

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

SUPPLEMENTAL SHEET FOR REGULAR MEETING OF SEPTEMBER 9, 2005
Prepared on September 1, 2005

ITEM NUMBER: 17

SUBJECT: ORDER NO. R3-2005-005; GENERAL CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR REUSE OF NON-HAZARDOUS CRUDE OIL IMPACTED SOIL AND NON-HAZARDOUS SANDBLASTING AGGREGATE ON ACTIVE OIL LEASES AND FEE PROPERTIES IN THE CENTRAL COAST REGION.

KEY INFORMATION:

Location: Central Coast Region
Type of Waste: Non-Hazardous Crude Oil Impacted Soil and Non-Hazardous Sandblasting Aggregate on Active Oil Leases and Fee Properties
Threat to Water Quality: Erosion of Petroleum-impacted soils and subsequent deposition to the environment.
Existing Orders: None

On August 31, 2005, David White, resident of Santa Maria, requested Water Board staff remove the above-noted general order from the consent calendar. Mr. White and his consultant, Tom Gibbons, will be at the Water Board meeting to provide public testimony.

Mr. White resides in the Harvest Ranch subdivision in Santa Maria. In 1991, the Central Coast Water Board issued a waiver of waste discharge requirements (WDRs) to Unocal Corporation for the reuse of petroleum materials underneath roads and beneath a park on the Gallison Fee property in Santa Maria. The Gallison Fee was later developed into the Harvest Ranch subdivision. County of Santa Barbara Protection Services Division (County PSD) staff confirms that the reuse materials were placed under the City of Santa Maria roads and these materials remain in place. Mr. White told Water Board staff that there was no public disclosure regarding these materials adjacent to his residence prior to his purchase.

The nearby Park Villas II subdivision was developed on the former oilfield Twitchell Lease property, which was reportedly decommissioned in the 1970s. According to Mr. White and County PSD staff, there is no documentation that any formal site assessment or cleanup occurred during or after the property was decommissioned. Sumps and the associated

petroleum-impacted materials were never removed during the oilfield decommissioning process. Former underground and aboveground storage tanks, which also existed on the former oilfield property, are also considered potential sources of petroleum impacts to soil and shallow groundwater. When the contractor was grading the property in the late 1990s, the sump materials were reportedly spread throughout the six-acre property. Oily soils were "beneficially reused" in the center of San Diego Street without County PSD approval or regulatory oversight by the Central Coast Water Board. For unknown reasons, which are also the subject of ongoing litigation, environmental investigation was not performed on the former oilfield lease development of 23 residences.

Mr. White's primary concerns with the subject order and the General Conditional Waiver of WDRs for the Waste Pile facilities reflect his concerns about reuse materials located beneath the Harvest Ranch and Park Villas II developments. Water Board staff has tried to summarize these issues from Mr. White's verbal comments provided during the first of three work shops (June 3, 2005), information relayed during a teleconference on August 31, 2005, and written e-mail comments submitted March and April 2005 (Attachments 1 and 2). Water Board staff addressed each summary comment shown in bold as follows:

Reuse materials should be limited to only industrial property or other locations not proximate to residences and public open space. The current orders do not protect future residential users.

As indicated in Attachment 1, both Central Coast Water Board oilfield orders pertain only to the construction and operation of waste pile treatment facilities and reuse of petroleum-impacted soils on active oil-producing properties. The general orders do not apply to residential properties. Thus, if an application or report of waste discharge were submitted to us for this type of project, Water Board staff would reject the application because the proposed project would not meet the waiver conditions.

Please note that property owner notification is required for any proposed waste pile or reuse project as shown on Item No. 17, Staff Report Attachment No. 4 (Reuse Waiver Conditions Attachment A), Prohibition A.3, page 1 and Item No. 16, Staff Report Attachment No. 4, (Waste Pile Waiver Conditions) Provision D.14, page 7.

Water Board staff proposes the following changes to clarify each order:

- Item No. 17, Staff Report Attachment No. 4 (Reuse Waiver Conditions Attachment A), Water Board staff added the following sentence in italics to Prohibition A.2 on page 1: Any other reuse or discharge, except to a licensed disposal facility, that is not specifically authorized by this General Waiver or individual waste discharge requirements is prohibited. Discharge of reuse materials to areas outside the designated reuse project area *and to areas outside "active" oil leases and fee properties, as defined by this Order*, is prohibited. The Discharger shall identify the proposed reuse project areas in its report of waste discharge (ROWD) and shall provide specific locations for the limits of reuse material in each reuse project area. When these boundary limits are identified to the satisfaction of the Executive Officer, these boundaries will define the limits of the corresponding reuse project boundary for the purposes of this prohibition.
- For Item No. 17, Staff Report Attachment No. 4 (Reuse Waiver Conditions Attachment A), Specification B.4 on page 3 will be deleted because it allows reuse outside of an active oil field, which is not the intent of this order. All subsequent items have been re-numbered.

- With regard to a change in land use (oilfield property to future industrial or residential property), the waste pile management facility must be decommissioned. However, the reuse materials that have been used as a liner for the waste pile facility may be left in place so long as formal authorization from the property owner is obtained (Reference Item No. 17, Staff Report Attachment No. 4 [Reuse Waiver Conditions Attachment A], Specification B.5 on page 3). Water Board staff proposes to re-word this as follows: *Prior to receiving Division of Oil, Gas and Geothermal Resources (DOGGER) approval of lease/fee decommissioning, the Discharger shall remove all reuse materials or may leave them in place provided that the property owner agrees in writing. All reuse materials that are removed shall be handled and disposed of in accordance with applicable local and state requirements in effect at the time of such removal.*
- For Item No. 16, Staff Report Attachment No. 4 (Waste Pile Waiver Conditions Attachment A), Provision D.14 on page 7 will be reworded as noted in the bullet above to be consistent with the wording in the General Order for Reuse projects.

Water Board staff considered requiring the property owner to record a notice to the deed showing the location of reuse material on a map with applicable engineering construction details. However, the waiver conditions specified in Item No. 17, Staff Report Attachment 4, (Waiver Conditions Attachment A) for the type of reuse material used and type of reuse project allowed are very explicit and conservative. From a water quality perspective, use of reuse materials as road base is not a significant threat to water quality.

In addition, our agency is not responsible for issuing oil field decommissioning permits and the lead agencies include DOGGR and the appropriate County Building and Planning Department where the oil field is located. Central Coast Water Board, County PSD, Monterey County and San Luis Obispo County environmental health staff are contacted by these lead agencies for assistance if human health and water quality issues from past historical practices at the oil field, particularly with historical spills from tank batteries, pipelines and other infrastructures, need to be addressed. Consequently, it will be up to permitting agencies and the property owner to decide whether these reuse projects should remain after the oil field is decommissioned. The decision to require deed

restrictions if the property changes land use will likely be made from a human health or ecological risk perspective based on the entire oil field assessment, not solely the location of beneficial reuse materials.

Given the nature of the reuse materials (non-hazardous crude oil impacted soils) and the stringent conditions of the proposed Order, from a water quality perspective, Water Board staff do not anticipate there will be a need for deed restrictions if the land changes land uses in the future. The conditions of the proposed General Order ensure that crude oil-impacted soils will not pose a significant threat to Water Quality by requiring that reuse projects be properly constructed, and maintained, with well-established and maintained erosion/sedimentation control management practices. Furthermore, Water Board staff is presently working on developing and adopting an interagency agreement (IAA) between several local agencies with jurisdictional authority at active oil field facilities. We anticipate the IAA will specifically outline each respective agency's role with regards to all aspects of the reuse program at active oil field facilities, including decommissioning.

The new reuse program must have improved documentation compared to the old program and the public needs to have access. The nature and concentration of contaminated materials and their placement at these properties need to be mapped using Geographical Information System technology (GIS). Topographic scale maps, required by the orders, are not detailed enough.

We agree that the program must be well organized and information is made readily available to the general public, as well as to the other local and state agencies. As shown on Attachment 4 (Attachment A Waiver Conditions), copies of the report of waste discharge and project description are required to be sent to the agency with the appropriate jurisdiction, which would be DOGGR, County PSD, and Santa Barbara County Building and Planning (County BP) in Santa Barbara County. As part of the program, Water Board staff reports will be prepared for each proposed project enrolled under the oilfield program. These staff reports will be available online and the item placed on agenda notice for the next Central Coast Water Board public hearing.

With regard to allowing public access to files, Water Board staff is reviewing available electronic data management options in addition to maintenance of hard copy files. We are considering requiring each

applicant to submit the project application to the State Water Board's GeoTracker online database.

However, the success of this program will go beyond a good filing and tracking system at the Central Coast Water Board office. As previously discussed, Water Board staff are in ongoing discussions with other agencies, such as Santa Barbara County Building and Planning, County PSD, and DOGGER, to establish an IAA with all these parties and define each agency's role at oil field facilities in Santa Barbara County. Water Board staff would pursue a similar agreement with the appropriate agencies in San Luis Obispo and Monterey counties. As part of the agreement, the interagency group would meet at least quarterly. During our teleconference on August 31, 2005, Mr. Gibbons suggested that Public Health representatives or other appropriate agency officials also attend these meetings. Water Board staff suggests that the initial agency meeting may be the appropriate place to discuss which agency has an active regulatory involvement versus more informational involvement to determine if interagency agreements are necessary with these parties as well.

In addition to interagency meetings, oil industry representatives, such as Western States Petroleum Association (WSPA), have suggested establishing Oilfield Work Groups, similar to those already in place in the Central Valley region. Interested parties, which include oil industry, regulatory agency, and the general public, meet on a quarterly basis to discuss ongoing oilfield issues. In June 2005, Central Coast Water Board staff attended the Central Valley Oil and Gas Work Group meeting in Bakersfield. All parties at the meeting were active participants and provided updates on their agency and oil field operational issues.

Placement of reuse materials must be subject to community right to know (SARA Title III) and Proposition 65 notification. Mr. White reported that strong odors and potentially toxic and flammable fumes overcame residences during trenching of San Diego Street, Park Villas II subdivision.

Please refer to the Prohibition section of Item No. 17, Staff Report Attachment 4 (Draft Attachment A). Prohibitions A. 1, 4, 7, and 8 list the types of materials and substances that are specifically prohibited from reuse projects. Prohibited materials include "hazardous" materials, non-RCRA excluded petroleum wastes (e.g., diluent or "KD" distillate), and reuse materials containing "substances in concentrations

toxic to human, plant, animal, or aquatic life.” For clarification purposes, prohibition A.4 of this item (Item 17) was revised to specify that the use of reuse materials containing diluent or “KD” distillate is prohibited.

With regard to SARA Title III requirements under the Community Right to Know statute, the focus of the Emergency Planning and Community Right-to-Know Act (EPCRA) is to protect public health and the environment. It affects almost all facilities that manufacture, use, or store hazardous chemicals. Considering that petroleum hydrocarbons are not classified as hazardous wastes, these statutes likely do not apply to these reuse projects.

With regard to the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), California law prohibits manufacturers and businesses across the United States from knowingly discharging listed chemicals into drinking water sources and require them to provide a “clear and reasonable” warning before exposing anyone to a listed chemical. We reviewed the most current version of “listed” chemicals and crude oil is not listed. However, there are constituents, such as benzene or benzo(a)pyrene, which are found in crude oil. Chemicals, such as these, are Proposition 65 listed because they are either known or suspected carcinogens or reproductive toxicity. Proposition 65 specifically states that “No person in the course of doing business shall knowingly discharge or release a chemical known to the state to cause cancer or reproductive toxicity into water or onto or into land where such chemical passes or probably will pass into any source of drinking water.”

As part of the application or ROWD, the applicant is required to submit chemical characterization of the materials proposed to be used in the reuse project. If Proposition 65 chemicals are detected, Water Board staff may require the applicant to perform additional testing, such as leachability tests, to determine if there is a threat to human health and the environment.

The sampling frequency to characterize spill materials and reuse materials (one sample per 3,000 cubic yards) is not stringent enough and more samples need to be collected. In addition, the oil industry collects and submits laboratory results as if “the wolf is guarding the henhouse”. Water Board staff or other third parties hired by the Water Board should collect split samples. In addition, reuse materials must not be placed at depths within 50 feet of underlying groundwater.

The specific sampling frequency for material characterization is not specified in the proposed orders. The specific sampling frequency should be based on the project proposed, allowing Water Board staff flexibility to require more frequent sampling and specify sample locations that is tailored for the specific project.

With regard to analytical laboratory funding issues associated with the request for our agency to collect split samples, our agency does not typically receive monies from the state to fund such sampling efforts. Our permitting programs rely on discharger self-monitoring as provided by state law. In addition, Water Board staff has collected samples for controversial investigation and clean up projects in the past and the responsible parties paid the analytical laboratory invoice. If the laboratory analytical data is suspect or that quality assurance and quality control data appear inadequate, Water Board staff could reject the project application.

With regard to the distance between the reuse material and underlying groundwater, the proposed Waste Pile Order specifies a minimum five-foot separation requirement between an authorized waste pile facility and underlying groundwater. This separation requirement is consistent with the separation requirements for landfill sites. However, the proposed reuse order does not impose a specific separation requirement because reuse materials will consist of non-hazardous crude-oil impacted soils, which are prohibited from containing highly leachable constituents that could impact groundwater resources. Specifically, the proposed Reuse Waiver prohibits the use of reuse material containing diluent or “KD” distillate.

No, the Orders do not specifically say “no benzene”. However, the reuse waiver says no hazardous waste, and only non-hazardous crude oil-impacted soils. I suppose this means that some levels of benzene could be acceptable so long as those levels do not exceed non-hazardous levels.

In summary, Water Board staff does believe that we considered Mr. White’s and Mr. Gibbon’s comments during development of the proposed general orders. As noted in the Staff Reports for both Item Numbers 16 and 17, multiple parties have submitted comments and Water Board staff has reviewed and considered all comments provided.

With regard to the ongoing issues with Park Villas II subdivision project in Santa Maria, Water Board staff

understands that litigation has been filed by eight of the homeowners against the former property owners and operators of the lease, as well as the agencies involved with granting property development (City of Santa Maria and County PSD). Water Board staff has met with Mr. White, Mr. Gibbons, and County PSD staff separately on several occasions regarding the soil and groundwater issues at the Park Villas II property. During the Water Board and County PSD meeting on August 30, 2005, County PSD informed Water Board staff that a directive letter to the responsible parties will require one groundwater-monitoring well to be installed at each of the properties to evaluate petroleum impacts to groundwater at the subject site. Water

Board staff will continue to meet with both parties to obtain updates regarding site assessment and clean up and our involvement may escalate, if appropriate.

ATTACHMENTS

1. Written e-mail comments from Mr. David White dated April 2005.
2. Written e-mail comments from Mr. David White dated March 2005.