

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

SETTLEMENT AGREEMENT AND STIPULATION FOR ENTRY OF
ADMINISTRATIVE CIVIL LIABILITY ORDER R5-2016-0567
IN THE MATTER OF
CALIFORNIA RESOURCES CORPORATION
PLEITO 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 California Resources Corporation (CRC 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

1. On 30 September 2014, Vintage Production California LLC (Vintage) reported to the Governor's Office of Emergency Services (OES) that approximately 100 barrels of drilling mud was discovered breaching from a hillside below the drilling Pleito Ranch 72-30 well (Well) and into a dry ephemeral channel. Drilling operations were suspended and cleanup began. Vintage began drilling the Well on 27 September 2014.
2. On 2 October 2014, Vintage provided an update of the initial report to OES. The updated report stated that about 1,000 barrels of produced water, 145 barrels of drilling mud, and less than 1 barrel of crude oil breached from the hillside below the Well drilling pad and into the ephemeral channel. The updated report also states that 980 barrels of produced water were recovered from the channel.
3. On 6 October 2014, the Division of Oil, Gas and Geothermal Resources (Division) sent an email to Central Valley Water Board staff (Staff) which included the Division's *Report of Occurrence*, three aerial photographs delineating the spill, and six photographs from the Division's inspection of the spill on 30 September 2014. The three aerial photographs depict the spill release point at the hillside breach, the length of the spill in the channel, and the endpoint of the spill just to the west of the California Aqueduct.
4. On 6 October 2014, Staff inspected the spill to observe the extent and composition of the spilled fluid. Staff observed the spilled fluid consisted of produced water and drilling mud with a small amount of crude oil (hereinafter, collectively "drilling fluid") that originated from the spill release point on the hillside below the Well. Staff observed that spilled fluid extended down the ephemeral channel for a distance of nearly 2.5 miles to just west of the California Aqueduct.

5. On 19 November 2014, the Central Valley Assistant Executive Officer issued an Order pursuant to Water Code section 13267 directing Vintage to address nine information items related to the spill in a technical report to be submitted by 8 December 2014. The information items include:
 - A) Drilling logs for the Well from the start of drilling through installation of the surface casing;
 - B) Drilling mud makeup water source, volume, and chemical characteristics;
 - C) Drilling mud and additives source, volume, and chemical characteristics;
 - D) Volume of drilling mud and additives or lost circulation materials used in the Well prior to suspension of drilling on 30 September 2014 and their chemical characteristics;
 - E) Estimation of drilling mud and liquids lost from the Well during drilling;
 - F) Analytical results for all spill samples collected;
 - G) Total volumes of oil, water, and mud collected during the cleanup of the spill;
 - H) Map of vacuum truck operations; and,
 - I) Identification of the final disposal site for the material transported by vacuum trucks.
6. On 1 December 2014, Vintage legally changed its name to California Resources Production Corporation, a subsidiary of CRC.
7. On 8 December 2014, Staff received the technical report (Response) required by the Section 13267 Order. The Response states that vacuum trucks were used to collect about 1,000 barrels of "free liquid" from the ephemeral channel, 72 barrels of free liquid were collected from the channel by hand crews, and a calculated 145 barrels of drilling mud were "released to the channel."
8. On 4 May 2015, Staff issued a Notice of Violation (NOV) for the discharge of drilling fluid to an ephemeral channel, a water of the State, in violation of the CWC sections 13260 and 13350. Attached to the NOV are a Staff memorandum and a report describing the inspection of the spill by Staff on 6 October 2014.

The NOV states that, based on the mud losses in the Response and the calculated (by Staff) mud losses per foot drilled, it appears that the amount of drilling fluid spilled into the ephemeral channel was greater than the estimated amount of 1,072 barrels in the Response. Using the reported total cumulative mud lost during drilling of 10,674 barrels and an assumed formation loss of 3.28 barrels per foot drilled, Staff calculated that on the order of 4,500 barrels (189,000 gallons) of fluid was likely discharged from the hillside breach and into the ephemeral channel.

9. On 27 July 2015, CRC submitted a response to the NOV stating that CRC disagreed with the discharge spill volume calculated by Staff and requested a meeting to provide additional information.

10. On 6 June 2016, the Central Valley Water Board Assistant Executive Officer issued a second Section 13267 Order to CRC directing CRC to address additional information about, or related to, the spill in a technical report to be submitted by 18 July 2016. The information items include the:
 - A) Number of vacuum truck loads and volume of fluids transported to the Well;
 - B) Total cost for the lost circulation cement plug placed in the Well;
 - C) Explanation of the decision to drill the Well from depths between 372 and 1,975 feet without any mud returns; why a second lost circulation cement plug was not placed in the borehole after mud circulation was lost; and,
 - D) Explanation of why CRC does not agree with the discharge spill volume of about 4,500 barrels calculated by Staff in the technical memorandum attached to the NOV.

11. On 18 July 2016, CRC responded to the second Section 13267 Order. The responses for the information required in the second Order follow:
 - A) Vacuum trucks are billed at an hourly rate rather than on a load or volume basis;
 - B) Total cost for the lost circulation cement plug placed in the borehole was approximately \$63,000;
 - C) It is accepted industry practice to drill ahead without full mud returns to the surface; in seven of 13 prior wells drilled in the area, severe mud losses were observed while drilling continued without incident to the casing point; and,
 - D) The spill discharge volume calculated by Staff is incorrect because the assumed mud loss per foot drilled does not take into account multiple loss paths from the wellbore into the formation and the assumed absorption rate in the ephemeral channel exceeds what would be expected.

12. On 2 August 2016, the Prosecution Team met with CRC to discuss formal enforcement and/or settlement of the violations for the 30 September 2014 spill discharge. Prior to discussing settlement, CRC provided new information about the spill. The information includes the following:
 - A) A vacuum truck crossed the dry ephemeral channel between 06:00 hours and 06:15 hours while driving to the Kelly Pump Station adjacent to the channel;
 - B) The same vacuum truck departed from the Kelly Pump Station and crossed the ephemeral channel at 08:30 hours and observed drilling mud flowing in the channel. The access road crossing the channel is about 3,000 feet from the spill release point on the hillside below the Well pad.
 - C) At 10:00 hours the drilling rig stopped drilling. As reported in the previously submitted *Daily Operations 30-Hr Report*, drilling with no mud returns at the surface stopped between 10:00 and 10:30 hours at a depth of 1,975 feet "due to a mud breach on side of mountain below rig pad."

- D) The drilling rig mud pumps were able to pump at a rate of 420 gallons per minute while drilling on 30 September 2014.
13. The Prosecution Team calculates that about 2,000 barrels (84,000 gallons) of drilling fluid were discharged into the ephemeral channel from the spill release point on the hillside below the Well. Using a mud pump rate of 420 gallons per minute, the 2,000 barrels could have been discharged in the 200 minutes from 06:40 hours to 10:00 hours on 30 September 2014.
14. 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 this discharge is \$94,500.

Regulatory Considerations

15. Staff has concluded that the Discharger has 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.
16. Water Code 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...."
17. Water Code 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."
18. Water Code 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

19. 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 delegate, 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.
20. 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.
21. To resolve the violations of the Water Code by consent and without further administrative proceedings, the Parties have agreed to the imposition of \$94,500 in liability against the Discharger with 50% of the settlement proceeds going towards a Supplemental Environmental Project (SEP).

Stipulations

The Parties stipulate to the following:

1. **Administrative Civil Liability:** CRC hereby agrees to the imposition of an administrative civil liability totaling **ninety-four thousand five hundred dollars (\$94,500)** to the Central Valley Water Board to resolve the alleged Water Code violations, specifically:
 - a. **Forty-seven thousand two hundred fifty dollars (\$47,250)** shall be paid to the State Water Board *Waste Discharge Permit Fund*. Payment shall be made no later than thirty (30) days after the entry of an Order approving this Settlement Agreement by the Central Valley Water Board, by check payable to the State Water Board *Waste Discharge Permit Fund*. CRC shall indicate on the check the number of this Order. CRC shall send the original signed check to the Accounting Office, Attn: ACL Payment, P.O. Box 1888, Sacramento, CA 95812-1888. Copies of the check shall be sent to Julie Macedo, Senior Staff Counsel, State Water Resources Control Board, Office of

Enforcement, P.O. Box 100, Sacramento, CA 95812 and Clay Rodgers, Assistant Executive Officer, Regional Water Quality Control Board, Central Valley Region, 1685 E Street, Fresno, CA 93706.

- b. **Forty-seven thousand two hundred fifty dollars (\$47,250)**, along with an administrative fee of 3% (\$1,417.50; for a total of \$48,667.50), shall be paid to the to the Rose Foundation for Communities and the Environment ("Rose Foundation") to be distributed to California Rural Legal Assistance (CRLA) for their project *Water Quality Planning and Well Rehabilitation*. This Project is intended to abate legacy groundwater contamination in the community of Del Rey in the Tulare Lake Basin. Payment shall be made no later than thirty (30) days after the entry of an Order approving this Settlement Agreement by the Central Valley Water Board. Payment shall be provided to the Rose Foundation in the form of a single check payable to the "Rose Foundation." Payment shall be sent to the following address: Rose Foundation, 1970 Broadway, Suite 600, Oakland, CA 94612, Attn: Tim Little. A copy of the check shall be sent to Julie Macedo and Clay Rodgers at the addresses set forth above.
2. **Supplemental Environmental Project:** CRC 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 CRC 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 Discharger's payment of its SEP obligations under this Stipulation, Central Valley Water Board staff shall send CRC a letter recognizing the satisfactory completion of its SEP obligations. This letter shall terminate any further SEP obligations of CRC and result in the permanent waiver of the SEP suspended liability.
- a. As part of the SEP funded by CRC, CRLA, in partnership with the Del Rey Community Services District, will support the residents of Del Rey to abate legacy contamination in the community's groundwater supply. Del Rey is located in the San Joaquin Valley Floor watershed and receives 100% of its water from groundwater sources. The community's drinking water is contaminated with 1,2,3-trichloropropane (TCP), a byproduct of soil fumigants used in agricultural production. Del Rey's private wells have TCP levels significantly higher than the Public Health Goal. Two of the wells have been rendered completely unusable and are abandoned. Funds from this SEP will be used to: assist the residents of Del Rey in their efforts to assess the extent of contamination in its wells; develop mitigation and treatment options to

remove TCP; and to develop a blueprint for community engagement, governance capacity, and technical assistance.

3. **Compliance with Applicable Laws:** CRC 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
1001 I Street, 16th Floor
Sacramento, CA 95812
(916) 323-6847

For CRC:

Adam Smith – Managing Counsel
27200 Tourney Road
Santa Clarita, CA 91355
(818) 661-3705
Adam.smith@crc.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 the 30 September 2014 discharge. The provisions of this Paragraph are expressly conditioned on the full payment of the administrative civil liability, in accordance with Stipulation Paragraph 1 herein.

7. **Public Notice:** CRC 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. CRC 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.
13. **No Admission of Liability:** In settling this matter, CRC does not admit to any of the findings in this Stipulated Order, or that it has been or are in violation of the Water Code, or any other federal, state, or local law or ordinance; however, CRC 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:** CRC 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:** CRC 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:** CRC 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.

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California Resources Corporation
Pleito Oil Field, Kern County

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.
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 Regional Water Quality Control Board Prosecution Team
Central Valley Region

By: Clay L. Rodgers
Clay Rodgers
Assistant Executive Officer

Date: 10/26/2016

California Resources Corporation

By: Chad Jones
Chad Jones
Vice President of Operations

Date: Oct 20, 2016

Order of the Central Valley Water Board

1. 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: 
Pamela Creedon,
Executive Officer

Date: 12-27-2016

Attachment A

Stipulated Order No. R5-2016-0567 Specific Factors Considered California Resources Corporation Pleito 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 and CRC in settlement:

30 September 2014 discharge violation: An unauthorized discharge of approximately 2,000 barrels (84,000 gallons) of oil and produced water (collectively, "drilling fluid") in violation of Water Code section 13350. Each factor of the Enforcement Policy and its corresponding score is presented below.

Step 1. Potential for Harm for Discharge Violations

The Potential for Harm is 5. 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 the susceptibility for cleanup or abatement.

a) Factor 1: Harm or Potential Harm to Beneficial Uses (2 = below moderate risk)

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.

The discharged material went into a dry ephemeral channel, and was contained before it reached the California Aqueduct. The Prosecution Team finds that given the circumstances, the harm or potential harm to beneficial uses resulting from this discharge was likely below moderate.

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

As noted in the Settlement Agreement, the material discharged from the hillside breach was drilling fluid with a limited amount of crude oil. The Prosecution Team selected a "moderate" score for this factor.

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

While CRC made expeditious efforts to abate the effect of the discharge upon learning of the hillside breach, this type of discharge tends not to be susceptible to thorough abatement. Therefore, this factor was assessed a score of 1.

Final Score - Potential for Harm is 5.

Step 2. Assessments for Discharge Violations

This violation resulted from the discharge of 84,000 gallons of drilling fluid into the channel from a breach on a hillside below a well being drilled by CRC. Pursuant to California Water Code section 13350, liability is proposed both on a per gallon or a per day basis, but not both. The Prosecution Team elected to proceed on a per gallon basis rather than a per day basis because of the short time duration for the discharge.

d) Per Gallon Assessments for Discharge Violation: 0.15

Using Table 1 of the Enforcement Policy (pg. 14), the per gallon factor based on the Potential for Harm (5) and Deviation from Requirement (major) is 0.15.

The "deviation from requirement" was considered major because the prohibition from discharging was rendered ineffective when CRC discharged approximately 84,000 gallons of material.

e) High Volume Discharges: A discretionary reduction is not available for this discharge

The Water Quality 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 nor considered "high volume," a reduction was not applied.

f) Initial Liability Amount: \$126,000

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

Per Gallon Liability: 84,000 gallons discharged x 0.15 (per gallon factor) x \$10 (per gallon) = \$126,000

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.

g) 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. CRC was given a multiplier value of 1.0, which does not increase or decrease the initial liability. While the discharge may have been accidental, drilling with no mud returns at the surface could have been cause to stop drilling.

h) Cleanup and Cooperation: 0.75

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.

During a meeting with the Prosecution Team, CRC provided greater details about efforts, independent of any agency requirement, to address and remediate the discharge. For example, upon learning of the discharge, within two hours, CRC stopped drilling and dispatched vacuum trucks to remove discharged fluid from the channel. A total of 1,072 barrels of "free liquid" from the drilling fluid was collected from the channel by vacuum trucks and hand crews. This served to reduce the impact to the environment, and the selection of 0.75 for this factor correspondingly reduces the initial penalty.

i) History of Violations: 1

As a consideration of settlement, this factor was left neutral, which does not increase the base liability.

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.

j) Total Base Liability Amount: \$94,500

$\$126,000 \times 1$ (culpability) $\times 0.75$ (cleanup and cooperation) $\times 1$ (history of violations) = \$94,500

Step 6. Ability to Pay and Continue in Business

Adjusted Combined Total Base Liability Amount:

CRC has the ability to pay the proposed penalty amount and continue on in business. Because the Parties are reaching settlement and ability to pay is an affirmative defense, no evidence was presented by CRC to contest the suggested liability.

Step 7. Other Factors as Justice May Require

Not applicable.

Staff costs needed to bring the discharger back into compliance are not applied in Region 5. No other factors need to be discussed in this settlement.

Step 8. Economic Benefit

In its 18 July 2016 response to the Water Code section 13267 order, CRC stated that it cost approximately \$63,000 to prepare for, to pump and set, and then to drill through the 280 feet thick lost circulation cement plug placed in the Well at depths from 48 to 328 feet. While there were other options discussed as to how similar discharges could have been avoided, this figure was used as the economic benefit for this discharge.

The Enforcement Policy (pages 20-21) requires that the adjusted Total Base Liability Amount be at least 10 percent higher than any economic benefit realized by the discharger. In determining the appropriate penalty, the Prosecution Team considered that the entire economic benefit (+ 10%) was recovered.

Step 9. Maximum and Minimum Liability Amounts

Minimum Liability Amount: \$69,300

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 CRC's economic benefit obtained from the violation is \$63,000, which was the amount reported by CRC to install an

additional cement plug in the borehole. Adding 10% to this amount results in a minimum penalty of \$69,300.

Maximum Liability Amount: \$840,000

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

Max. Penalty for Discharge Violation: (84,000 gallons X \$10 per gallon) = \$840,000

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

Step 10. Final Liability Amount

The final liability amount is \$94,500, and CRC has agreed to perform a SEP as described in the Settlement Agreement.

ATTACHMENT B

Administrative Civil Liability Order R5-2016-0567
 California Resources Corporation
 Pleito Oil Field, Kern County

Penalty Calculation Methodology Worksheet

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	2 = Below Moderate
Select Item	2 = Discharged material poses moderate risk
Select Item	> 50% of Discharge Susceptible to Cleanup or Abatement
Select Item	Major

Discharger Name/ID: California Resources Corporation - Pleito Oil Field, Well 72-30 Spill

ATTACHMENT B

		Violation 1			
Discharge Violations	Step 1	Potential Harm Factor	5	F1 = 2; F2 = 2; F3 = 1	
	Step 2	Per Gallon Factor	0.15	Major Deviation	
		Gallons	84,000	2,000 barrels	
		Statutory / Adjusted Max per Gallon (\$)	10.00		
		Total			\$ 126,000
		Per Day Factor			
	Days				
	Statutory Max per Day				
	Total			\$ 126,000	
Non-Discharge Violations	Step 3	Per Day Factor			
		Days			
		Statutory Max per Day			
		Total			\$ 126,000.00
Initial Amount of the ACL				\$ 126,000.00	
Add'l Factors	Step 4	Culpability	1	\$ 126,000.00	
		Cleanup & Cooperation (Removed 1,072 barrels)	0.75	\$ 94,500.00	
		History of Violations	1	\$ 94,500.00	
	Step 5	Total Base Liability Amount		\$ 94,500.00	
Step 6	Ability to Pay & to Continue in Business	1	\$ 94,500.00		
Step 7	Other Factors as Justice May Require Staff Costs*	1	\$ 94,500.00		
		\$ -	\$ 94,500.00		
Step 8	Economic Benefit (Cement plug estimated cost, \$63,000 + 10%)		\$ 69,300.00		
Step 9	Minimum Liability Amount	\$69,300			
	Maximum Liability Amount	\$ 840,000			
Step 10	Final Liability Amount		\$ 94,500.00		