volume of produced water discharged "outside of the surface impoundments" could not be provided because volume was not directly measured by the vacuum truck contractors (whom charge only time for truck use at an hourly billing rate) and "calculations to estimate the volumes discharged involved many assumptions and the results varied widely."
 - E) On 10 May 2014, the date the Section 13267 Response was prepared, produced water disposal was into the three disposal ponds and in one injection disposal well permitted by the Division for disposal into the Etchegoin Formation.



- 10. On 2 July 2014, the Assistant Executive Officer issued to CMO a Section 13267 Order to complement the Division's Emergency Order to Immediately Cease Injection Operations (Emergency Order) in injection wells identified as American Petroleum Institute (API) numbers 03044445 and 03039980. The Section 13267 Order required CMO to submit a technical report with information about groundwater within the injection interval in the two wells because the injection interval was in an aquifer that may not have been properly designated as an exempt aquifer under the federal State Drinking Water Act. The two injection wells are approximately 900 feet east-northeast of the disposal ponds.
- 11. In a technical report, dated 26 August 2014, CMO submitted the information required by the 2 July 2014 Order. The information included, but is not limited to, the following:
 - A) Well API 03044445 was plugged back to 400.6 feet and perforated in the Tulare Formation from 205 to 235 feet beneath the reference elevation (the elevation of the kelly bushing on the drilling rig). Well API 03039980 was plugged back to 390 feet and perforated in the Tulare Formation from 248 to 285 feet beneath the reference elevation.
 - B) When the Division's Emergency Order was issued on 2 July 2014, the injection wells had not yet been used for disposal of produced water.
 - C) The wells were purged dry with a bailer and allowed to recharge overnight before samples were collected with a bailer on 7 and 8 August 2014. For well API 03044445, the TDS, chloride, and boron concentrations were 3,700; 1,300; and 27 mg/L, respectively. BTEX concentrations were 9.0; 14; 27; and 69 μ g/L, respectively. Total Petroleum Hydrocarbons, Crude Oil (C8-C40) was 71 mg/L. Methane was 10.2 μ g/L. For well API 03039980, the TDS, chloride, and boron concentrations were 5,500; 54; and 28 mg/L, respectively. BTEX concentrations were 3.9; 1.7; 3.4; and 6.1 μ g/L, respectively. Total Petroleum Hydrocarbons, Crude Oil (C8-C40) was 170 mg/L. Methane was 55.7 μ g/L.
- 12. On 12 September 2014, CMO sent an e-mail to Staff stating: "...we believe the probable spreading started towards the end of the month of July (2013). The probable spreading of produced water on lease roads took place under previous management."
- 13. On 17 December 2014, CMO and its legal counsel, Day Carter Murphy LLP (DCM), met with the Prosecution Team to discuss monetary penalty amounts and attempted to reach a settlement. Settlement negotiations to assess a monetary penalty amount were unsuccessful.
- On 29 January 2015, DCM electronically submitted correspondence to the Prosecution Team that included additional information toward resolving the NOV,



dated 28 February 2014. The information included, but was not limited to, the following:

- A) Confidential financial information to show the financial condition of CMO which included the Business Organization Ability to Pay Claim, five years of tax returns through 2013, and a profit and loss statement.
- B) CMO began operation of a new water treatment facility on 23 June 2014. The facility allowed CMO to recycle 90 percent of the produced water for use in steam generation.
- C) Two calculations of the economic benefit gained by CMO's discharge. While the information was submitted in a confidential settlement communication, it is being used for purposes of approving the settlement only and not to determine liability. Instead, the economic benefit information provided by CMO goes to show that the agreed-upon penalty is fair and appropriate, and captures the economic benefit of the discharge as required by the Enforcement Policy.

CMO stated that the calculated economic benefit plus 10 percent gained by discharging produced water instead of treating and recycling produced water at a water treatment facility is \$231,000. See Attachment A.

- In April 2015, CMO changed legal counsel to Jeffer Mangels Butler & Mitchell LLP (JMBM).
- 16. On 26 May 2015, JMBM sent an e-mail to the Prosecution Team legal counsel stating that the information prepared by Marcum LLP in an attached Financial Report on CMO is "intended to clarify CMO's financial situation, and support its inability to pay claim."
- 17. On 30 July 2015, JMBM sent an e-mail to the Prosecution Team legal counsel stating that CMO's amended tax returns were attached.
- On 24 August 2015, the Prosecution Team legal counsel sent an e-mail to JMBM informally requesting the submittal of information about the volume of produced water discharged to land by 15 November 2015.
- On 27 August 2015, the Prosecution Team legal counsel sent an e-mail to JMBM requesting additional information about CMO's ability to pay the proposed penalty.
- 20. On 13 November 2015, JMBM notified by e-mail the Prosecution Team legal counsel that CMO was unable to submit by the 16 November 2015 due date the information requested in the 24 August 2015 e-mall and that CMO had hired a consultant, Geosyntec Consultants (Geosyntec), to investigate the discharge and estimate the discharge volume.
- On 8 December 2015, JMBM and Geosyntec met with the Prosecution Team.
 JMBM stated that more time was needed by CMO to comply with the informal

information requests previously sent electronically by the Prosecution Team legal counsel to JMBM.

- 22. On 18 December 2015, the Assistant Executive Officer issued a Section 13267 Order directing CMO to submit a technical report by 5 February 2016. The 18 December 2015 Order required CMO to provide, along with additional information, the previous information requested in the 24 August 2015 e-mail sent by the Prosecution Team legal counsel to JMBM.
- 23. On 5 February 2016, Geosyntec, on behalf of CMO, submitted the *Technical Report Response to 13267 Order* (Geosyntec Report) in response to the 18 December 2015 Order. The Geosyntec Report addressed the information required in the 18 December 2015 Order. The information included, but was not limited to, the following:
 - A) Geosyntec reviewed vacuum truck invoices and discovered an annotation on a 28 February 2013 invoice that suggests the earliest discharge to land occurred on 28 February 2013.
 - B) The calculated volume of produced water discharged to land by vacuum trucks was estimated as a range of values using a water balance approach. There was uncertainty in the amount of produced water discharged to the ponds and the amount that infiltrated into the ground beneath the ponds. Geosyntec's calculated discharge volumes and assumptions follow:
 - i. Table 7 calculated the lowest discharge volume of 468,985 barrels (19,697,370 gallons) and the discharge began in April 2013. Geosyntec assumed a hydraulic conductivity (K) of 5 feet per day (feet/day) and reduced by 30 percent the produced water volume reported by CMO to the Division.¹
 - ii. Table 6 calculated the highest discharge volume of 1,137,276 barrels (47,765,592 gallons) and the discharge began in January 2013. Geosyntec used a K of 1.25 feet/day and the produced water volume reported by CMO to the Division.
 - C) Geosyntec stated that "although the volume of produced water discharged to land can only be presented as a range of values, the actual volume of produced water discharged to land is likely in the lower end of the range and could even have been less than 467,000 barrels."



For purposes of reporting to the Division, CMO calculates the volume of produced water using an indirect method based on ball trap results and the volume of oil sold. CMO routinely tests using a ball trap apparatus to estimate the percentages of water to oil generated from the fluids produced at a well. Based on comparisons between produced oil volumes calculated from ball trap methods with the volumes calculated from direct oil sales, CMO observed that the ball trap method can overestimate the volume of produced oil by 30 percent. This implies that the volume of produced water is also overestimated by 30 percent. The volume of oil is based on measurements that are certified by a third party (Section 6.2 of the Geosyntec Report).

- 24. Throughout early 2016, JMBM and the Prosecution Team legal counsel exchanged numerous e-mails which included requests for additional financial documentation from CMO to support an inability to pay argument. This information was provided on 1 July 2016.
- 25. On 2 June 2016, JMBM and Geosyntec met with the Prosecution Team. Based on the technical and financial information previously provided, the Prosecution Team proposed a reduced proposed liability amount that JMBM agreed to consider with CMO. CMO accepted the reduced liability amount as reflected in this settlement agreement.
- 26. Attachments A and B present the methodology spreadsheet and the assigned factors, agreed to for purposes of reaching a settlement, consistent with the Enforcement Policy. The penalty amount for the resolution of the discharges that occurred over a period of 8 or more months is \$468,930.

Regulatory Considerations

- 25. The Prosecution Team concluded that the Discharger violated Water Code section 13350 for an unpermitted discharge to land. The Central Valley Water Board may assess administrative civil liability based on CWC Section 13350 for such discharges.
- 26. CWC Section 13350(a) states: "(a) A person who (1) violates a cease and desist order or cleanup and abatement order hereafter issued, reissued, or amended by a regional board or the state board, or (2) in violation of a waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board or the state board, discharges waste, or causes or permits waste to be deposited where it is discharged, into the waters of the state, or (3) causes or permits any oil or any residuary product of petroleum to be deposited in or on any of the waters of the state, except in accordance with waste discharge requirements, or other actions or provisions of this division, shall be liable civilly, and remedies may be proposed...."
- 27. CWC Section 13350(e)(2) states: "The state board or a regional board may impose civil liability administratively pursuant to Article 2.5 (commencing with Section 13323) of Chapter 5 either on a daily basis or a per gallon basis, but not on both. (2) The civil liability on a per gallon basis shall not exceed ten dollars (\$10) for each gallon of waste discharged."
- 28. CWC Section 13327 states: "In determining the amount of civil liability, the regional board . . . shall take into consideration the nature, circumstance, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on ability to continue in business, any voluntary cleanup



efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters as justice may require."

Settlement

- 29. The Parties have engaged in confidential settlement negotiations and agree to settle the matter without administrative or civil litigation and by presenting this Stipulated Order to the Central Valley Water Board, or its delegee, for adoption as an order by settlement pursuant to Government Code section 11415.60. The Prosecution Team believes that the resolution of the alleged violations is fair and reasonable and fulfills its enforcement objectives, that no further action is warranted concerning the violations alleged herein and that this Stipulated Order is in the best interests of the public.
- 30. The agreed-upon penalty, as reflected in the Penalty Calculation Methodology Worksheet attached hereto as Attachment B, reflects the consideration of Water Code 13327 factors and the State Water Resources Control Board's (State Water Board) Enforcement Policy.
- 31. To resolve the violations of the Water Code by consent and without further administrative proceedings, the Parties have agreed to the imposition of \$468,930 in liability against the Discharger with 50% of the settlement proceeds going towards a Supplemental Environmental Project (SEP), administered by the Rose Foundation.

Stipulations

The Parties stipulate to the following:

- Administrative Civil Liability: CMO hereby agrees to the imposition of an administrative civil liability totaling four hundred sixty-eight thousand nine hundred thirty dollars (\$468,930) to the Central Valley Water Board to resolve the alleged Water Code violations, specifically:
 - a. Two hundred thirty one thousand dollars (\$231,000) shall be paid to the State Water Board Waste Discharge Permit Fund. CMO has requested a payment plan of eight equal payments spread out over two years. The first payment of \$28,875 shall be made by check, payable to the State Water Board Waste Discharge Permit Fund, no later than thirty (30) days after the entry of an Order approving this Settlement Agreement by the Central Valley Water Board. CMO shall indicate on the check the number of this Order. CMO shall send the original signed check to the Accounting Office, Attn: ACL Payment, P.O. Box 1888, Sacramento, CA 95812-1888. CMO shall send a copy of the check to Clay Rodgers and Julie Macedo at the

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addresses set forth in Section 4 of the Stipulations. Subsequent payments

shall be made on a quarterly basis as described in the table below.

Two hundred thirty one thousand dollars (\$231,000) shall be utilized for a Supplement Environmental Project (SEP) described below and administered by the Rose Foundation. The Prosecution Team has agreed to allow CMO to fund the SEP over two years, as described in the table below. A copy of the checks shall be sent to Clay Rodgers and Julie Macedo at the addresses set forth in Section 4 of the Stipulations. An additional \$6,930 will go to the Rose Foundation's administrative costs, resulting in a total of \$468,930 (\$231,000 + \$231,000 + \$6,930).



Date Settlement Agreement is Signed	8 equal payments to CAA (\$28,875)* *The first payment shall be \$28,875.	8 equal payments to the Rose Foundation (\$28,875)* *The first payment shall be \$28,875.	Rose Foundation Administration Costs
January 2, 2018 April 2, 2018 July 2, 2018 October 1, 2018 January 2, 2019 April 1, 2019 July 1, 2019	First payment is due within 30 days after the entry of the Order approving the Settlement Agreement. The subsequent payments to the State Water Board shall be made in no later than August 1, 2017; November 1, 2017; February 1, 2018; May 1, 2018; November 1, 2018; November 1, 2018; and February 1, 2019.	First payment is due within 30 days after the entry of the Order approving the Settlement Agreement. The subsequent payments to the Rose Foundation shall be made in no later than August 1, 2017; November 1, 2018; May 1, 2018; August 1, 2018; November 1, 2018; November 1, 2018; and February 1, 2019.	3% of \$231,000 is \$6,930. This dollar amount shall be included with the first payment, due within 30 days after entry of the Order approving the Settlement Agreement. January 2, 2018 April 2, 2018 July 2, 2018 October 1, 2018 January 2, 2019 April 1, 2019 July 1, 2019

	The total of the initial payments, due within 30 days after entry of the Order, is \$64,680 with \$28,875 to the State Water Board and \$35,805 to the Rose Foundation.
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- 2. Supplemental Environmental Project: CMO and the Central Valley Water Board agree that the payment specified in Section 1.b of the Stipulations is a Supplemental Environmental Project (SEP), and that the amount specified (hereafter SEP Amount) will be treated as a Suspended Administrative Civil Liability for purposes of this Stipulated Order. Whenever CMO publicizes the SEP, it must state in a prominent manner that the project is being undertaken as part of a settlement of a Central Valley Water Board enforcement action. Upon the CMO's payment of its SEP obligations under this Stipulation, Central Valley Water Board staff shall send CMO a letter recognizing the satisfactory completion of its SEP obligations. This letter shall terminate any further SEP obligations of CMO and result in the permanent waiver of the SEP suspended liability.
 - a. Three projects will be funded by CMO through this SEP, and the Rose Foundation has selected projects that will be able to paid over two years. The SEPs are described in Attachment C.
- 3. Compliance with Applicable Laws: CMO understands that payment of administrative civil liability in accordance with the terms of this Stipulated Order and/or compliance with the terms of this Stipulated Order is not a substitute for compliance with applicable laws, and that continuing violations may subject it to further enforcement, including additional administrative civil liability.
- 4. Party Contacts for Communications related to Stipulated Order:

For the Central Valley Water Board:

Clay Rodgers
Assistant Executive Officer
Central Valley Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, CA 93706
(559) 445-5116



Julie Macedo – Senior Staff Counsel Office of Enforcement State Water Resources Control Board 801 K Street, Suite 2300 Sacramento, CA 95814 (916) 323-6847

For CMO: Geir Utne Berg, CEO CMO, Inc. 19100 7th Standard Road McKittrick, CA 93251 (661) 889 5855

Jon Welner – Counsel
Jeffer Mangels Butler & Mitchell LLP
Two Embarcadero Center, Suite 500
San Francisco, CA 94111
(415) 984-9656
jxw@imbm.com

- 5. **Attorneys' Fees and Costs:** Except as otherwise provided herein, each Party shall bear all attorneys' fees and costs arising from the Party's own counsel in connection with the matters set forth herein.
- 6. Matters Addressed by Stipulation: Upon the Central Valley Water Board's, or its delegee's, adoption of this Stipulated Order, this Order represents a final and binding resolution and settlement of any potential violations resulting from any and all discharges of produced water described or alleged in this Order The provisions of this Section are expressly conditioned on the full payment of the administrative civil liability, in accordance with Section 1 of the Stipulations.
- 7. Public Notice: CMO understands that this Stipulated Order will be noticed for a 30-day public review and comment period prior to consideration by the Central Valley Water Board, or its delegee. If significant new information is received that reasonably affects the propriety of presenting this Stipulated Order to the Central Valley Water Board, or its delegee, for adoption, the Executive Officer may unilaterally declare this Stipulated Order void and decide not to present it to the Central Valley Water Board, or its delegee. CMO agrees that it may not rescind or otherwise withdraw its approval of this proposed Stipulated Order.
- 8. Addressing Objections Raised During Public Comment Period: The Parties agree that the procedure contemplated for the Central Valley Water Board's adoption of the settlement by the Parties and review by the public, as reflected



in this Stipulated Order, will be adequate. In the event procedural objections are raised prior to the Stipulated Order becoming effective, the Parties agree to meet and confer concerning any such objections, and may agree to revise or adjust the procedure as necessary or advisable under the circumstances.

- 9. No Waiver of Right to Enforce: The failure of the Prosecution Team or Central Valley Water Board to enforce any provision of this Stipulated Order shall in no way be deemed a waiver of such provision, or in any way affect the validity of the Order. The failure of the Prosecution Team or Central Valley Water Board to enforce any such provision shall not preclude it from later enforcing the same or any other provision of this Stipulated Order.
- 10. **Interpretation:** This Stipulated Order shall be construed as if the Parties prepared it jointly. Any uncertainty or ambiguity shall not be interpreted against any one Party.
- 11. Modification: This Stipulated Order shall not be modified by any of the Parties by oral representation made before or after its execution. All modifications must be in writing, signed by all Parties, and approved by the Central Valley Water Board.
- 12. If Order Does Not Take Effect: In the event that this Stipulated Order does not take effect because it is not approved by the Central Valley Water Board, or its delegee, or is vacated in whole or in part by the State Water Board or a court, the Parties acknowledge that they expect to proceed to a contested evidentiary hearing before the Central Valley Water Board to determine whether to assess administrative civil liabilities for the underlying alleged violations, unless the Parties agree otherwise. The Parties agree that all oral and written statements and agreements made during the course of settlement discussions will not be admissible as evidence in the hearing. The Parties agree to waive any and all objections based on settlement communications in this matter, including, but not limited to:
 - a. Objections related to prejudice or bias of any of the Central Valley Water Board members or their advisors and any other objections that are premised in whole or in part on the fact that the Central Valley Water Board members or their advisors were exposed to some of the material facts and the Parties' settlement positions as a consequence of reviewing the Stipulation and/or the Order, and therefore may have formed impressions or conclusions prior to any contested evidentiary hearing in this matter; or
 - b. Laches or delay or other equitable defenses based on the time period for administrative or judicial review to the extent this period has been extended by these settlement proceedings.



- c. If the matter proceeds to hearing, CMO will need to make certain financial documentation available to enable the Board to evaluate its inability to pay defense. The Prosecution Team reserves the right to name related entities to CMO that likely have an ability to pay and to challenge CMO's claim that it does not.
- 13. No Admission of Liability: In settling this matter, CMO does not admit to any of the findings in this Stipulated Order, or that it has been or is in violation of the Water Code, or any other federal, state, or local law or ordinance; however, CMO recognizes that this Stipulated Order may be used as evidence of a prior enforcement action consistent with Water Code section 13327.
- 14. **Waiver of Hearing:** CMO has been informed of the rights provided by CWC section 13323(b), and hereby waives its right to a hearing before the Central Valley Water Board prior to the adoption of the Stipulated Order.
- 15. Waiver of Right to Petition: CMO hereby waives its right to petition the Central Valley Water Board's adoption of the Stipulated Order as written for review by the State Water Board, and further waives its rights, if any, to appeal the same to a California Superior Court and/or any California appellate level court.
- 16. Covenant Not to Sue: CMO covenants not to sue or pursue any administrative or civil claim(s) against any State Agency or the State of California, its officers, Board Members, employees, representatives, agents, or attorneys arising out of or relating to any violation alleged herein.
- 17. Central Valley Water Board is Not Liable: Neither the Central Valley Water Board members nor the Central Valley Water Board staff, attorneys, or representatives shall be liable for any injury or damage to persons or property resulting from acts or omissions by the Discharger, its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Stipulated Order.
- 18. **Authority to Bind:** Each person executing this Stipulated Order in a representative capacity represents and warrants that he or she is authorized to execute this Stipulated Order on behalf of and to bind the entity on whose behalf he or she executes the Order.
- 19. No Third Party Beneficiaries. This Stipulated Order is not intended to confer any rights or obligations on any third party or parties, and no third party or parties shall have any right of action under this Stipulated Order for any cause whatsoever.
- 20. **Effective Date**: This Stipulated Order shall be effective and binding on the Parties upon the date the Central Valley Water Board, or its delegee, enters the Order.

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21. **Counterpart Signatures:** This Stipulated Order may be executed and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document.

IT IS SO STIPULATED.

California Regi	ional Water Q	uality Contr	ol Board	Prosecut	ion Team
Central Valley	Region	-			
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By: Clay Rodgers
Assistant Executive Officer

Date: 6/23/2017

CMQ, Inc.

By: Chir Utne Berg

Chief Executive Officer, CMO

Date: 19/6-1+

Order of the Central Valley Water Board

- In adopting this Stipulated Order, the Central Valley Water Board or its delegee has considered, where applicable, each of the factors prescribed in CWC sections 13327, 13351 and 13385(e). The consideration of these factors is based upon information and comments obtained by the Central Valley Water Board's staff in investigating the allegations concerning the Discharger discussed herein or otherwise provided to the Central Valley Water Board or its delegee by the Parties and members of the public.
- 2. This is an action to enforce the laws and regulations administered by the Central Valley Water Board. The method of compliance with this enforcement action consists entirely of payment of an administrative penalty. As such, the Central Valley Water Board finds that issuance of this Order is not considered subject to the provisions of the California Environmental Quality Act (CEQA) as it will not result in a direct or reasonably foreseeable indirect physical change in the environment and is not considered a "project" (Public Resources Code 21065, 21080(a); 15060(c)(2),(3); 150378(a), Title 14, of the California Code of Regulations). In addition, the Central Valley Water Board finds that issuance of this Order is also exempt from the provisions of CEQA in accordance with section 15321(a)(2), Title 14, of the California Code of Regulations as an enforcement action by a regulatory agency and there are no exceptions that would preclude the use of this exemption.
- 3. The terms of the foregoing Stipulation are fully incorporated herein and made part of this Order of the Central Valley Water Board.

Pursuant to CWC sections 13323, 13350, 13385 and Government Code section 11415.60, IT IS HEREBY ORDERED by the California Regional Water Quality Control Board, Central Valley Region.

By:	ORIGINAL SIGNED BY		
	mela Creedon, ecutive Officer		
Date:	31 August 2017	· 	

ATTACHMENT A

Attachment A

Stipulated Order No. R5-2017-0534 Specific Factors Considered CMO, Inc. Chico Martinez Oil Field, Kern County

Each factor of the Enforcement Policy and its corresponding score for each violation are presented below. Since an administrative civil liability complaint (ACLC) was not issued in this case, this description represents the agreed-upon factors as discussed by the Central Valley Water Board Prosecution Team (Prosecution Team) and CMO, Inc. (CMO) in settlement:

Discharge of produced water: Unauthorized discharges of an unknown quantity occurred over a period of 8 or more months. Prior to a change of management and personnel, CMO used vacuum truck(s) to discharge oil field produced water on CMO leases. During a Central Valley Water Board staff inspection, produced water observed in unlined ponds was sampled. The samples were analyzed for, among other chemical constituents, total dissolved solids (TDS), chloride, and boron. The TDS, chloride, and boron concentrations exceeded the salinity limits for oil field discharges in the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (Basin Plan).

Step 1. Potential for Harm for Discharge Violations

The Potential for Harm is **4**. This is determined by the sum of the factors for a) the potential for harm to beneficial uses; b) the physical, chemical, biological or thermal characteristics of the discharge; and, c) the susceptibility for cleanup or abatement.

a) Factor 1: Harm or Potential Harm to Beneficial Uses (1 = Minor)

The Regional Water Board's *Water Quality Control Plan for the Tulare Lake Basin* (hereinafter the Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. In addition, the Basin Plan implements State Water Resources Control Board (State Water Board) Resolution No. 88-63, which establishes a policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

Produced water was discharged to land (the CMO leases) from vacuum trucks. Some vacuum truck discharges caused erosion on hillsides and flowed into a dry ephemeral channel as shown in the complainant's video; however, most of the produced water was discharged onto lease roads. All vacuum truck discharges of produced water on the CMO leases ended on or before the date CMO received a Notice of Violation, dated 28 February 2014. The Prosecution Team finds that

given the circumstances, the harm or potential harm to beneficial uses resulting from the discharges is low and "minor" is selected for this factor.

b) Factor 2: The Physical, Chemical, Biological or Thermal Characteristics of the Discharge (2 = discharged material poses moderate risk)

A factor of moderate was selected because the discharged produced water is high in TDS, chloride, and boron. The CMO leases and surrounding land were used for cattle grazing purposes. While a precise volume is unknown, CMO's consultant conservatively estimated the discharge at almost 20 million gallons, and possibly as high as almost 48 million gallons. The estimated volume of high salinity produced water discharged supports the Prosecution Team's selection of "moderate" for this factor.

c) Factor 3: Susceptibility to Cleanup or Abatement (1 = less than 50% of the discharge is susceptible to cleanup or abatement)

CMO did not make any efforts to effect of the discharge, nor could any material previously discharged have been abated. Therefore, because less than 50% of the discharge was susceptible to cleanup or abatement, this factor was assessed a score of 1.

Final Score - Potential for Harm is 4.

Step 2. Assessments for Discharge Violations

Pursuant to California Water Code section 13350, liability is proposed either on a per gallon or a per day basis, but not both. The Prosecution Team elected to proceed on a per gallon basis. The volume of the discharge was provided by CMO in a February 2016 Technical Report (468,985 barrels) is approximately 19,697,370 gallons.

a) Per Gallon Assessments for Discharge Violation: 0.025

Using Table 1 of the Enforcement Policy (pg. 14), the per gallon factor based on the Potential for Harm (4) and Deviation from Requirement (major) is 0.025.

The "deviation from requirement" was considered major because the prohibition from discharging was rendered ineffective when CMO discharged approximately 20 million gallons of produced water over a significant period of time.

b) High Volume Discharges: A discretionary reduction was not given for this discharge

The Enforcement Policy allows for a reduction of the maximum per gallon penalty amount for certain types of high volume spills, including those associated with spills of sewage, municipal stormwater, and recycled wastewater. Because this

discharge was not of a type enumerated in the Enforcement Policy, the Prosecution Team did not feel it was appropriate to consider a high volume reduction. Furthermore, if such a reduction had been considered, it might have resulted in an inappropriately low penalty, or resulted in the Prosecution Team calculating the penalty based on days of discharge, rather than volume. In addition, based on the totality of all circumstances herein, including the reduction of the penalty considered based on CMO's alleged inability to pay, the Prosecution Team felt that a reduction based on this factor was inappropriate. In summary, the calculation of volume utilized quantities provided by CMO, and the proposed penalty did not consider any reduction based on high volume.

c) Initial Liability Amount: \$4,924,342

The initial liability amount for the discharge violation calculated on a per-gallon and per-day basis is as follows:

Per Gallon Liability: 19,697,370 gallons discharged) x 0.025(per gallon factor) x \$10 (per gallon) = \$4,924,342

Step 3. Per Day Assessment for Non-Discharge Violations

This step in the penalty calculator is not applicable to this discharge violation.

Step 4. Adjustment Factors

There are three additional factors to be considered for modification of the amount of initial liability: the violator's culpability, efforts to clean up or cooperate with regulatory authority, and the violator's compliance history.

a) Culpability: 1

Higher liabilities should result from intentional and negligent violations as opposed to accidental violations. A multiplier between 0.5 and 1.5 is to be used, with a higher multiplier for negligent behavior. CMO was given a multiplier value of 1.0, which does not increase or decrease the initial liability. While the discharge could be viewed as intentional given its repetitive nature, the Prosecution Team agreed to keep this factor at neutral because the activity stopped once the water quality issues were brought to the attention of CMO, and CMO immediately installed a new management team.

b) Cleanup and Cooperation: 1

This factor reflects the extent to which a discharger voluntarily cooperated in returning to compliance and correcting environmental damage. A multiplier between 0.75 and 1.5 is to be used, with a higher multiplier when there is a lack of cooperation.

CMO met the Prosecution Team repeatedly in an effort to resolve this matter and determine both the volume and extent of impact of the discharges. CMO devoted significant time, effort, and funds to provide a detailed analysis of complex environmental and financial issues, to assist the Prosection Team with its analysis. On the other hand, it took significant time to obtain the necessary information to move forward with settlement, resulting in a 20-month period from when a complainant provided information about CMO's discharges to Central Valley Board staff, and when a settlement was agreed upon. Therefore, the Prosecution Team left this factor at neutral.

c) History of Violations: 1

CMO did not have any history of previous violations, so this factor was left neutral.

Step 5. Determination of Total Base Liability Amount

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Potential for Harm determined in Step 2.

Total Base Liability Amount: \$4,924,342

 $44,924,342 \times 1$ (culpability) x 1 (cleanup and cooperation) x 1 (history of violations) = 44,924,342

Step 6. Ability to Pay and Continue in Business

Adjusted Combined Total Base Liability Amount: \$468,930

While an ACLC of \$5 million was not issued, CMO claimed it has an inability to pay a significant penalty. This was disputed by the Prosecution Team, as the documents provided by CMO did not convince the Prosecution Team that it, or its parent corporation Crudecorp, which is a Norwegian entity, has an inability to pay. Instead, the documents indicated to the Prosecution Team, and its economic consultant, that Crudecorp purposefully de-capitalized CMO to render it unable to pay a significant penalty. CMO vigorously disputes this claim; states unequivocally that CMO was managed properly was never "de-capitalized"; and further notes that CMO is a properly managed independent company, and there is no basis to assert liability for CMO's actions against its parent corporation.

As a result of the difficulty, at the current time, to pursue CMO's parent entity, the penalty was reduced based on an inability to pay argument, with the stipulation that if the Settlement Agreement is not executed by the Central Valley Water Board or its designee, the penalties sought could exceed \$468,930 and

Crudecorp's assets/control of CMO would be presented to the Central Valley Water Board in consideration of an appropriate penalty.

As an additional request, and agreed upon by the Prosecution Team, but within the discretion of the Central Valley Water Board or its delegee to approve or disapprove, CMO would like to pay the penalty over a period of two years. CMO has agreed to fund a SEP with the Rose Foundation, and efforts are being made to select a SEP that will have the maximum benefit but allow CMO to likewise extend its SEP payments over two years. Other than the Rose Foundation administrative costs, which will be due within 30 days of the execution of an Order by the Central Valley Water Board or its delegee, the penalties and SEP would occur in eight equal payments, made on a quarterly basis.

Given the agreement of the Prosecution Team and the request to the Advisory Team/Board to agree to the payment plan as described above, CMO waives further argument related to an alleged "inability to pay" the agreed-upon penalty set forth in this Order. The Parties understand that if this Order is not approved by the Board or its delegee, including the payment plan terms, CMO reserves its right related to its ability to pay.

Step 7. Other Factors as Justice May Require

No other factors need to be discussed in this settlement.

Step 8. Economic Benefit

Counsel for CMO calculated two types of economic benefit realized by CMO, which were submitted to the Prosecution Team in January 2015. Instead of properly disposing of its produced water through underground injection or other methods of disposal (or reuse after treatment), CMO illegally discharged produced water to land via vacuum trucks as described in the settlement agreement. Shortly after ceasing the discharges, CMO replaced its management and significantly curtailed production; and, in March 2014, began injecting limited amounts of produced water in an injection disposal well permitted by the Division of Oil, Gas, and Geothermal Resources. CMO began operation of a new water treatment facility in June 2014. The new water treatment facility allowed CMO to recycle 90 percent of its produced water for use in steam generation. CMO's counsel calculated an economic benefit of \$210,000 gained by discharging produced water instead of treating and recycling produced water at a water treatment facility. The calculated economic benefit plus 10 percent amounts to \$231,000. The Prosecution Team accepted this dollar amount. The proposed penalty exceeds the economic benefit (plus 10 percent) gained for the discharges.

Step 9. Maximum and Minimum Liability Amounts

Minimum Liability Amount: \$231,000

The Enforcement Policy requires that the minimum liability amount imposed not be below the economic benefit plus ten percent. As discussed above, the Prosecution Team's estimate of CMO's economic benefit obtained from the violation is \$231,000, which was the estimated cost necessary for the proper reuse of produced water. This amount takes into account the 10% as required by the Enforcement Policy.

Maximum Liability Amount: \$19,697,370

The Enforcement Policy requires that the maximum liability amount be determined for comparison to the amount being proposed.

Max. Penalty for Discharge Violation: (19,697,370 gallons X \$10.00 per gallon) = \$19,697,370

The proposed liability falls within these maximum and minimum liability amounts.

Step 10. Final Liability Amount

The final liability amount is \$468,930, and CMO has agreed to perform a SEP as described in the Settlement Agreement.

ATTACHMENT B

Penalty Calculation Methodology Worksheet

Administrative Civil Liability Order R5-2017-xxxx CMO, Inc.
Chico Martinez Oil Field, Kern County

Instructions

1. Select Potential Harm for Discharge Violations

2. Select Characteristics of the Discharge

3. Select Susceptibility to Cleanup or Abatement

4. Select Deviation from Standard

5. Click "Determine Harm & per Gallon/Day..."

6. Enter Values into the Yellow highlighted fields

Select Item 1 = Minor

Select Item 2 = Discharged material poses moderate risk

Select Item < 50% of Discharge Susceptible to Cleanup or Aba

Select Item Major

Discharger Name/ID:		: CMO, Inc., Chico Martinez Oil Field, Kern County		ATTACHMENT B	
				Violation 1	
ons	Step 1	Potential Harm Factor	4		
olati	Step 2	Per Gallon Factor	0.025		
e Vic		Gallons	19697370	68,985 barrels -Table 7 in 5 Feb 2016 Tech Repor	
larg		Statutory / Adjusted Max per Gallon (\$)	10.00		
Discharge Violations		Total		\$ 4,924,34	
		Per Day Factor			
		Days			
		Statutory Max per Day			
		Total			
Non-Discharge Violations	Step 3	Per Day Factor			
scha		Days		<u> </u>	
Ş Ş		Statutory Max per Day		Maria de la companya	
S .		Total			
	In	itial Amount of the ACL		\$ 4,924,342	
Add'I Factors	Step 4	Culpability	1	\$ 4,924,342	
Fac		Cleanup & Cooperation	1	\$ 4,924,342	
		History of Violations	1	\$ 4,924,342	
	Step 5 T	otal Base Liability Amount		\$ 4,924,342	
	Step 6	Ability to Pay & to Continue in Business	1	\$ 468,930	
	Step 7	Other Factors as Justice May Require	1	\$ 468,930	
		Staff Costs*	\$ -	\$ 468,930	
	Step 8	Economic Benefit	\$ 231,000		
	Step 9	Minimum Liability Amount	\$ 231,000		
		Maximum Liability Amount	\$ 4,924,342		
	Step 10 Fi	nal Liability Amount		\$ 468,930	

ATTACHMENT C



Water Quality Planning and Well Rehabilitation

Amount Requested: \$93,930 - 2 Year Grant

Summary Description: Del Rey is a disadvantaged unincorporated farmworker community in southeastern Fresno County. The Del Rey Community Services District (CSD) currently needs to assess the extent of water contamination and identify the best treatment options for its wells. The community's drinking water is contaminated with the highly toxic fumigant pesticide 1,2,3-trichlopropane (TCP), a byproduct of soil fumigants used in agricultural production. TCP is known to cause liver and kidney damage, blood disorders and cancer in animals. The State Water Board is in the process of developing a formal drinking water standard, or Maximum Contaminant Level (MCL), for TCP and the regulation is projected to enter the monitoring stage in January 2018. The State Water Board has released a preliminary finding that the MCL will be set at 5 parts per trillion. In the meantime, the California Environmental Protection Agency has set a Public Health Goal for TCP at 0.7 parts per trillion and the California State Water Resources Control Board has established the current notification level for TCP at 5,000 parts per trillion.

Del Rey is served by three active private wells operated by the Community Service District and has two additional standby wells. Del Rey's most recent water testing results show that the community's water contains 99,000 parts per trillion of TCP, over 19 times the notification level, and significantly higher than the Public Health Goal and proposed MCL of 5 ppt. Two standby wells are located in the district, and an additional eight wells have been rendered completely dry and are unusable. CRLA seeks funding to support the community in its efforts to assess the extent of contamination in its wells and develop mitigation and treatment options to bring the level of TCP within an acceptable range and to foster and encourage robust public participation throughout the process.

Detailed Project Description At least 20 other disadvantaged communities in the San Joaquin Valley, including Arvin, Parlier, Le Grand, and Wasco, have drinking water sources contaminated by TCP and are actively involved in remediation efforts. Successful remediation and improved water quality is dependent on a number of factors, including securing funding for remediation, increasing technical expertise of decision-makers and governance capacity of local agencies, and meaningful community engagement and participation.

For over 2 years, CRLA has been laying the necessary groundwork for ultimate success of groundwater remediation in the rural Fresno County community of Del Rey. In an effort to build a more transparent and inclusive government structure, CRLA has worked in Del Rey before the Community Service District Board of Directors to increase their understanding not only of the value of robust community participation, but also how to facilitate it. On behalf of concerned citizens, CRLA has provided guidance on how to increase Board responsiveness to requests for information and on the importance of providing Spanish

translation of materials and interpretation at meetings. This has led to a more transparent and inclusive government structure with increased community participation by both Spanish-speaking and English-speaking community members. CRLA and community residents have also increased the governance capacity of Del Rey by identifying and facilitating training opportunities for the Community Service District Board offered through the Rural Community Assistance Corporation.

The Community Services District recently employed a competitive bid process to solicit and select a service provider to conduct a remediation study and report findings and recommendations. Three bids were secured to ensure a fair and reasonable contract price and appropriate stewardship of resources. The Board of Directors approved a resolution granting the contract for the initial well remediation study to the lowest bidder, Provost & Pritchard at a cost of \$24,895.

With SEP funds, CRLA will pass through the exact contract amount to move forward on the remediation study. CRLA and Del Rey community residents will work together to monitor the activities of the Community Service District; identify and secure further fundraising opportunities as appropriate to support the remediation process through to completion; and continue capacity building activities to ensure public participation in the well remediation process. Robust public participation in this process increases Del Rey's chances of securing additional funds towards planning for and ultimately remediating their contaminated wells and providing safe and affordable drinking water to residents. By securing outside financial assistance for this project, the Community Services District will be able to significantly defray if not ultimately mitigate the final cost that they will need to pass on to residents of Del Rey to provide safe drinking water. Given that Del Rey is a severely disadvantaged community, this rate relief will provide significant benefit to the residents.

WORK PLAN

CRLA seeks funding for a two-year period during which it will engage in two major types of activities: (1) analysis and development of the remediation study, monitored through a technical advisory committee comprised of Del Rey community residents and (2) community engagement and education. Ensuring meaningful community engagement will include facilitating and encouraging community participation in Community Service District processes, providing training and technical assistance to community residents, and researching water quality issues as necessary to educate residents.

Months 1-6

CRLA will monitor the Community Service District's performance through the contracting process. The preliminary study phase will:

- (1) evaluate available treatment and non-treatment alternatives for addressing the TCP contamination in Del Rey and provide this information to the public in an accessible manner
- (2) provide education to residents about the study and results of the study and elevate their preferred mitigation approach to the Board

(3) assess the site-specific capital and operation and maintenance costs associated with that approach on a well-by-well basis and provide outreach around these costs to the public

Outreach will be conducted to new community members not yet involved regularly in Community Service District public meetings or community group meetings. CRLA will convene 4-5 Del Rey residents and form a Technical Assistance Committee (TAC) to monitor the Community Services District's oversight of the engineering consultant. The TAC will meet bi-monthly with the Community Service District to monitor progress. CRLA will provide the TAC with civic engagement and leadership training. This training will provide, at a minimum, an overview of the function of a Community Services District, the guidelines and legal restrictions that the Board must operate under, a primer on local government structure, and specific training on the well remediation process and funding mechanisms in place to plan for and remediate the contaminated wells.

Months 6-12

The Community Services District will be primarily responsible for project management over the course of the remediation study and will be the first point of contact for questions and information requests from the selected contractor, with CRLA providing ongoing technical support to the TAC. Training series topics can include: Understanding Water Resource Programs, Principles of Monitoring and Managing Contracts for Services, Evaluating Various Water Resource Programs and Projects, Evaluating Alternatives and Making Sound Recommendations, Understanding Laws, Codes, and Regulations Associated with Management of Water Resources and Operation of Water Services in California, State Agencies Involved in Water Resource Oversight and Management, etc. as requested by the TAC. CRLA will monitor the progress of the remediation study in collaboration with the TAC.

The TAC will meet bi-monthly with the Community Service District to monitor progress and to review the final report and recommendations. The TAC will provide input on final remediation proposals.

Months 12-18

The TAC will present its recommendations to the Community Service District to consider its input on the selection of a final remediation plan based on the recommendations of the planning study. CRLA will facilitate the convening and provide the necessary bridge for any information gaps between the CSD and the TAC.

Months 18-24

CRLA will maintain a close relationship with CSD staff and Board to ensure that Del Rey residents are aware of up to date information about project development and are aware of key deadlines and factors that impact the well remediation project. CRLA will provide education and support for resident participation on various councils, conferences, meetings

and associations concerned with the use of water resources and local government participation. CRLA can provide continued training to TAC members and interested community residents on training topics such as: Identifying Public and Private Funding Opportunities for the Community (and the Impact on Water Rates for Users), Grant Development and Administration: Information Requirements and the Application Process, Rate Study Basics, etc. as requested.

CRLA will draft a final report chronicling the process for a disadvantaged community to remediate contaminated drinking water sources. The report will include an examination of the steps taken to ensure success including: (1) meaningful community engagement and education; (2) improved governance capacity; (3) increased local technical expertise; and (4) the use of a resident-based technical advisory committee to ensure meaningful public involvement in the well remediation process.



CALIFORNIA RURAL LEGAL ASSISTANCE, INC.

	Water Quality Planning and Well Rel Deliverables & Timeline	nabilitation
Milestone	Tasks	Deliverables
25% complete— 6 month mark. Target project period: 24 months	 CRLA will conduct outreach to community residents not yet engaged with the CSD. CRLA will meet with Del Rey community residents to identify 4 to 5 community members to participate on the Technical Advisory Committee (TAC) CRLA will provide training to the TAG members on their roles in providing process oversight and residents' legarights CRLA will conduct resident training as needed on elements of community engagement in addressing water quality and water access challenges CRLA and TAC will meet with the Community Service District to review the contracting process and TAC's role CRLA will monitor the CSD's performance during the contracting process CRLA and TAC will meet to review the selected consultants proposed scope of work 	engaged in water access project Formation and training of the Technical Advisory Committee (TAC) to participate in remediation study contracting process oversight Contracting process for commissioning planning study with a qualified engineering consultant completed
50% complete— 12 month mark Target project period: 24 months	 CRLA and TAC will meet bi-monthly with the Community Service District to review and monitor progress on the engineering study CRLA will provide training to TAC as necessary on leadership and civic engagement within the water quality and remediation project context CRLA will provide technical assistance as needed to TAC to enhance their ability to monitor the CSD's project management process 	Demonstrated increased level of knowledge by Del Rey community residents about civic participation and community involvement in water quality planning and well rehabilitation process Demonstrated increased level of knowledge by Del Rey community residents about

CALIFORNIA RURAL LEGAL ASSISTANCE, INC.

	 4. CRLA will facilitate TAC residents attending Community Service District meetings and ensuring accessibility 5. CRLA will assist TAC members in providing regular updates to community residents at large on progress of the engineering study project 6. CRLA will provide training to TAC and community residents about health impacts of contaminant TCP 7. CRLA will provide information and training to TAC and community residents about the state's regulatory efforts around drinking water standards and maximum contaminant levels 8. CRLA will produce a brief interim report on the status of the remediation study and the parallel community engagement and education process 	the health impacts of TCP and contaminated drinking water Increased technical expertise and governance capacity of local Community Service District, achieved by providing oversight and accountability training to the TAC Ongoing development of the well remediation study informed by resident input
75% complete— 18 month mark Target project period: 24 months	 CRLA and TAC will meet with the Community Service District to review the recommendations presented in the study and to establish criteria the community wants to see to be considered in determining final course of action CRLA will meet with TAC to facilitate its determination of which alternative best satisfies agreed upon criteria CRLA will support TAC in presenting its recommendations to the Community Service District 	Technical Advisory Committee endorsement of engineering consultant's final recommendations for well remediation plan based on informed participation in oversight process Completed remediatino study identifying mitigation and treatment alternatives and providing technical and financial feasibility analysis, including preliminary plans and costs estimates, in addition to a final recommendation from the TAC on an alternative for Del Rey to pursue



CALIFORNIA RURAL LEGAL ASSISTANCE, INC.

100% complete— 24 month mark Target project period: 24 months	1. CRLA will assist TAC in providing a final update to Del Rey community members on the outcome of the planning study and the next steps in the well remediation process 2. CRLA will provide training to the TAC around funding opportunities for completion of the well remediation project, including Prop 1 capital improvement funding 3. CRLA will provide ongoing technical assistance to the CSD and coaching for the TAC and community residents pursing continued well remediation project development 4. Continued training sessions will be offered to support fundraising for full remediation activities 5. CRLA will produce a Final Report detailing how a disadvantaged community can address water contamination in a way that ensures meaningful community engagement and participation, increases technical expertise, and improves local governance capacity Resident buy-in for well remediation process, informed by community leader participation Development of increased community resources and funding for improved water quality and access introduced to effective fundraising techniques for community development projects Documented process for well remediation process, informed by community leader participation Development of increased community resources and funding for improved water quality and access Introduced to effective fundraising techniques for community development projects Documented process for well remediation projects
Ongoing Tasks	Providing ongoing training and technical assistance in fundraising to complete the well remediation process Providing ongoing training and technical assistance to community residents in addressing further water quality challenges through the remediation process

California Rural Legal Assistance, Inc. Water Quality Planning and Well Rehabilitation Project Budget Rose Foundation

Line Item Budget

EXPENSES:	Ros	e Foundation	O	ther Secured Funds	Requested Funds	Total
Program Director (.05 FTE)	\$	6,265.25	\$	1,947.25	\$ -	\$ 8,212.50
Staff Attorney (.25 FTE)	\$	23,724.00	\$	13,720.00	\$ -	\$ 37,444.00
Community Worker (.45 FTE)	\$	27,334.50	\$	11,688.00	\$, -	\$ 39,022.50
Payroll Taxes & Fringe Benefits	\$	16,394.59	\$	7,823.60	\$ -	\$ 24,218.19
Equipment, Maintenance & Technology	\$	1,269.95	\$	583.00	\$ _	\$ 1,852.95
Telecommunications	\$	2,085.75	\$	1,581.00	\$ -	\$ 3,666.75
Travel	\$	2,960.56	\$	2,604.88	\$ -	\$ 5,565.44
Rent & Utilities	\$	3,383.90	\$	-	\$ -	\$ 3,383.90
Office Supplies, Duplication & Printing	\$	1,972.41	\$	-	\$ -	\$ 1,972.41
Indirect Costs	\$	8,539.09	\$	3,994.77	\$ 	\$ 12,533.86
Total Project Budget	\$	93,930.00	\$	43,942.50	\$ _	\$ 137,872.50

Direct Administration Cost\$ 7,070.00Total Project Budget\$ 101,000.00Overall Program Oversight\$ 3,030.00Total Due from Discharger\$ 104,030.00



ARSENIC-FREE DRINKING WATER FOR CENTRAL VALLEY DACS

Amount Requested: \$93,000 - 1 Year Grant

Summary Description:

Rural Community Assistance Corporation (RCAC) proposes to implement a Point of Use (POU) program to provide safe drinking water to Central Valley disadvantaged communities (DACs). Initial outreach will be to Caruthers and Riverdale in Fresno County - both designated DACs with primary and secondary water contaminant issues. This program would replicate RCAC's current work in Arvin on the largest POU program ever to be funded by the State Water Resources Control Board. RCAC's POU program takes place in conjunction with Agua4All, an innovative campaign to increase access to and consumption of safe drinking water in low-income rural areas. Agua4All raises awareness about the lack of safe drinking water access in many schools and communities; creates unique public-private partnerships to install water bottle filling stations where they are needed most; and advocates for sustainable long-term solutions to ensure safe drinking water for all. The pilot stage of the program was completed in South Kern County and the eastern Coachella Valley where RCAC installed 147 filling stations in schools and other public places, such as parks, libraries and clinics and to date, has installed over 125 POU filters. RCAC is expanding the program throughout rural California and plans to install more than 200 additional bottle filling stations in Fresno, Kern, Kings, Lake, Merced, Riverside, San Diego and Tulare counties.

In the Fresno DACs, RCAC would install bottle filling stations with POU water treatment specifically designed to filter out arsenic. RCAC will also work with the communities' water systems, possibly leveraging state funds, to procure vending machines to dispense larger volumes of safe water for home use. RCAC will collaborate with the city councils and school districts in Caruthers and Riverdale. These partners will help to identify locations for installations. RCAC's locally-based Agua4All staff will conduct outreach to inform residents on the newly available safe water, as well as educate them on the health benefits of drinking water. RCAC will continue to work with the communities beyond the completion of the POU program to identify and implement long-term solutions to access to safe drinking water.

Detailed Project Description:

The primary geographic area for the specific project described in this proposal consists of the disadvantaged communities of Caruthers and Riverdale in Fresno County. If the Central Valley Regional Water Quality Control Board identifies additional potential beneficiaries, RCAC is also prepared to implement this POU program in other DACs with water quality issues.

Caruthers and Riverdale are both within the Tulare-Buena Vista Lakes watershed in Fresno County, a Central Valley Regional Water Quality Control Board jurisdiction.

Arsenic, a toxic element that is both naturally occurring and artificially produced from industrial processes, is present in the groundwater that is the source of drinking water for Caruthers and Riverdale. As its name implies, the POU program removes arsenic from water at the point of use: in this case, the water bottle filling stations installed by RCAC.



Although not the necessary long-term solution to improving the quality of the water in the Tulare-Buena Vista Lakes watershed, the installation of bottle filling stations equipped with POU filters will provide an interim solution that will greatly increase access to safe drinking water for the residents of Caruthers and Riverdale and will help protect public health now while research and implementation of a long-term solution is in process..

Other DACs that might receive this program would be served by one of 12 other Fresno County watersheds: Upper Kaweah; Mill; Upper Dry; Upper King; Upper Los Gatos-Avenal; Middle San Joaquin-Lower Chowchilla; Upper San Joaquin; Panoche-San Luis Reservoir; Pajaro; Salinas; Crowley Lake; and Owens Lake.

The need to provide safe drinking water in Caruthers and Riverdale is urgent, but the necessary long-term solutions are financially challenging and can take many years to implement. RCAC's POU program is cost-effective and fits well into an overall strategy for watershed contaminant mitigation by providing both an interim measure that results in immediate access to safe drinking water and long-term infrastructure in the form of state-of-the-art water bottle filling stations.

With a \$93,000 Central Valley Disadvantaged Community Water Quality grant, RCAC would be able to install nine water bottle filling stations equipped with POU filter systems designed to remove arsenic contamination. RCAC will secure other funding to install a tenth filling station to ensure sufficient access to safe drinking water in Caruthers and Riverdale.

The Multipure Plus AS-PB-PID POU filter systems will be purchased through the equipment distributor, AdEdge. This filter technology is manufactured by Multipure and certified and performance tested by the National Public Health and Safety Organization, NSF International (formerly the National Sanitation Foundation) for compliance with NSF/ANSI Standard No. 42 and 53, and is listed as a certified device by the State Water Resources Control Board (SWRCB) Division of Drinking Water (Certificate Number 03-1582) under the name of MultiPure Plus AS-PB-PID.

The filter will be equipped with a capacity monitor (Digiflow 8000T) that includes a totalizer and electronic display. This monitor also includes a digital readout of use, and an audible alarm signal when the filter is reaching its end of life and when the monitor has low battery. Two filtration systems will be installed in parallel where bottle filling stations are installed in order to maintain adequate flow. The filter systems will be mounted in locking security enclosures to minimize the potential for filter malfunction and possible vandalism.

These filters are unique because unlike other arsenic treatment methods that often create hazardous waste as a byproduct, these systems have replaceable cartridges that can be discarded in the normal trash.

The installation of POU filters and other interim solutions will give the residents of DACs in Fresno County safe water access now while a long-term solution is sought. Community involvement, outreach and education about the health benefits of drinking water, and funding can all be leveraged to help accelerate the long-term solution. Community members will also benefit financially when they no longer have to spend up to 10 percent of their income on bottled water.



		Deliverables		
Milestone	Tasks	Deliverables		
25% complete— 3 month mark. Target project period: 12 months	 Program outreach and commitment from water system and community installation sites. Site walk-through and preinstallation assessments. Execute grant agreements with site sponsors and water system. Order filling station units, filter systems and security cabinets. Obtain construction bids from sites and/or contractors. Execute task orders to provide installation funds. Apply for additional funding through SWRCB and/or other foundations for additional Point of Use sites or a complementary interim solutions project for households. 	10 water bottle filling stations purchased to increase effective access to free safe drinking water (9 filling stations purchased under this grant; 1 purchased with separate funding.) Twenty certified Point of Use Arsenic filters purchased to ensure access to at least 10 safe drinking water sites for schoolchildren and community members.		
50% complete— 6 month mark Target project period: 12 months	Develop sampling, monitoring and communications protocols. Facilitate filling station and filter installations. Design, purchase and install safe water signage.	Communications, sampling and monitoring, and operations and maintenance protocols established. At least 10 water bottle filling stations equipped with POU arsenic filters installed.		
75% complete— 9 month mark Target project period: 12 months	1. Ongoing water sampling by water system. 2. Ongoing filter and filling station operation and maintenance by site sponsors. 3. Develop program communications and outreach materials, including fact sheets, maps of safe water locations. 4. Prepare presentations for schools and communities about. 5. Put water quality results online for community members.	Communications and outreach materials developed and distributed to educate the communities on location and functionality of water bottle filling stations and filtration systems, and provide information on the availability of safe drinking water. Promotion of water as the healthiest beverage choice conducted.		
100% complete—	Ongoing water sampling by water system.	Communications and outreach materials developed and distributed to educate the		

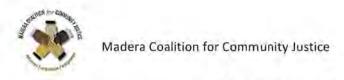


12 month	2. Ongoing filter and filling station	communities on location and functionality of
mark	operation and maintenance by site	water bottle filling stations and filtration systems,
Target	sponsors.	and provide information on the availability of
project	3. Develop program	safe drinking water.
period: 12	communications and outreach	
months	materials, including fact sheets, maps of safe water locations. 4. Prepare presentations for schools and communities about. 5. Put water quality results online for community members.	Promotion of water as the healthiest beverage choice conducted.

ITEM	Cost	
TAP purchase & installation	\$	27,000.00
Filter purchase & installation	\$	20,340.00
Filter replacements	\$	2,400.00
Salaries	\$	14,000.00
Fringe Benefits	\$	6,300.00
Travel	\$	3,000.00
Supplies	\$	141.00
Telephone	\$	233.00
Postage	\$	40.00
Office Space	\$	628.00
Equipment rental & maintenance	\$	87.00
Printing & copying	\$	331.00
Water sampling & monitoring su	\$	8,500.00
Communications subcontract**	\$	-
Indirect	\$	10,000.00
Total Project Budget	\$	93,000.00
Direct Aministration Cost	\$	7,000.00
Total SEP Amount	\$	100,000.00
Overall Program Oversight	\$	3,000.00
Total Due from Discharger	.6 .,	(05:000):00)

^{*} Subgrant to local water system to take water samples to ensure filters are removing arsenic and to pay for processing of the samples at a local laboratory.

^{**} Depending on the location of the DAC, RCAC will select either Community Water Center (CWC) or Self-Help Enterprises (SHE) as a local partner to assist with the outreach and communications component of the Agua4All program.



Madera Community for Sustainable Water

Amount Requested: \$27,900 - 1 Year Grant

Summary Description: Despite recent rains, the last several year's of drought in California has been the proverbial "canary in a coal mine" signaling a much larger catastrophe. Currently, decisions and actions are being made by local government that will long term impacts especially for the most vulnerable communities and families. But, the process guiding these decisions has not been focused towards addressing long-term and structural issues of water economics and politics in the County of Madera. The DACs (disadvantage communities) need to be at the table to address the water side of the issue – how the water system is working (and/or how it is broken and how it can work differently), does it work for all, how is water distributed and accessed, who pays and how much, is it protected, conserved and recycled, who decides, etc. So far they have been confined to the sidelines. They must be able to exercise ownership of the problem and participate in fashioning the solution.

Funds are requested to build capacity in Madera County to establish an organizational framework to ensure water security both in terms of quality and quantity by inculcating a collective consciousness and sense of ownership, responsibility and accountability in impacted and under-served communities. These efforts will build on the organization's ongoing advocacy and education work in land use and air quality both locally and regionally. In that connection, a key to this project focuses on youth leadership development as a key component to the community awareness, education and advocacy. There is so much at stake currently. Effective public participation must be functional for the governing entities and meaningful to the DACs. In that regard, community input should help to create better decisions and more responsive planning. That only occurs when public participation serves to influence decisions and community participants gets a sense of ownership of the outcomes.

Detailed Project Description (not to exceed 2 pages): Please explain how the work will improve water quality and benefit disadvantaged communities in the region; include updated details on the work plan. All project activities must relate to the full project description that was approved as part of the Project List.

We've learned that water is our most precious community and should be accessible by the entire community. But our current vicious cycle of allowing the continued depletion of groundwater and lack of planning for capturing and retaining surface water is a failed strategy. We need an educated citizenry to formulate an equitable and sustainable agenda for the regional and local water boards and commissions. This project allows DACs and vulnerable communities to coordinate their efforts in collaboration with other stakeholders to actively and effectively participate in the political and administrative processes. It is also imperative to develop young people to be water-conscious and educated on the issues at an early age going forward.

There are a number of barriers to making the water management and planning process more inclusive. First, the federal and state governing hierarchy and water laws is enormous, complicated, very technical, nuanced and otherwise not easy to understand. Second, meetings are held at inconvenient time and places and without interpreters. Third, governing bodies conduct business in manners that exclude the general public, de facto. Non-experts (members of the public) are treated like intruders. The decision

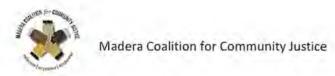
Madera Coalition for Community Justice

making process of the local irrigation and water districts is likewise opaque. Fourth, websites offer very little in the way of meaningful dialogue/structured as one-way line of communication. Fifth, agriculture has used "water = jobs" as a wedge issue to divide the farmworker communities. Sixth, water management planning lacks the obvious and immediate tangible benefit to sustain and support community involvement on an ongoing basis.

The project will address the issue of water security and management using a four-prong approach: (1) Awareness - Communities must be aware of planning and participation opportunities; (2) Education - Communities must be better prepared and educated before they can constructively participate; (3) Governing agencies must receive and supplement public input that reflect their practical experiences, attitudes and beliefs; and (4) Communities input must contribute to the decision-making before policies are made. The project will conduct outreach, disseminate info flyers and material, convene and facilitate community workshops and training sessions for members of DACs to provide them with an understanding of the overall ecosystem for promoting safe potable water, groundwater protection and recharge, flood control and habitat preservation, and knowledge and skills to develop a comprehensive community water management plan. The thrust of the project to mobilize the community is twofold: (1) empower community members to become informed and active participants in local, regional and state hearings, for a and taskforces on watershed planning and protection, upgrading of water system, improving community infrastructure and remediating septic pollution and other contaminants, and (2) establish a cadre of youth watershed stewards who will be trained on the fundamentals of protecting, restoring and improving our surface and groundwater through a 8 week course (5 classes and 3 field).

Deliverables & Timeline: Please identify all key deliverables for 25%, 50% 75% and 100% completion milestones, and tie them into the project timeline. The timeline does not have to be 12 months. It may be a longer or shorter period. Please express the timeline that will work best for your project. (3 month/6 months etc. as expressed below is for illustration purposes only).

Timeline & Deliverables		
Milestone	Tasks	Deliverables
25% complete— 3-month mark. Target project period: 12 months	 Hire coordinator Develop Action Plan Develop Watershed Education curriculum Recruit students for project Develop power point presentation and outreach material In-house staff training Mapping of "playing field" of Madera County 	 Integrate a watershed education component in the organization's youth leadership development project that may include storm drain stenciling, certain components of wetland restoration, water sampling & monitoring, and stream land/meadows stabilization or clean-up Develop public educational flyers Develop power-point presentation in English and Spanish. Establish a user-friendly website that will provide information on the drought and related information in layperson terms an



		serve as a community portal for announcements, updates, hearing dates and other notices and information on water and related issues. 25% check-in with the Rose Foundation.
50% complete— 6-month mark Target project period: 12 months	 Identify likely partners; meet with local groups and leaders to gauge interest in being part of campaign and identify what is needed by other organizations already working on issue in county. Networking with regional advocacy groups working on water and related environmental justice issues Attend at least monthly Madera County Board of Supervisor, Madera County Integrated Regional Water Management Group and/or local irrigation district meeting(s). Madera Youth Leaders will put on a panel discussion on water at high school before the social studies/civics class. Sponsor annual Earth Day fair that showcases topic(s) on water to foster public awareness and coordinate county to with "pledge board" for volunteers' river clean up or restoration. Submit one feature story on water of a technical nature and at least one letter to the editor of the local newspaper Schedule local Spanish radio talk show with guest speakers and listener call-in to educate the public on water issues twice a year. 	 Maintenance of an active network (local and regional) of concerned citizens, community organizations, environmental advocates, and faith-based groups. Coordination and collaboration with local stakeholders. Convening's with school officials, college students, business and industry leaders, private organizations, service clubs, government and civic leaders to recruit support and/or coordinate education and outreach efforts. Public awareness campaign to offer a balance view of the current drought crisis. Messages and presentations tailored for specific community group needs and interests. MCCJ will actively participate at local events, public gatherings, special conferences and club meetings where a portable exhibit with a message will be displayed and informational literature distributed and/or deliver a message, answer questions and clarify ambiguities. Aggressive outreach effort 'to inform residents about their role in water management and opportunities for involvement in fashioning the solutions to the issues and problems. This will serve as a targeted recruitment of community members to attend workshops and other events. Workshop/training - Tailored to meet the different audiences; the training will cover: overview of water agencies within state government, the California water right programs, beneficial uses and



		designation, water allocations (federal & state), protection of water supply, proposed federal and state projects, local water boards, plan preparation, decision-making and policies, and public input and participation. 50% narrative and financial report to the Rose Foundation.
75% complete— 9-month mark Target project period: 12 months	 Attend at least monthly Madera County Board of Supervisor, Madera County Integrated Regional Water Management Group and/or local irrigation district meeting(s). Attend networking/coalition meetings with regional advocacy groups working on water and related environmental justice issues to with an eye toward supporting local work. Watershed education training with up to 10 youth (weekly meetings) Youth field trip Distribute public educational fliers/fact sheets at public gatherings and community events bi-monthly (at 100 distributed). Put on training workshop on water at selected DAC. 	 Regularly scheduled meetings held among representatives from DACs and other identified marginalized communities to establish protocol for including the public in the planning process and enable the public to be more active in governance. MCCJ will chart an action plan that sets out small steps leading to the accomplishment of the overall goal of sustained active participation in the county's water management process in a way that volunteers don't lose interest and drop out. Realistic goals will take into account the time each person is willing and able to commit to strategies relative to the time it takes to successfully fulfill a particular stated objective. Strategies will build on small gains and tangible results so that participants remain encouraged and are more willing to tackle bigger tasks as part of a long range campaign. Coordinated attendance and participation by community members at hearings held by Board of Supervisors, Planning Commission, Madera County Water Advisory Commission, and Madera County Integrated Regional Water Management Group. Targeted participation in ongoing plan update and development by respective government agencies. 75% check-in with the Rose Foundation.
100% complete— 12-month mark Target project	Attend at least monthly Madera County Board of Supervisor, Madera County Integrated Regional Water Management	Letter to editor - Madera newspapers



Madera Coalition for Community Justice

period: 12 months	Group and/or local irrigation district meeting(s). • Guest column article - Madera Tribune & high school newspaper		
	Submit one feature story on water of a technical nature and at least one letter to the editor of the local newspaper, Final narrative and financial report to the Rose Foundation documenting completion of all deliverables.		
	Schedule quarterly local radio talk show with guest speakers and listener call-in to educate the public on water issues.		
	Convene meeting with local partners to coordinate advocacy efforts for next year.		
	Attend networking/coalition meetings with regional advocacy groups working on water and related environmental justice issues to with an eye toward supporting local work.		
	Youth field trip #2		
	Distribute public educational fliers/fact sheets at public gatherings and community events bi-monthly (at 100 distributed).		
	Put on training workshop on water at selected DAC.		
	Madera Youth Leaders will put on a panel discussion on water at high school before the social studies/civics class.		
	Meet with MCCJ board of directors to share information, plan actions and evaluate project activities of past 12 months.		
Ongoing Tasks	 Circulate newsletter with updates, recent developments and upcoming events Face-to-face communication to identify those entities interested in cosponsoring educational activities or provide financial/resource support (e.g., printing, sponsorship, etc.) 		
	 Reintroduce "service-learning" by coordinating educational efforts and field projects with Madera Unified School District grade schools (e.g., nonpoint source pollution, water quality monitoring, etc.) in a manner that aligns with education curriculum. 		
	nonpoint source pollution, water quality monitoring, etc.) in a ma		

PROJECT BUDGET

Personnel	
Coordinator	\$15,400.00
Stipends	\$1,000.00
Benefits	\$1,300.00
Total	\$17,700.00
Non-Personnel	
Communications	\$100.00
Professional Development	\$2,500.00
Consultant	\$3,900.00
Refreshments/Meals	\$1,000.00
Postage & Photocopying	\$100.00
Materials and Supplies	\$500.00
Insurance	\$600.00
Administration	\$1,500.00
Total	\$10,200
Total Project Budget	\$27,900
Direct Administration Cost	\$2,100
Total SEP Amount	\$30,000
Overall Program Oversight	\$900
Total Due from Discharger	\$30,900