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GOVERNOR

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Central Valley Regional Water Quality Control Board

3 December 2018

Robert Boston, EH&S Director
Berry Petroleum Company, LLC
5201 Truxtun Avenue, Ste 100
Bakersfield, California 93309

CERTIFIED MAIL
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NOTICE OF APPLICABILITY, CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD, ORDER NUMBER R5-2017-0036, WASTE DISCHARGE REQUIREMENTS FOR OIL FIELD DISCHARGES TO LAND, GENERAL ORDER NUMBER THREE, BERRY PETROLEUM COMPANY, LLC, BERRY AND EWING LEASE, MIDWAY-SUNSET OIL FIELD, KERN COUNTY

On 11 December 2017, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) received a document entitled, *General Order Three Application Package, Midway Sunset Oil Field, Berry and Ewing Lease, Section 31, T31S, R24E*. The document is a request for coverage under the Central Valley Water Board's Order Number R5-2017-0036, Waste Discharge Requirements General Order for Oil Field Discharges to Land, General Order Number Three (General Order Three). The document is supported by information contained in additional documents previously submitted to the Central Valley Water Board by Berry Petroleum Company, LLC (herein the documents are collectively referred to as the Notice of Intent or "NOI"). The NOI was prepared by Groundwater and Environmental Services, Inc. (GES) on behalf of Berry Petroleum Company, LLC (Berry). General Order Three regulates the discharge of oil field produced wastewater to surface ponds.

Berry operates the Berry and Ewing Lease (Lease) in the Midway-Sunset Oil Field, in Kern County. The Lease utilizes two concrete-lined surface impoundment (ponds) that are used for sediment settling and the temporary storage of oil field produced wastewater (produced water or discharge). The ponds are both 36 feet by 11 feet in dimension, and 5.5 feet deep. According to Berry representatives, the concrete liners are reinforced by a thin layer of asphalt. Available information, including figures and cross-sections provided by Berry, indicates that the ponds are constructed in alluvial sediments. The ponds take solids and fluids from production tank drains and truck washouts. Sediments settle out in pond one. Fluids flow into pond two, where oil and water are separated by gravity. According to Berry representatives, the ponds are not designed for disposal or percolation. Some of the produced water is recycled for steam generation and some is injected into a permitted well for underground injection (UIC well).

This letter serves as formal notice that General Order Three is applicable to the ponds. General Order Number **R5-2017-0036-009** is hereby assigned to all produced wastewater discharges to the ponds. Berry should become familiar with all the requirements, time schedules, prohibitions, and provisions of General Order Three, and Monitoring and Reporting Program R5-2017-0036 (MRP).

This letter also serves as formal notice that Cleanup and Abatement Order Number R5- 2016- 0706 (CAO) issued on 28 January 2016, is hereby rescinded.

As stated in California Water Code section 13263, all discharges of waste into waters of the state are privileges, not rights. General Order Three does not create a vested right for Berry to continue to discharge to the ponds. Failure to prevent conditions that create or threaten to create pollution or nuisance or cause degradation will be sufficient reason to modify, revoke, or enforce the provisions of General Order Three, as well as prohibit further discharge.

In 2006, the Central Valley Water Board, the State Water Resources Control Board (State Water Board), and regional stakeholders began a joint effort to address salinity and nitrate problems in the region and adopt long-term solutions that will lead to enhanced water quality and economic sustainability. Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) is a collaborative basin planning effort aimed at developing and implementing a comprehensive salinity and nitrate management program. The CV-SALTS effort might effect changes to the Basin Plan that would necessitate the re-opening of General Order Three.

FACILITY SPECIFIC REQUIREMENTS

1. Berry shall maintain exclusive control of the discharge and shall comply with all of the requirements and timelines of General Order Three and the MRP.
2. The required annual fee specified in the annual billing from the State Water Board shall be paid until coverage under General Order Three is officially terminated. Berry must notify the Central Valley Water Board in writing to request termination.
3. Under Discharge Specifications, Item B.2., General Order Three states: *“The discharge flow shall not exceed actual maximum monthly average produced wastewater flow to the pond between 26 November 2004 and 26 November 2014. The discharge flow also shall not exceed the maximum design flow of the Facility’s limiting unit as described by the technical data in the NOI.”* The NOI states that the maximum monthly recorded discharge to the ponds is approximately 11,920 barrels (bbls). This volume shall not be exceeded. Any increase in discharge volume that would exceed the “design capacity” constitutes a facility expansion requiring an evaluation under the California Environmental Quality Act (CEQA). The “design capacity” of the ponds is identified from information in the NOI as being 1,386 cubic feet with two feet of freeboard and shall not be exceeded.
4. Berry shall not discharge produced wastewater outside of the pond except for permitted dust control use. If Berry intends to apply for use of produced wastewater for dust control, a proposed management plan as described in Provision E.6 of General Order Three must be submitted at least **90 days prior** to the anticipated discharges.
5. **By 5 March 2019**, Berry shall, pursuant to Provision E.3 of General Order Three, submit written certification that acceptable flow meters have been installed at a location or locations to ensure the accurate measurement of all discharge flows. The certification

shall be accompanied by: (1) a description of the flow metering devices installed, (2) a diagram showing their locations, and (3) evidence demonstrating that the devices were properly calibrated. An engineered alternative may be used if approved in writing by the Central Valley Water Board's Executive Officer.

6. Based on information provided in the NOI, Provision 4 of General Order Three must still be satisfied. **By 5 February 2019**, Berry shall, pursuant to Provision E.4. of General order Three, submit either:
 - a. The results of a hydrogeological investigation demonstrating that there is no groundwater beneath the Facility discharge areas and that produced wastewater and constituents associated with other approved wastes discharged at the Facility will not migrate into areas where there is groundwater with designated beneficial uses. Upon the written concurrence of the investigation results by the Executive Officer, this provision shall be considered satisfied,
 - or
 - b. If there is first encountered groundwater underlying the Facility or the Executive Officer does not concur with the results of the investigation in Provision E.4.a., above, the Discharger shall demonstrate that the natural background groundwater quality for the Facility meets the Sources of Drinking Water Policy exception criteria and/or parallel exception criteria outlined in this General Order (Findings 22 through 24) and thus the current Basin Plan groundwater beneficial uses are eligible for de-designation in accordance with the compliance schedule provided in Tasks 1 through 10 of Provision 4.b.

The NOI states that *"An investigation of the sumps was conducted in May 2017, which included a soil assessment of the material underlying the ponds. No groundwater was encountered beneath the ponds during drilling activities, and based on the geophysical data, first fluids beneath the ponds are likely to be located in the Tulare Formation, which is a producible hydrocarbon zone. Based on the lack of reported concentrations of the target analytes in the soil, no evidence of a subsurface release of produced water from the ponds was found."* Central Valley Water Board staff reviewed the geophysical logs referenced in the Notice of Intent. The NOI reports that geophysical logs show that first encountered fluids are sourced in a hydrocarbon producing zone. However, some logs (e.g. well SEC_31D_027) show that the "cross-over" effect is not consistent after approximately 250 feet bgs. Furthermore, the NOI predicts that first encountered fluids are in "a hydrocarbon producing zone" but does not supply water quality data that supports this statement. The depth and quality of first encountered fluids in the sediments underlying the ponds must be further assessed.

Provision 4 requires Berry to demonstrate that the discharge will not migrate to groundwater with beneficial uses or obtain a Basin Plan Amendment. There is no hydrogeological information in the NOI regarding structural containment. However, structural containment may not be required if Berry can demonstrate that the pond liners

maintain their integrity. As stated above, GES conducted a soil characterization investigation in 2017, to determine whether a release has occurred in the sediments underlying the ponds. No hydrocarbons were found in soil samples obtained from beneath the ponds. Central Valley Water Board staff reviewed the analytical data and found the investigation inconclusive because: the shallowest soil sample was obtained 19 feet below the base of the pond, soil samples and produced water samples taken from the Lease were not analyzed for the same constituent list, and the soil samples were not compared to a background sample. Berry shall provide hydrogeologic information demonstrating that there are regional structures which provide containment, or a demonstration that the pond liners will continue to contain the discharge. Periodic testing of the of the integrity of the ponds' liners may be necessary.

7. Berry shall operate and maintain the ponds sufficiently to protect the integrity of berms and prevent overtopping and/or structural failure. Discharges not authorized by General Order Three and not described in the NOI should be reported to Central Valley Water Board. Discharges of wastes other than those described in the NOI is prohibited. If the method of waste disposal changes, Berry must submit a Report of Waste Discharge (Form 200).
8. Order Number 2014-0057-DWQ (NPDES General Permit CAS000001) specifies waste discharge requirements for discharges of storm water associated with industrial activities. **By 5 February 2019**, Berry must either apply for coverage under NPDES General Permit CAS000001 or provide information that shows that the Lease does not need coverage under that Order.
9. General Order Three contains a prohibition for the discharge of produced water that contains well stimulation fluids. General Order Three states, "*The discharge of fluids used in "well stimulation treatment," as defined by California Code of Regulations, title 14, section 1761 (including hydraulic fracturing, acid fracturing, and acid matrix stimulation), to land is prohibited.*"

Regarding a compliance time schedule, General Order Three states, "*A three-year time schedule is provided for the Discharger to either a) develop an alternative disposal method or b) demonstrate that the produced wastewater does not contain well stimulation treatment fluids in concentrations that could adversely affect beneficial uses of waters.*" There is no information provided in the NOI regarding production methods used on the Lease. If Berry accepts produced water from wells that have been stimulated, then Berry shall comply with Prohibition A.5 in accordance with the compliance time schedule prescribed in General Order Three.

10. Regarding the use of solids produced at the Lease, the NOI states, "*Residuum is collected from the ponds periodically and recycled as road base and berm material.*" Berry should become familiar with General Order Three's requirements for the reuse of solids. **At least 180 days prior to any solids reuse**, Berry shall, pursuant to Provision E.7 of General Order Three, submit a solids management plan for approval by the Executive Officer.

The MRP requires extensive monitoring requirements. Failure to comply with the requirements in General Order Three and the MRP could result in an enforcement action as authorized by provisions of the California Water Code. A copy of General Order Three and the MRP is included with the enclosures to this notice. A copy can also be found online at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/5-2017-0036.pdf.

The MRP includes monitoring and reporting of chemicals and additives. Berry should become familiar with those requirements. The Central Valley Water Board will review the MRP periodically and revise requirements when necessary. The MRP can be modified if Berry provides sufficient data to support the proposed changes. If monitoring consistently shows no significant variation in the magnitude of a constituent concentration or parameter after a statistically significant number of sampling events, Berry may request the MRP be revised by the Executive Officer to reduce monitoring frequency or minimize the list of constituents. The proposal must include adequate technical justification for a reduction in monitoring frequency.

Berry must comply with the Central Valley Water Board's Standard Provisions and Reporting Requirements for Waste Discharge Requirements, dated 1 March 1991 (Standard Provisions). A copy of the Standard Provisions is included with the enclosures to this notice. A copy can also be found online at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/std_provisions/wdr-mar1991.pdf.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review this action in accordance with Water Code section 13320 and CCR, title 23, division 3, chapter 6, section 2050 and those that follow. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Notice of Applicability, except that if the thirtieth day following the date falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day.

SUBMISSIONS

Documents that are less than 50 MB shall be sent via electronic mail to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50 MB or larger shall be transferred to a disk and mailed to the Central Valley Water Board office at: 1685 E Street, Fresno, CA 93706.

In addition, Berry shall submit electronic copies of all work plans, reports, analytical results, and groundwater elevation data over the internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at: http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml. A frequently asked question document for GeoTracker can be found at: http://www.waterboards.ca.gov/ust/electronic_submittal/docs/faq.pdf.

Electronic submittals shall comply with GeoTracker standards and procedures, as specified on the State Water Board's web site. Uploads to GeoTracker shall be completed on or prior to the

due date. The GeoTracker site Global I.D. number that is associated with this Notice of Applicability is **T10000007297**. Berry shall note that GeoTracker only accepts documents in the PDF format. If Berry chooses to submit documents in an alternative format, then they must be submitted by email or post mail as described above.

Please review the attached memorandum for more information. If you have any questions regarding this matter, please contact Rebecca T. Asami of this office at (559) 445-5548 or at: rebecca.asami@waterboards.ca.gov.



for Patrick Pulupa
Executive Officer

Enclosures: 27 November 2018 Memorandum
General Order Three
1 March 1991 Standard Provisions

cc: Cameron Campbell, Chief Deputy of the Division of Oil Gas and Geothermal Resources, Bakersfield (NOA and Memorandum only, Via Email)
Tom Wright, Project Manager, Groundwater and Environmental Services, Inc., San Diego
Keith Nakatani, Oil and Gas Program Manager, Clean Water Action
(NOA and Memorandum only, Via Email)
Andrew Grinberg, National Campaigns Special Projects Manager, Clean Water Action
(NOA and Memorandum only, Via Email)
Bill Allayaud, California Director of Government Affairs, Environmental Working Group
(NOA and Memorandum only, Via Email)

Central Valley Regional Water Quality Control Board

TO: Clay Rodgers
Assistant Executive Officer

W. Dale Harvey
Supervising Engineer
RCE No. 55628

FROM: Ronald E. Holcomb
Senior Engineering Geologist
PG No. 6725

Rebecca T. Asami
Engineering Geologist

DATE: 27 November 2018

SUBJECT: NOTICE OF INTENT REVIEW, ORDER NUMBER R5-2017-0036, WASTE DISCHARGE REQUIREMENTS GENERAL ORDER FOR OIL FIELD DISCHARGES TO LAND, GENERAL ORDER THREE, BERRY AND EWING LEASE, MIDWAY-SUNSET OIL FIELD, KERN COUNTY

On 11 December 2017, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) received a document titled: *General Order Three Application Package, Midway Sunset Oil Field, Berry and Ewing Lease, Section 31, T31S*. Information in the NOI is supported by additional documents, including a document titled, *Facility Investigation Report, Midway-Sunset Oil Field, Berry and Ewing Lease, Section 31, T31S, R24E* which was submitted on 6 June 2017, and a document titled, *Facility Investigation Workplan, Berry and Ewing Lease, Midway Sunset Oil Field, Section 31, T31S, R24E, MDB&M, Cleanup and Abatement Order No. R5-2016-0706* submitted on 29 March 2016 (herein all documents are collectively referred to as the "Notice of Intent" or NOI). The Notice of Intent was submitted as a request for coverage under Order R5- 2017-0036, Waste Discharge Requirements General Order for Oil Field Discharges to Land, General Order Three (General Order Three). The NOI was prepared by Groundwater and Environmental Services, Inc. (GES), on behalf of Berry Petroleum Company, LLC (Berry). A summary of the NOI and Central Valley Water Board staff comments follow in this memorandum.

General Order Three regulates oil field produced wastewater discharges where: 1) produced wastewater exceeds the maximum oil field discharge limits for electrical conductivity, chloride, and boron contained in the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, Revised July 2016* (Basin Plan); and 2) there is no first encountered groundwater or first encountered groundwater is of poor quality and does not support beneficial uses as identified in the Basin Plan as municipal and domestic supply (MUN), or agricultural supply (AGR), industrial service supply (IND), or industrial process supply (PRO).

SUBMITTED INFORMATION

Location

Berry operates the Berry and Ewing Lease, an oil production facility located in the Midway Sunset Oil Field, in Kern County (Lease or facility). The Lease is approximately two- and one-half miles south of Taft, in Section 31, T31S, R24E, MDB&M.

Regulatory History

On 28 January 2016, Cleanup and Abatement Order R5-2016-0706 (CAO) was issued to Berry for the Lease. The CAO requires Berry to obtain coverage under waste discharge requirements (WDRs) or cease the discharge. In response to the CAO, Berry submitted a work plan which proposed to assess potential unplanned discharges from the ponds (referenced above). Analytical results obtained from the soil boring samples are included in the NOI. A deadline to respond to the CAO was set to four months following the adoption of the Central Valley Water Board's General Orders for Oil Field Discharges to Land.

Pond and Discharge Characteristics

The Lease utilizes concrete-lined surface impoundments (ponds) for the temporary storage and evaporation of oil field produced wastewater (produced water or discharge). According to the NOI, the ponds have been active for approximately 37 years. The ponds are connected in series. Both ponds are approximately 30 feet long, by 11 feet wide, and 5.5 feet deep. Oil Field produced fluids and solids are initially discharged into the first pond. Sediments settle out in the first pond and fluids flow into the second pond. In the second pond, wastewater and oil are separated by gravity. Some produced water is reused on the Lease and the remainder is injected into a permitted underground injection control well (UIC well).

Analytical results from produced water samples taken from the ponds follow:

Constituent	Sampled April 2015	Sampled March 2017
Specific Conductance (micromhos per centimeter)	Not Measured	Not Measured
Boron (milligrams per liter (mg/l))	97	45
Chloride (mg/l)	4,200	2,700
Sodium (mg/l)	3,300	1,700
Total Dissolved Solids (mg/l)	10,000	5,800
Calcium (mg/l)	23	2.4
Total Petroleum Hydrocarbons (TPH) Gasoline	14	1.1
TPH- Diesel	40	8.5

Flow Volumes

To obtain coverage under General Order Three, the discharger shall document existing operations, which includes flow data from the actual maximum monthly average produced water discharge flow to ponds that occurred in the ten years prior to 26 November 2014. Berry staff did not begin monitoring discharge flow until 2017. The Notice of Intent includes a table with discharge flow volumes for the year 2017. In 2017, monthly discharges to the ponds were as follows:

Month	Discharge Volume (bbls)	Daily Average (bbls per day)
March	571	23.8
April	6,381	212.7
May	10,382	334.9
June	9,695	323.2
July	11,920	384.5
August	10,296	332.1
September	7,043	320.1

Under Discharge Specifications, Item B.2., General Order Three states, *“The discharge flow shall not exceed actual maximum monthly average produced wastewater flow to the pond between 26 November 2004 and 26 November 2014. The discharge flow also shall not exceed the maximum design flow of the Facility’s limiting unit as described by the technical data in the NOI.”* Berry staff have indicated that there are no records of discharge flow volumes for 2004 - 2014 for the Lease. The only flow data collected at the Lease was from 2017. Therefore, based on the discharge volumes submitted in the NOI, the maximum monthly discharge volumes to the ponds shall be 11,920 bbls. With two feet of freeboard, the capacity of the ponds is approximately 1,386 cubic feet. This capacity shall also not be exceeded.

Dust Control and Solid Reuse

General Order Three allows for the reuse of produced water and solids under certain conditions. Berry representatives have indicated that produced water is not used for dust control on the Lease, but solids are recycled and used as road base mix. Regarding produced water and the reuse of solids, the NOI states, *“... residual oil present is skimmed and returned to the production system, before water from Pond #2 is pumped to the produced water system for reuse in oilfield activities, (i.e. steam generation) and disposal in DOGGR approved UIC injection wells. The sumps are not under pressure and do not discharge wastewater to the subsurface. Residuum is collected from the ponds periodically and recycled as road base and berm material.”*

General Order Three states that, *“Solids from the Facility shall be managed in accordance with a solids management plan approved by the Executive Officer in accordance with Provision E.7. Handling and application practices shall be designed to ensure that oil field wastes do not migrate once placed.”* If Berry starts using produced water for construction or road base mix, then Berry must first submit a proposed management plan for such activities as per Provision E.6. of General Order Three.

UNSATURATED SOIL AND GROUNDWATER CHARACTERISTICS

Hydrogeological Conditions

The Midway-Sunset Oil Field is located on the western side of the San Joaquin Valley. This area is underlain by quaternary alluvial fan deposits and sediments of the Tulare Formation. Data submitted from geophysical logs show a “cross over” effect between bulk density and neutron porosity readings in the sediments underlying the ponds. This type of cross over typically occurs in the vadose zone. During an investigation of the ponds conducted in May 2017, soil samples were collected at vertical depths between 25.3 and 67.47 feet below ground surface (bgs). Analytical results show that the soil samples were non-detect for total petroleum hydrocarbons. The samples were not analyzed for boron. The NOI states that first fluids beneath the ponds are located approximately 350 feet bgs in the Tulare Formation.

The Notice of Intent states, “An investigation of the sumps was conducted in May 2017, which included a soil assessment of the material underlying the Ponds. No groundwater was encountered beneath the Ponds during drilling activities, and based on the geophysical data, first fluids beneath the ponds are likely to be located in the Tulare Formation, which is a producible hydrocarbon zone. Based on the lack of reported concentrations of the target analytes in the soil, no evidence of a subsurface release of produced water from the Ponds was found.”

Provision 4 of General Order Three

Provision 4 of General order Three requires that Berry either: 1) demonstrate that there is no groundwater beneath the Facility discharge areas and that produced wastewater and constituents associated with other approved wastes discharged at the Facility will not migrate into areas where the groundwater quality supports designated beneficial uses, or 2) obtain a Basin Plan amendment under the time schedule outlined in General order Three Provision 4.b.

The NOI includes geophysical logs that show cross-over in bulk density and porosity readings. The interpretation of the logs in the NOI states, *“the alluvial zone overlying the Tulare Formation is interpreted to be gas-filled (air-filled) to a depth of approximately 350 feet bgs, approximately 125 feet below the alluvial/ Tulare Formation contact. The geophysical logs shown on the cross section in appendix B are interpreted to depict that there are no fluids or groundwater underlying the Ponds in the underlying alluvial formation and that first fluids encountered are likely within a producible hydrocarbon zone.”*

Based on the soil investigation and geophysical logs, the NOI concludes that first encountered fluids under the ponds are mixed with hydrocarbons. The Notice of Intent states, *“With respect to current investigation, geophysical logs already exist for the vicinity and the interpreted depth-to-groundwater is approximately 350 feet bgs. This interpreted depth-to-groundwater would put first encountered groundwater well into the Tulare Formation which is a producible hydrocarbon formation at this depth. Groundwater samples collected from within a producible hydrocarbon formation likely would not allow for any meaningful laboratory analysis and any results would be skewed because of natural background minerals and hydrocarbon concentrations.”*

Central Valley Water Board staff reviewed the geophysical logs referenced in the Notice of Intent. The NOI reports that geophysical logs show that first-encountered fluids are sourced in a hydrocarbon producing zone. However, logs for wells near the ponds (e.g. well SEC_31D_027) show that the “cross-over” effect is not consistent after approximately 250 feet bgs. The NOI concludes that first encountered fluids are in “a hydrocarbon producing zone” but does not supply water quality data that supports this statement. The depth and quality of first encountered fluids in the sediments underlying the ponds must be further assessed.

Included in the NOI is analytical data from soil boring samples. The NOI concludes that there has been no release of produced water in the sediments underlying the ponds because soil samples did not contain hydrocarbons. However, Central Valley Water Board staff reviewed the results of the investigation and found: the soil samples were not analyzed for boron, which is present in the discharge (45-97 mg/l), samples were not compared to a background sample, and the shallowest sample was taken approximately 19 feet below the base of the ponds. These issues make it difficult to discern definitively that produced water is not percolating beneath the ponds. In addition, soil boring logs describe the shallowest soil samples as “moist”. Considering that the NOI states that under the ponds the sediments are air sands, fluids in the soils may be sourced from the ponds. This needs to be further assessed.

Finally, there is no information in the NOI regarding geologically confining structures. Provision 4 of General Order Three requires that Berry show that the discharge will not migrate to groundwater with beneficial uses or obtain a Basin Plan Amendment. If the ponds’ concrete liners are to act as the main source of containment, then Berry must demonstrate the continued ability for the pond liners to contain the discharge. Periodic testing of the integrity of the pond liners may be necessary.

STAFF SUMMARY

Based on the conditions described in the Notice of Intent, coverage under General Order Three appears to be appropriate for the ponds. However, Provision 4 of General Order Three still must be satisfied. Berry must either 1) demonstrate that there is no groundwater in the sediments underlying the ponds and that produced water will not migrate into areas that contain waters with beneficial uses as designated by the Basin Plan, or 2) obtain a Basin Plan Amendment.