

ATTACHMENT A to ADMINISTRATIVE CIVIL LIABILITY ORDER NO. R5-2015-0510
BREITBURN OPERATING L.P.
Dow Chanslor Lease, South Belridge Oil Field
Kern County

Analysis of Enforcement Policy Penalty Methodology

BreitBurn Operating L.P. (BreitBurn or Discharger) has violated California Water Code (CWC) section 13350 for discharging unpermitted materials to sumps. The Central Valley Water Board may assess administrative civil liability based on CWC section 13350 for these violations.

CWC sections 13327 and 13385(e) require the State Water Resources Control Board (State Water Board) and Regional Water Boards consider several factors when determining the amount of civil liability to impose. These factors include in part: "...the nature, circumstance, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup and 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."

On 17 November 2010, the State Water Board adopted Resolution No. 2009-0083 amending the Water Quality Enforcement Policy ("Enforcement Policy"). The Enforcement Policy was approved by the Office of Administrative Law and became effective on 20 May 2010. The Enforcement Policy establishes a methodology for assessing administrative civil liability. The use of this methodology addresses the factors that are required to be considered when imposing a civil liability as outlined in CWC sections 13327. The Enforcement Policy is at: http://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final11179.pdf.

This attachment summarizes the Prosecution Team's selected factors reached through settlement negotiations with the Discharger.

Factor 1 – Harm or Potential Harm to Beneficial Use

For this case, the violation was for the unpermitted discharges of stimulation treatment fluid (fluid) to land. The Prosecution Team must consider where the fluid went to determine harm or potential harm to beneficial uses. The fluid was discharged to six unlined sumps that were used for the Discharger's drilling mud and drill cuttings when drilling the wells. The sumps were unlined and therefore discharge of the fluid had the potential to affect groundwater. However, because the discharges occurred in the South Belridge Oil Field, where the quality of the underlying groundwater is somewhat poor, the Prosecution Team balanced the existing quality of the groundwater against the State Water Board's acknowledgment that all water has the potential to be drinking water in Resolution 88-63, and selected a factor of 2, below moderate. Below moderate harm means that the potential harm is less than moderate harm to beneficial uses (i.e., impacts are observed or reasonable expected, and harm to beneficial uses is minor).

Factor 2 – Physical, Chemical, Biological or Thermal Characteristics of the Discharge

The Prosecution Team issued numerous CWC section 13267 Orders to oil and gas producers, including BreitBurn, in November 2013 to inquire as to the nature of fluids discharged to drilling mud sumps between 1 January 2012 and 15 November 2013. BreitBurn initially responded that stimulation treatment fluid was discharged to 24 sumps. A Notice of Violation and a second CWC section 13267 Order were sent to the Discharger on 21 May 2014. The second Order asked for additional information about the 24 discharges. The Discharger responded in a 16 July 2014 technical report that the originally reported fluid discharges to 24 sumps was actually only to six sumps. Fluid discharged to six sumps because only six of the 24 wells had positive pressure at the surface after stimulation treatment. Wellhead pressures were bled down in these six wells which likely caused fluid to discharge to the adjacent sumps. There was no positive pressure in the other 18 wells and therefore it was unlikely that well stimulation treatment fluids discharged to the sumps.

Fluid discharged to the six sumps had salinity levels exceeding the maximum salinity limits in the *Water Quality Control Plan for the Tulare Lake Basin*, Second Edition, revised January 2004 (Basin Plan). The Prosecution Team selected a score of 2, because the material poses a moderate risk or threat to groundwater.

Factor 3 – Susceptibility to Cleanup or Abatement

A score of 1 is assigned for this factor if less than 50% of the discharge is susceptible to cleanup or abatement. This factor is evaluated regardless of whether the discharge was actually cleaned up or abated by the Discharger (Enforcement Policy, pg. 13). Here, the discharge was not susceptible to cleanup because the unlined sumps allow the material to percolate into the ground. In addition, the Discharger made no effort to remove treatment fluids from the sump using vacuum trucks as soon as possible after discharging fluid to the sumps. Therefore, this factor was given a score of 1.

For the first three factors, each factor is added together for a score of 5 [2 + 2 + 1 = 5].

Deviation from Requirement – The Prosecution Team considers the discharge of well stimulation treatment fluids to the sumps to be a major deviation from requirement because only boring wastes (drilling mud and cuttings) could be discharged to the sumps. The use of the sumps for the discharge of stimulation treatment fluids is a total disregard for the Central Valley Water Board's regulatory authority and an indication that the requirement has been rendered ineffective.

Using the table in the Enforcement Policy (p. 14), the Initial Liability is $0.15 \times \$5,000 \times 17$ days = \$12,750.

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 cleanup or cooperate with regulatory authority, and the violator's compliance history. After each of these factors is considered for the

violations involved, the applicable factor should be multiplied by the proposed amount for each violation to determine the revised amount for that violation.

Culpability

Higher liabilities should result from intentional or negligent violations as opposed to accidental violations. A multiplier between 0.5 and 1.5 is to be used, with a higher multiplier for intentional or negligent behavior. The Discharger was given a neutral multiplier value of 1.0, since it timely responded to the Prosecution Team's CWC 13267 Orders, negotiated in good faith, and came forward with the information leading to settlement.

Cleanup and Cooperation

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. While there was a high degree of cooperation with this Discharger during the investigation, the Prosecution Team finds that the Discharger failed to quickly remove the fluid from the sumps as soon as possible after the discharges. Therefore, the Prosecution Team considers a factor of 1.1 to be suitable.

History of Violations

The Enforcement Policy states that a minimum multiplier of 1.1 should be used when there is a history of violations. The Prosecution Team is unaware of any previous enforcement actions against BreitBurn, so this factor is neutral (1.0).

Step 5 - Determination of Total Base Liability Amount

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Initial Liability Amount determined in Step 3.

Total Base Liability Amount: This value is calculated as the Initial Liability Amount (\$12,750) x Adjustment Factors (1) (1.1) (1) and is equal to \$14,025.

Step 6 - Ability to Pay and Ability to Continue in Business

BreitBurn is a large oil company and the recommended penalty will not have an effect on its ability to continue in business. Ability to pay is an affirmative defense that BreitBurn was willing to waive by entering into a settlement agreement with the Prosecution Team and it has not presented any information regarding its inability to pay. If it wishes to present such information to the Board, it should do so.

Step 7 – Other Factors as Justice May Require

The final settlement amount that the Prosecution Team and BreitBurn agreed to resolve this matter for (\$67,700) reflects a resolution based on the uncertainty of a number of factors. First, the Discharger is uncertain about the discharge volumes but roughly estimated that between 10 barrels (420 gallons) and 20 barrels (840 gallons) of fluid was discharged into

each sump. Therefore, the maximum volume of fluid discharged to the six sumps is 120 barrels or 5,040 gallons. At a maximum penalty per gallon of \$10, the maximum liability amount based on volume is \$50,400. Second, it is unclear whether the violation should be based on the combined 17 days of fluid discharge to the six sumps, or also for the additional days that liquid containing some stimulation treatment fluid remained in the sumps prior to the removal of liquid from the sumps during their closure. Third, the Prosecution Team is satisfied that the initial reports of discharges from 24 wells was inaccurate and that fluid from only six of the 24 wells initially reported in the Discharger's 13267 response actually had fluid discharged to sumps. For the other 18 wells, the Discharger reported that there was no positive pressure at the wellhead after stimulation treatment and therefore all treatment fluid remained in those wells.

The final settlement amount, as demonstrated below, significantly exceeds the economic benefit amount plus 10%. If the Central Valley Water Board believes that the amount determined using the above factors is inappropriate, the amount may be adjusted under the provision for "other factors as justice may require," but only if express findings are made to justify this.

Step 8 – Economic Benefit

The Porter-Cologne Act requires that certain civil liabilities be set at a level that accounts for any "economic benefit or savings" violators gained through their violations. To establish the amount of civil liabilities, the Office of Enforcement uses a "Penalty Calculation Methodology" that addresses the economic benefit of noncompliance. The economic benefit was calculated as the rental of two Baker tanks from May through July 2013 and the cost of proper disposal of materials, at a total cost of approximately \$1,500.

The Enforcement Policy states (p. 21) that the total liability shall be at least ten percent higher than the economic benefit, "so that liabilities are not construed as the cost of doing business and the assessed liability provides a meaningful deterrent to future violations." For this case, this would result in a minimum liability of at least \$1,650.

Final Adjusted Liability Amount: The agreed-upon administrative liability is **\$67,700**. This significantly exceeds the assumed economic benefit plus 10% and therefore should deter future similar discharge violations; is greater than the maximum liability amount based on volume (\$50,400); and, is less than the maximum liability of \$5,000 per day for 17 days (\$85,000).

Step 9 – Maximum and Minimum Liability Amounts

The maximum and minimum amounts for discharge violation must be determined for comparison to the amounts being proposed.

Maximum Liability Amount: \$85,000 (per Water Code section 13350)

Discussion: The maximum administrative liability amount is the maximum amount allowed by Water Code section 13367(b)(1): five thousand dollars (\$5,000) for each day

in which the violation occurs. Therefore, Discharger faces a maximum liability amount for the total number of days in violation (17 total days X \$5,000 per day) of \$85,000.

Minimum Liability Amount: \$14,025

Discussion: The Enforcement Policy requires that the minimum liability amount imposed not fall below the economic benefit plus 10%. As discussed above, the Prosecution Team's estimate of the Discharger's economic benefit obtained from the alleged violation is \$1,650.

Step 10 – Final Liability Amount

Based on the cooperative nature of the Discharger and certain evidentiary uncertainties, the Prosecution Team continues to recommend settlement at the agreed-upon amount of **\$67,700**. This recommended amount is in the best interests of the people of the State.