11 July 2006

Harlan and Corbin Prine
Prine Oil Company
3750 West Iris
Visalia, CA 93277

CLEANUP AND ABATEMENT ORDER R5-2006-0716, PRINE OIL COMPANY, SEVENEX LEASE, MOUNTAIN VIEW OIL FIELD, KERN COUNTY

Enclosed is the Cleanup and Abatement Order (Order) for Prine Oil Company (Prine). The Order directs Prine to cease discharging wastewater to unlined surface impoundments at the Sevenex Lease, Mountain View Oil Field, Kern County. The Order contains compliance dates to cease discharging, submit a plan for removal and cleanup of spilled crude oil, submit a plan describing wastewater disposal and a final sump closure report.

If you have any questions or comments, please call Dean Hubbard at (559) 445-5179.

Pamela C. Creedon
Executive Officer

Enclosure: Cleanup and Abatement Order

cc: Ms. Frances McChesney, Office of Chief Counsel, State Water Board, Sacramento
Mr. Randy Adams, California Division of Oil, Gas, and Geothermal Resources, Bakersfield
Department of Fish and Game, Region IV, Fresno
Kern County Environmental Health Services Department, Bakersfield
This Order is issued to Harlan and Corbin Prine, (hereafter Dischargers), dba Prine Oil Company, based on California Water Code (hereafter Water Code) Section 13304, which authorizes the California Regional Water Quality Control Board, Central Valley Region (hereafter Regional Water Board) to issue a Cleanup and Abatement Order (CAO), and Water Code Section 13267, which authorizes the Regional Water Board to require preparation and submittal of technical and monitoring reports.

The Executive Officer finds, with respect to the Discharger’s acts or failure to act, the following:

**BACKGROUND**

1. The Dischargers own and operate the Sevenex Lease (hereafter Lease) in the Mountain View Oil Field, approximately eight miles southeast of the City of Bakersfield.

2. The Lease includes approximately 18 acres in the NW ¼ of Section 29, T30S, R29E, MDB&M (Assessor Parcel No. 178-220-01-8), as shown on Attachment A, which is attached to and made part of this Order.

3. The Dischargers own and operate two crude oil production wells and two unlined surface impoundments, generally known in the industry as sumps, at the Lease. The Dischargers use the sumps for the disposal of non-hazardous oilfield production wastewater. The disposal is not regulated by waste discharge requirements.

4. In 1995 the Regional Water Board adopted the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition -1995* (hereafter Basin Plan), which designates beneficial uses of the waters of the State, establishes water quality objectives, and establishes policies to implement water quality objectives. To protect the beneficial uses of groundwater and prevent its degradation, the Basin Plan contains maximum salinity limits for the disposal of oilfield produced wastewater in unlined sumps overlying groundwater with existing and future probable beneficial uses. The maximum numerical concentrations in the Basin Plan are: electrical conductivity (EC) @ 25°C, 1,000 µmhos/cm (micro-Siemens per centimeter); chloride, 200 mg/L (milligrams per liter); and, boron, 1 mg/L.

5. Table II-2 in the Basin Plan lists the beneficial uses of groundwater. The Lease is in the Kern County Basin Hydrologic Unit and the 254 Detailed Analysis Unit, which has the following designated beneficial uses of groundwater: municipal and domestic supply, agricultural supply, and industrial service supply.

6. In October 2005, a complaint was received from California Division of Oil, Gas, and Geothermal Resources (CDOGGR) staff describing how the Dischargers had excavated a sump for produced water disposal. An October 28, 2005 inspection by Regional Water Board staff confirmed an unlined sump containing produced water and crude oil. Pools of crude oil were noted on the ground, between storage tanks and in ditches leading to the sump.
7. The Dischargers indicated that remedial measures would be implemented immediately and the discharge to the sump ceased. Wastewater would be sent to a permitted disposal facility. In January 2006, CDOGGR staff again notified Regional Water Board staff that the Dischargers had failed to implement cleanup measures and that discharges were continuing. The Dischargers again indicated that arrangements were being made to resolve the issues.

8. On 26 April 2006, Regional Water Board staff conducted a follow-up inspection. A second sump had been excavated that also contained wastewater covered with crude oil. Further, the sump was not netted. Wastewater and crude oil were overflowing from a storage tank into open ditches near the Lease storage tanks. Several pools of crude oil were noted on the ground between the tanks, and adjacent to the ditches. There was no secondary containment around the tanks or sumps to confine spills or leaks. A wastewater sample was obtained and submitted for laboratory analysis.

9. High salinity wastewater and crude oil spills and leaks threaten to impact adjacent surface water irrigation canals and/or the adjacent irrigated agricultural fields.

10. The unpermitted disposal of the high salinity wastewater to two unlined sumps threatens to impact underlying good quality groundwater having both existing and designated beneficial uses.

11. Un-netted sumps containing crude oil and pools of crude oil threaten to entrap waterfowl and wildlife.

**HYDROGEOLOGIC INFORMATION**

12. According to Department of Water Resources (DWR, 1956) groundwater studies of the area, Mountain View Oil Field lies on the western edge of the Caliente alluvial fan and extends northward to the low area between this fan and the alluvial fan of Kern River. The area is covered by a series of coalescing fans and floodplains of both younger and older alluvium, which, in turn, is underlain by a considerable thickness of continental Pleistocene and Plio-Miocene beds. These sediments, dipping valleyward 50 to 200 feet, form the principal fresh water bearing units in the field. At the surface is the younger Continental fluvial and lacustral alluvium varying in thickness between 50 and 200 feet, consisting of relatively unweathered sands, gravels, silts, and clays. The underlying older alluvium of the upper Pleistocene Kern River Series consists of fluvatile, poorly sorted sands, silts, gravels, and clays; thickness may be up to 300 feet in the north and thickens to the south and west.

13. Information provided by Lamont Public Utility District indicates that depth to the regional groundwater aquifer is 240 to 265 feet. Additionally, local shallow aquifers at approximately 100 feet (“perched aquifers”) apparently provide some groundwater for nearby rural residences.
14. Lamont Public Utility District staff indicated there are several groundwater wells within one to two miles of the Lease that are used for domestic and agricultural purposes and the water quality for samples obtained and analyzed between 1994 and 2000 is as follows:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Concentration Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dissolved Solids (TDS)</td>
<td>240 to 630 mg/L</td>
</tr>
<tr>
<td>EC</td>
<td>350 to 700 µmhos/cm</td>
</tr>
<tr>
<td>Chloride</td>
<td>15 to 100 mg/L</td>
</tr>
<tr>
<td>Sodium</td>
<td>45 to 60 mg/L</td>
</tr>
<tr>
<td>Sulfate</td>
<td>35 to 100 mg/L</td>
</tr>
</tbody>
</table>

15. Groundwater information provided by a 1956 DWR report (*Geologic and Waste Disposal Investigation, Mountain View Oil Field, Kern County*) indicates that samples from local domestic and/or irrigation wells had the following characteristics:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Concentration Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDS</td>
<td>250 to 650 mg/L</td>
</tr>
<tr>
<td>Chloride</td>
<td>15 to 300 mg/L</td>
</tr>
<tr>
<td>Sodium</td>
<td>40 to 90 mg/L</td>
</tr>
<tr>
<td>Sulfate</td>
<td>25 to 370 mg/L</td>
</tr>
</tbody>
</table>

**WASTEWATER CHARACTERISTICS**

16. Connate formation water (wastewater) is co-produced in association with crude oil, primarily from hydrocarbon bearing marine formations in the Mountain View Oil Field by the oilfield operators. The wastewater at the Discharger’s facility is a sodium-chloride type having a high inorganic salt content.

17. Certified laboratory analytical results of the wastewater sample taken during the April 2006 inspection indicated the following characteristics:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC @ 25° C</td>
<td>5,600 µmhos/cm</td>
</tr>
<tr>
<td>TDS</td>
<td>3,200 mg/L</td>
</tr>
<tr>
<td>Chloride</td>
<td>1,700 mg/L</td>
</tr>
<tr>
<td>Boron</td>
<td>7.6 mg/L</td>
</tr>
</tbody>
</table>

18. The salinity levels in the wastewater exceed the maximum numerical limitations prescribed in the Basin Plan by five to ten times or more.

**AUTHORITY – LEGAL REQUIREMENTS**

19. Section 1778 (d)(2) of Title 14, California Code of Regulations (CCR) states that sumps shall be effectively netted to preclude entry of wildlife.

20. Section 13173 (b) of the Water Code states that non-hazardous waste containing pollutants that, under ambient environmental conditions at a waste management unit, could be released in
concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state is defined as “Designated Waste”.

21. Section 20210 of Title 27, CCR (Title 27), states that sumps used for the disposal of designated waste are required to be constructed in accordance with prescriptive criteria for Class II surface impoundments. The sumps used at the Lease for the disposal of wastewater classified as designated waste do not meet the prescriptive construction criteria for Class II surface impoundments as specified by Title 27, Section 20250.

22. Alternatives to the discharge of wastewater to unlined sumps can include: (a) discharge to sumps that are constructed in accordance with prescriptive criteria for Class II surface impoundments as specified in Title 27; or (b) disposal of wastewater at a permitted waste disposal facility; or (c) subsurface injection into a Class II injection well permitted by CDOGGR. The method of achieving compliance is at the discretion of the Dischargers.

23. The State Water Resources Control Board (hereafter State Board) has adopted Resolution No. 92-49, Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304. The Resolution sets forth the policies and procedures to be used during an investigation or cleanup of a contaminated or polluted site and requires that cleanup standards be consistent with State Board Resolution 68-16 (the Anti-degradation Policy). Resolution 92-49 and the Basin Plan establish the cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with Section 2550.4, Title 23, CCR. Any alternative cleanup level to background must: (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Board.

24. Section 13304(a) of the Water Code, states that:

“Any person who has discharged or discharges waste into waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the regional board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.”
25. Section 13304 (c)(1) of the Water Code states, in part, that:

“...the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions...”

26. Section 13267(b)(1) of the Water Code states that:

“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of discharging, or who proposes to discharge waste outside of its region that could affect the quality of waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

27. Section 13268 of the Water Code states, in part, that:

(a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b). and,

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars ($1,000) for each day in which the violation occurs.

28. Section 13350 of the Water Code states, in part, that:

(a) Any person who (1) violates any 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 any 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, in accordance with subdivision (d) or (e).
(e) 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 on a per gallon basis, but not both.

1. The civil liability on a daily basis may not exceed five thousand dollars ($5,000) for each day the violation occurs.

(B) When there is no discharge, but an order issued by the regional board is violated, except as provided in subdivision (f), the civil liability shall not be less than one hundred dollars ($100) for each day in which the violation occurs.

DISCHARGER LIABILITY

29. The technical reports required by this CAO are necessary to assure compliance with Section 13304 of the Water Code. Existing data and information about discharges to the sumps (Finding Nos. 6 through 11) indicates that wastewater exceeding the numerical limitations contained in the Basin Plan (Finding No. 4) has been discharged or is discharging into the unlined sumps owned and operated by the Dischargers. The Dischargers have caused or permitted water to be discharged or deposited where it has created, or threatens to create, a condition of pollution or nuisance. This threat includes that crude oil spills and leaks also noted on the Lease, present threats to impact nearby agricultural land, surface waters, and potentially entrap wildlife.

30. If, in the opinion of the Executive Officer, the Dischargers fail to comply with this CAO, the Executive Officer may refer the issue to the Regional Water Board to pursue further enforcement, including making a referral to the Attorney General for judicial enforcement or issuing a complaint for administrative civil liability. The Regional Water Board reserves its right to take any enforcement actions authorized by law.

31. The issuance of this CAO is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), pursuant to Section 15321(a)(2), Title 14, CCR.

32. The implementation of this CAO is an action to assure the restoration of the environment and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), in accordance with Section 15308 and 15330, Title 14, CCR.

33. Sections 3890-3895 of Title 23, CCR, require submittal of analytical data electronically via the Internet, using approved electronically deliverable format, to the State Water Board Geographic Environmental Information Management System database (GeoTracker).

34. Sections 2050-2068, Title 23, CCR provide that any person affected by this action of the Regional Water Board may petition the State Board to review the action. The State Board must receive the petition within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request or are available at www.waterboards.ca.gov/water_laws.
35. As described in Finding 25, the Dischargers are subject to an order pursuant to Section 13304 of the Water Code because the Dischargers have caused or permitted waste to be discharged or deposited where it has created, and continues to threaten, a condition of pollution or nuisance. The issuance or adoption of a cleanup and abatement order pursuant to Section 13304 of the Water Code is appropriate and consistent with policies of the Regional Water Board.

36. This CAO requires investigation and cleanup of the site in compliance with the Water Code, applicable Basin Plan, Resolution 92-49, and other applicable plans, policies, and regulations.

37. As described in Finding 26, the Dischargers are subject to an order pursuant to Section 13267 of the Water Code to submit technical reports because existing data and information about the site indicate that waste has been discharged, is discharging, or is suspected of discharging, at the property, which is owned and/or operated by the Dischargers named in this Order, Harlan and Corbin Prine, their agents, successors, and assigns. The technical reports required by this CAO are necessary to adequately investigate and cleanup the site to protect the beneficial uses of waters of the state, to protect against nuisance, and to protect human health and the environment.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to Water Code Sections 13304 and 13267 and Resolution 92-49, Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304, and with the Regional Water Board’s Water Quality Control Plan for the Tulare Lake Basin Second Edition – 1995, Dischargers shall cleanup waste and abate forthwith the existing and threatened effects of waste discharged to the ground and unlined sumps from the Sevenex Lease facility in the NW ¼ NW ¼ Section 29, T29S R29E, MDB&M in the Mountain View Oil Field, Kern County. “Forthwith” means as soon as reasonably possible, but in any event no later than the compliance dates below.

Time Schedule for Completing Tasks

The Dischargers shall:

1. **Immediately cease all discharges to the unlined sumps** and confine all wastewater previously discharged to the two existing unlined sumps depicted on Attachment A and described in Finding No. 3. The sumps shall either be free of oil or effectively netted to preclude entry of wildlife. All crude oil leaks and overflows from tanks, pipes, or other equipment shall cease and repairs implemented; all crude oil spills and leaks on the ground surface shall be cleaned up and removed.

2. **By 15 August 2006**, submit a report, including photographs, detailing completion of the cleanup and repairs at the lease.

3. **By 15 August 2006**, submit a **Compliance Plan** describing how wastewater disposal will be implemented. The plan must discuss those tasks needed to implement the disposal program to complete the tasks in accordance with the **Time Schedule** described herein.

4. **By 1 September 2006**, submit a **Compliance Report** describing implementation of the wastewater disposal plan.
5. **By 1 October 2006**, unless sump liners have been constructed as described in Finding No. 21 above, the Dischargers shall submit a detailed *Sump Closure Plan* describing the sump closure process. The plan must include a time schedule to complete the tasks.

6. **By 15 November 2006**, submit a *Closure Certification Report* describing the sump closure process and containing all engineering data, test results, and soil and wastewater analyses.

**General Requirements**

7. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports are to be prepared by, or under the supervision of, a registered professional engineer or geologist and signed by the registered professional. All technical reports submitted by the Dischargers shall include a statement signed by the authorized representative certifying under penalty of law that the representative has examined and is familiar with the report and that to his knowledge, the report is true, complete, and accurate.

8. If, for any reason, the Dischargers are unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this CAO and approved by the Executive Officer, the Dischargers may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. An extension may be granted by revision of this CAO or by a letter from the Executive Officer.

9. Reference herein to determinations and considerations to be made by the Regional Water Board regarding the terms of the CAO shall be made by the Executive Officer. Decisions and directives made by the Executive Officer in regards to this CAO shall be as if made by the Regional Water Board.

This Cleanup and Abatement Order is effective upon the date of signature.

____________________________________________
PAMELA C. CREEDON, Executive Officer

11 July 2006
(Date)

CDH: 7/11/06