

**STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR REGULAR MEETING OF MAY 28, 2020**

Prepared on May 8, 2020

**ITEM NUMBER:** 9

**SUBJECT:** **Consideration of Order No. R3-2020-0006, General Waste Discharge Requirements for the Management and Beneficial Reuse of Petroleum-Impacted Soils on Active Oil Leases and Fee Properties in the Central Coast Region**

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**KEY INFORMATION**

Location: Central Coast Region Jurisdictional Boundaries  
Type of Discharge: Discharge to Land  
Treatment: Temporary Storage of Petroleum Impacted Soils and Beneficial Reuse  
Existing Orders: R3-2010-0036 and R3-2010-0037

**ACTION:** **Adopt Order No. R3-2020-0006**

**SUMMARY**

This item is to recommend adoption of proposed General Order No. R3-2020-0006, General Waste Discharge Requirements for the Management and Beneficial Reuse of Petroleum-Impacted Soils on Active Oil Leases and Fee Properties in the Central Coast Region (proposed General Order).

Historically, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) utilized two general conditional waivers of waste discharge requirements, one for the temporary storage and one for the beneficial reuse of non-hazardous crude oil impacted soil and non-hazardous spent sandblasting aggregate on active oil leases and fee properties in the Central Coast Region.

The conditional waivers expired in September 2017 and Order No. R3-2020-0006 is proposed to combine and replace the expired conditional waivers. The proposed General Order will allow oilfield operators to continue managing and beneficially reusing petroleum-impacted soils onsite while also requiring dischargers to implement best

practical treatment and control measures to prevent pollution and nuisance conditions and limit impacts to receiving waters.

## DISCUSSION

### ***What are the water quality impacts that may result from the discharge of waste associated with the temporary storage and beneficial reuse of petroleum-impacted soils?***

Oil exploration, production, and delivery generate large volumes of waste soils at active oilfields within the Central Coast Region. Sources of waste soils include, but are not limited to, tank bottom sludges, soils impacted by accidental spills, produced sands generated during oil extraction, and non-hazardous spent sandblasting aggregate from tank and pipeline maintenance activities.

To manage waste soils, oilfield owners and/or operators often use waste pile management facilities for the temporary storage of waste soils prior to beneficial reuse or disposal. Waste pile management facilities are areas where waste soils are temporarily stored for the purpose of characterization, stabilization, and processing prior to beneficial reuse or off-site disposal at an appropriately permitted waste disposal facility. Beneficial reuse projects are defined as the practice of using waste soils in the construction of oilfield infrastructure such as, but not limited to, road and drilling pad pavement and containment berms.

Chemical characterization data collected under the previous conditional waivers established that petroleum impacted waste soils have the potential to adversely impact surface water and groundwater quality if not appropriately managed. Constituents that exceeded their respective environmental screening level<sup>1</sup> for leaching based on protecting drinking water and non-drinking water standards or gross contamination included total petroleum hydrocarbon (TPH) gasoline, TPH diesel, TPH heavy oil, total xylenes, phenanthrene, naphthalene, 2-methylnaphthalene, methylene chloride, fluorene, ethylbenzene, and chrysene.

However, if waste pile management facilities and beneficial reuse projects are constructed and managed properly, with comprehensive and clearly defined management practices to contain wastes and minimize erosion, they will not pose a significant threat to water quality.

### ***How has the Central Coast Water Board historically regulated this type of discharge?***

In September 2005, the Central Coast Water Board adopted Order R3-2005-0005, General Conditional Waiver of Waste Discharge Requirements for the Reuse of Non-

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<sup>1</sup>Environmental screening levels (ESLs) provide conservative screening levels for common chemicals found at sites with contaminated soils and groundwater and are intended to help evaluate potential environmental concerns at contaminated sites. [https://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/esl.html](https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html)

Hazardous Crude Oil Impacted Soil and Non-Hazardous Spent Sand Blasting Aggregate on Active Oil Leases and Fee Properties in the Central Coast Region and Order R3-2005-0006, General Conditional Waiver of Waste Discharge Requirements for the Management of Petroleum-Impacted Soils at Authorized Waste Pile Management Facilities on Active Oil Leases and Fee Properties in the Central Coast Region. These orders waived waste discharge requirements for these operations where the Discharger complied with waiver conditions. Pursuant to section 13269(a)(2) of the California Water Code, conditional waivers may not exceed five years in duration, but may be renewed by the state board or a regional board.

In September 2010, the Central Coast Water Board renewed the conditional waiver programs by adopting Orders R3-2010-0036 and R3-2010-0037. These conditional waivers expired in September 2015 and the Central Coast Water Board's Executive Officer issued Order R3-2015-0031 to extend the termination date of the conditional waivers by two years until September 2017. Central Coast Water Board staff has continued to conduct informal cooperative implementation of the expired waivers in coordination with dischargers during the development of proposed General Order. Copies of the previous orders regulating the discharge of waste associated with the temporary storage and beneficial reuse of petroleum-impacted soils are available on the Central Coast Water Board's website.<sup>2</sup>

The proposed General Order will provide coverage for discharges that were regulated under the previous conditional waiver programs, while also making the containment and monitoring requirements more protective of water quality, consistent with other Central Coast Water Board programs. The use of general waste discharge requirements instead of a conditional waiver of waste discharge requirements also alleviates the need for the Central Coast Water Board to renew requirements every five years. All oilfield operators within the jurisdictional boundaries of Region 3 discharging petroleum impacted soils to a centralized facility or conducting beneficial reuse in an active oil field will be required to attain coverage under the proposed General Order. By regulating these activities under a single general order, Central Coast Water Board staff can ensure consistency, such that all oilfield operators are held to the same protective standards and that no single oilfield operator may gain an unfair advantage by enrolling in an individual or lower threat permit with potentially less protective requirements.

***How does the proposed General Order improve water quality protection in comparison to previous orders?***

The Central Coast Water Board previously regulated these discharges under general conditional waivers. The general conditional waivers required complete containment of waste soils at the waste pile management facilities and the use of "Good and Workmanlike" practices for the construction of all beneficial reuse projects.

The proposed General Order maintains these requirements; however, it improves water quality protection by including new professional certification requirements to verify

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<sup>2</sup> [https://www.waterboards.ca.gov/centralcoast/board\\_decisions/adopted\\_orders/](https://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/)

containment and additional monitoring and reporting requirements to demonstrate that individual beneficial reuse projects are implementing appropriate and effective best practicable treatment or control (BPTC) measures. These, and other significant changes, are described in greater detail below.

#### Waste Pile Management Facility Containment

Both the previous general conditional waiver and the proposed General Order require that waste pile management facilities maintain an impervious working liner to prevent infiltration of stormwater or other liquids, however the general conditional waiver did not require a construction design proposal, construction quality assurance/quality control report, or professional engineering certification to demonstrate that the constructed liner was effective and met the requirements of the general conditional waiver.

The proposed General Order resolves this issue by requiring dischargers operating waste pile management facilities to do one of the following:

1. Operate waste piles on an impermeable ( $1 \times 10^{-6}$  centimeters per second) concrete working surface, or
2. Operate waste piles on an engineered alternative that provides complete containment and is certified by a California-licensed professional engineer, or
3. Submit an engineering evaluation of the existing liner, prepared, and certified by a California-licensed professional engineer, that demonstrates complete containment of waste at the waste pile management facility, or
4. Establish a groundwater monitoring program to demonstrate containment at the waste pile management facility.

#### Beneficial Reuse Projects

In accordance with the State Water Resources Control Boards Anti-Degradation Policy Resolution 68-16, the proposed General Order recognizes that some limited degradation may result from the beneficial reuse of petroleum-impacted soils and requires dischargers to implement, record, and report the use of effective BPTC measures. To achieve this, the proposed General Order requires the submission of a Site-Wide Beneficial Reuse Project Plan to document the location and type of all beneficial reuse projects, specify the individual management practices and/or "Good and Workmanlike" standards used for each project, and propose a monitoring plan to ensure that beneficial reuse projects maintain their structural integrity and maximize water quality protection. The proposed General Order requires that the Site-Wide Beneficial Reuse Project Plan be updated and submitted to the Central Coast Water Board annually.

#### Waste Soil Characterization Sampling Plan and Data Collection Requirements

The proposed General Order requires dischargers to submit a Waste Soil Characterization Sampling Plan that specifies how the discharger will collect representative samples from petroleum-impacted soils imported to the waste pile management facility to assess potential risks to water quality. The previous general

conditional waiver required sampling; however, the sampling plan is a new requirement. The proposed General Order also improves the sampling approach by requiring dischargers to characterize individual waste streams (e.g., tank bottom sediments, pond cleanout sediment, spills/leaks, etc.) rather than sample collection based on total volume of petroleum-impacted soils as previously required. The proposed General Order requires a minimum of two samples annually per waste stream.

### **Compliance History**

Eight active and three inactive waste pile management facilities were enrolled under the previous general conditional waiver Order No. R3-2010-0036. Six active and three inactive beneficial reuse programs were enrolled under general conditional waiver Order No. R3-2010-0037. Most waste pile management facilities and beneficial reuse programs operate within Santa Barbara County oilfields; however, a few are also located within San Luis Obispo and Monterey Counties.

Central Coast Water Board staff evaluated the compliance of individual dischargers with the previous general conditional waivers based on enrollment information, threat of water quality impairment, content of technical reports, and results of inspections. Compliance with the requirements of the general conditional waivers varied between oilfield operator and facility. Overall, dischargers complied with the general conditional waiver conditions and mitigated violations in a timely manner when identified. Some historical non-compliance issues included a malfunctioning sump pump at one waste pile management facility that lead to a discharge to surface water, minor berm maintenance issues at another waste pile management facility, excessive storage periods at some waste pile management facilities, and the failure to remove liquids within 48 hours as required by the general conditional waiver at one waste pile management facility. Central Coast Water Board staff worked with the discharger in each of these cases to bring them back into compliance with the general conditional waiver. No outstanding compliance issues have been observed during recent inspections.

### **Human Right to Water**

California Water Code section 106.3, subdivision (a) states: It is a policy of the State of California "that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation purposes." On January 26, 2017, the Central Coast Water Board adopted Resolution No. R3-2017-0004, which affirms the realization of the human right to water and the protection of human health as the Central Coast Water Board's top priorities. The proposed General Order is consistent with Resolution No. R3-2017-0004 by requiring containment at waste pile management facilities and ensuring best practicable treatment or control (BPTC) of the discharge is implemented during beneficial reuse projects to protect groundwater and surface water that serve as sources of drinking water within the Central Coast Region.

### **Disadvantaged Communities**

The Central Coast Water Board prioritizes the implementation of regulatory programs in a manner that ensures the fair treatment of people of all ethnicities, cultures, and income levels, including disadvantaged communities. The proposed General Order applies to all active oil leases and fee properties within the Central Coast region. Based on 2016 census data, 61 disadvantaged community (DAC) census block groups are within one mile of an active oilfield lease or fee property.

If impacts to surface water or groundwater quality result from the discharges regulated by the proposed General Order, Central Coast Water Board staff will help facilitate outreach and education to inform affected parties and connect them with available resources, especially disadvantaged communities.

### **Climate Change**

The Central Coast faces the threat and the effects of climate change for the foreseeable and distant future. To proactively prepare and respond, Central Coast Water Board staff has launched the Central Coast Water Board's Climate Action Initiative, which identifies how our work relates to climate change and prioritizes actions that promote adaptation and mitigation to improve resilience and protect beneficial uses. The Climate Action Initiative is consistent with the Governor's Executive Order B-30-15 and the State Water Board's Climate Change Resolution No. 2017-0012.

The proposed General Order regulates the discharge of wastes related to beneficial reuse of waste soils on-site at active oil leases. Supporting the beneficial reuse of waste soils on-site will reduce carbon emissions by decreasing the volume of material and the fuel required to transport material off-site for disposal.

### **PUBLIC PROCESS**

Central Coast Water Board staff conducted early outreach to stakeholders to inform them of the process to develop a draft General Order and obtain early input. Prior to circulating a draft General Order for public comment, Central Coast Water Board staff circulated a "preliminary" draft General Order for review and comment by interested parties on October 28, 2019. In addition, Central Coast Water Board staff met with oilfield operators and members of the oil industry on two separate occasions to discuss the preliminary draft General Order and receive input from the regulated community, including representatives of Western States Petroleum Association (WSPA). Central Coast Water Board staff considered the early input received on the preliminary draft order to inform development of a draft General Order. On February 12, 2020, Central Coast Water Board staff posted the draft General Order to its website and notified interested parties of its intent to consider adoption of the draft General Order and provided an opportunity to submit written comments during a 30-day public comment period. Written comments were due to the Central Coast Water Board by March 13, 2020.

**COMMENTS**

The Central Coast Water Board received comment letters from the following three individuals:

1. Najeli Gomez, Asset Administrator, GSR, LLC
2. Amy Roth, Vice President of Regulatory Affairs, E&B Natural Resources Management Corporation
3. Jeff Johnson, Health, Environment, and Safety Advisor – Water, Chevron North America Exploration and Production Company

The comment letters are available to download at:

<https://ftp.waterboards.ca.gov/?u=item9&p=public>

In response to comments, Central Coast Water Board staff incorporated many revisions to the draft General Order resulting in the proposed General Order. The substantive comments and responses are summarized below and a Response to Comments document is included as Attachment 2 to the Staff Report documenting each individual comment and response.

***Comment Letter 1 – Najeli Gomez, Asset Administrator, GSR, LLC (comment letter dated March 13, 2020)***

Comments received from Najeli Gomez focus on issues related to landowner consent for the construction and operation of waste pile management facilities and beneficial reuse projects when the oilfield operator and landowner are not the same entity. In response to these comments, Central Coast Water Board staff revised the draft General Order to include some of the changes requested by the commenter. For example, Central Coast Water Board staff added Prohibition A.5 to prohibit the construction of beneficial reuse projects without the disclosure and written consent of the landowner.

***Comment Letter 2 – Amy Roth, Vice President of Regulatory Affairs, E&B Natural Resources Management Corporation (comment letter dated March 13, 2020)***

Comments received from Amy Roth focus on issues related to the increased requirements in the draft General Order and the associated additional compliance costs to oilfield operators. As discussed in section above, the requirements in the proposed General Order are generally consistent with the requirements included in the previous general conditional waivers, with a few key differences. Central Coast Water Board staff determined that the requirements are necessary and reasonable to protect water quality and do not agree that the proposed General Order is significantly more onerous than the previous general conditional waivers. Additionally, in response to early input and comments from the regulated community, Central Coast Water Board staff incorporated changes to simplify requirements and reduce costs. For example, based on early input from operators, Central Coast Water Board staff modified the draft General Order to significantly reduce the chemical characterization requirements from those proposed in the preliminary draft General Order.

***Comment Letter 3 - Jeff Johnson, Health, Environment, and Safety Advisor – Water, Chevron North America Exploration and Production Company (comment letter dated March 13, 2020)***

Comments received from Jeff Johnson focus on suggesting specific language changes to clarify implementation of the General Order. In response to comments, Central Coast Water Board staff revised the draft General Order to incorporate many of the changes requested by the commenter. The commenter also requested that other State and Regional Water Board permits be allowed to provide coverage for the management of petroleum impacted soils at active oilfields. Central Coast Water Board staff affirmed the intent of the General Order to regulate the waste discharge from petroleum impacted soils to land at all oilfields within the Central Coast Region. By regulating these activities under a single general order, Central Coast Water Board staff can ensure that all oilfield operators are held to the same protective standards and that no single oilfield operator may gain an unfair advantage by enrolling in a lower threat permit.

**ENVIRONMENTAL SUMMARY**

The Central Coast Water Board is the lead agency for this project pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code sections 21100 et seq.). In September 2005, in accordance with California Code of Regulations (CCR), title 14, section 15063, the Central Coast Water Board conducted an Initial Study for the proposed adoption of No. R3-2005-0005 General Conditional Waiver of Waste Discharge Requirements for the Reuse of Non-Hazardous Crude Oil Impacted Soil and Spent Sandblasting Aggregate on Active Oil Leases and Fee Properties in the Central Coast Region. No significant impacts related to water quality were identified in the Initial Study. By Resolution R3-2005-0089, the Central Coast Water Board adopted a Negative Declaration on September 9, 2005, concurrent with the adoption of Order No. R3-2005-0005.

The proposed General Order relies on the environmental impact analysis contained in the 2005 Initial Study and Negative Declaration to satisfy the requirements of CEQA. Pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15164, the Central Coast Water Board prepared an Addendum to the Negative Declaration (Attachment 3). The Addendum evaluates the proposed changes to the project and whether they create a condition described in section 15162(a). The Addendum determines that no new significant impacts will result, and no substantial increase in severity of impacts will result from those previously identified in the Initial Study and Negative Declaration. Therefore, the conditions in section 15162(a) do not occur, and a subsequent negative declaration or environmental impact report is not necessary. In accordance with CCR title 14, section 15164(d), the Central Coast Water Board has considered the Addendum with the 2005 Negative Declaration.



## **RECOMMENDATION**

Adopt Order No. R3-2020-0006, General Waste Discharge Requirements for the Management and Beneficial Reuse of Petroleum-Impacted Soils on Active Oil Leases and Fee Properties in the Central Coast Region.

## **ATTACHMENTS**

1. Proposed Order No. R3-2020-0006, including the following associated attachments:
  - A. Monitoring and Reporting Program Order R3-2020-0006
  - B. Additional Findings for Order R3-2020-0006
  - C. Notice of Intent for Order R3-2020-0006
2. Response to Comments
3. Addendum to the Negative Declaration