#### STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Elizabeth Christian) MEETING DATE: May 8, 2013

ITEM: **5G** 

SUBJECT: Port of Oakland Berth 10 Multi-User Dredged Material Rehandling

Facility, Oakland, Alameda County – Update of Waste Discharge

Requirements and Rescission of Order No. 98-019

CHRONOLOGY: February 1995 - Waste Discharge Requirements (WDRs) adopted

March 1998 – Updated WDRs adopted

DISCUSSION: The Tentative Order (Appendix A) would update WDRs that regulate the

rehandling (i.e., dewatering and short-term storage) of sediment from various navigational dredging projects in San Francisco Bay prior to upland disposal or beneficial reuse. The Berth 10 Facility located within the Port of Oakland at the east end of Oakland Outer Harbor has been periodically used since 1995, mainly by the Port and the U.S. Army Corps, for rehandling dredged sediment determined to be unsuitable for wetland restoration or other upland beneficial reuse or for in-bay disposal. Between 2006 and 2009, the Port made significant repairs and upgrades to the Facility's containment system that greatly reduce the likelihood that dredged material will be released to the Bay. Under the Tentative Order, the Facility may only accept dredged material that has been adequately

characterized and demonstrated to be non-hazardous or inert according to State and federal testing protocols. Discharges of decant water to the Bay are not

necessary and are not permitted by the Tentative Order.

As the only currently-permitted site for multi-user dredged material rehandling in the Bay Area, the Berth 10 Facility will continue to be a necessary component for implementing the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS), which is examining alternative management options for disposal of dredged sediment over a 50-year planning horizon. There are currently no other facilities with waterside access that can process both contaminated dredged material for offsite upland disposal or dredged material suitable for upland beneficial reuse.

The Tentative Order also rescinds the existing WDRs. We circulated the Tentative Order to the Port, other responsible agencies, and interested parties. The only comment we received was a letter of support from the Bay Conservation and Development Commission. We expect this item to remain uncontested.

**RECOMMEN-**

DATION: Adoption of the Tentative Order

CIWOS Place: 209358

APPENDIX A. Tentative Order

# **APPENDIX A**

### **Tentative Order**

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

TENTATIVE ORDER

WASTE DISCHARGE REQUIREMENTS AND RECISSION OF ORDER NO. 98-019 for:

PORT OF OAKLAND BERTH 10 MULTI-USER DREDGED MATERIAL REHANDLING FACILITY OAKLAND, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), finds that:

#### **Purpose of Order**

- 1. This Order applies to the Port of Oakland (Port) for operation of its Berth 10 Dredged Material Rehandling Facility (Berth 10 Facility or Facility) for drying and short-term storage of sediments dredged from various navigational dredging projects taking place at the Port and other locations in San Francisco Bay.
- 2. The purpose of the Berth 10 Facility is to rehandle (i.e., dewater and otherwise prepare) dredged material prior to transportation to and disposal at a permitted landfill or, if determined suitable, beneficial reuse at an upland site.
- 3. This Order authorizes the Facility as a multi-user dredged material rehandling facility, meaning that dredgers other than the Port may make arrangements with the Port to rehandle dredged material for eventual upland disposal or beneficial reuse.

#### **Site Description**

- 4. The Berth 10 Facility is located at the east end of the Oakland Outer Harbor portion of San Francisco Bay (Figure 1). About half of the Facility is constructed on a pile-supported concrete wharf and the remaining half is on asphalt-covered land. The 4.4-acre facility is enclosed by a system of gravel and earthen berms topped with concrete "K" rail. The "K" rail also divides the facility into two sections. The tops of the "K" rails are approximately five feet in elevation above the wharf deck. The Facility generally slopes away, in an easterly direction, from the highest side, which is adjacent to the face of the wharf. The containment features described above are shown in the Facility site plan in Figure 2.
- 5. The Port owns the property where the Berth 10 Facility is located. For each dredging project that delivers sediment, the Port enters into a use agreement with a dredging contractor to operate the Facility in accordance with the provisions of the use agreement and the "Berth 10 Dredge Material Rehandling Facility Maintenance and Operations Plan," dated October 2009. The "site operator" for any particular portion of the Facility is the entity holding the contractual agreement to use that portion of the site. At the beginning and end of a site operator's tenure and at least weekly during dredged material placement and drying, a Port staff member oversees and monitors the site operator to ensure compliance with all regulatory requirements.

#### **Regulatory History**

6. The Berth 10 Facility was constructed in 1995-1996 for rehandling dredged material during the Howard Terminal Expansion Project pursuant to Regional Water Board Order No. 95-037. The Port began operating the rehandling facility in 1995. The Regional Water Board revised Order No. 95-037 in 1998 (Order No. 98-019) to accommodate dredged material rehandling for deepening berths at the Port of Oakland and for deepening the federal shipping channels and turning basins from –42 feet Mean Lower Low Water (MLLW) to –50 feet MLLW during the Oakland Harbor Navigation Improvement Project.

#### **Site Design and Operations**

- 7. The Berth 10 Facility has been constructed and modified in the following manner:
  - a. It has the capacity to contain an estimated 21,370 cubic yards (cy) of wet dredged sediment at any one time, with an estimated annual throughput of approximately 50,000 cy. Maximum annual throughput could be higher, depending on weather conditions and level of active site management. Wet dredged sediment is sediment that contains approximately 50% water, by weight, if it consists mostly of fine-grain particles such as silts and clays.
  - b. From 1995 until 2006, the Facility's containment area was enclosed by sediment-filled woven-mesh geotextile bags containing an inner filter fabric liner (geotubes). These geotubes were four feet in diameter and rested against an external earthen berm to prevent rolling. Over the years, the mesh bags became increasingly torn, which compromised their ability to retain the fine-grained clay sediments that provided containment for the Facility.
  - c. In 2006, the Port repaired and upgraded the Facility, replacing the original containment system with an improved containment system consisting of low earthen and gravel berms. The berms are composed of gravel that was crushed and blended onsite with fine-grained sediments. The berms are topped with "K" rail and lined with a geotextile fabric, which was anchored at the foot of the inner berm slope with 15-inch-square reinforced concrete piles laid on their sides.
  - d. Also in 2006, the Port removed two weirs located in the northeast corner of the Facility. The Facility slopes away from the wharf face in an easterly direction toward the area where the weirs were formally located. The 1995 and 1998 orders permitted discharges of water associated with dredged material, known as "decant water" or "return flow," via the weirs. According to the Port, these weirs have never been used since the Facility's initial construction, and there has been no discharge from the Facility to date. All of the decant water from the dredged material placed at Facility to date has evaporated, and it is expected that this will also be the fate of all decant water from dredged material placed at the Facility in the future. Similarly, rainwater that falls onto the Facility (stormwater) is contained within the berms and eventually evaporates.
  - e. Between 2008 and 2009, the Port reduced the size of the Facility from 348,100 square feet to 192,350 square feet, due in part to the designation of "No Load" areas in portions of the wharf needing pile repair or replacement. Piles at Berth 10 will be repaired by the Port's Harbor Facilities staff as part of routine maintenance of the Port's maritime facilities. The Regional Water Board regulates routine maintenance activities, with the exception of navigational dredging, via a federal Clean Water Act section 401 water quality certification for Port maritime facilities maintenance.

- f. In 2009, the Port repaired the wharf deck and covered three storm drain openings to prevent dredged material from being released into Oakland Outer Harbor.
- 8. In accordance with the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS), the Dredged Material Management Office (DMMO) reviews sediment quality testing data for each navigational dredging project and determines the suitability of the dredged material for various disposal or beneficial reuse sites. Material that is not suitable for aquatic disposal and is proposed for rehandling at the Berth 10 Facility may require additional evaluation to make a final disposal site determination.
- 9. The Regional Water Board, as a participant in the LTMS, is examining alternative management options for disposal of dredged sediment over a 50-year planning horizon, and finds that it is in the public interest to encourage beneficial reuse of suitable dredged material for habitat creation to reduce the volumes of disposal in the San Francisco Bay. As the only currently-permitted site for multi-user dredged material rehandling in the Bay Area that can process both contaminated material for offsite disposal or material for upland beneficial reuse, the Berth 10 Facility will continue to be a necessary component for successful implementation of the LTMS.
- 10. The San Francisco Bay Basin Water Quality Control Plan (Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board, Office of Administrative Law, and U.S. EPA, where required.
- 11. The existing and potential beneficial uses of groundwater in the vicinity of the site include municipal and domestic water supply, industrial process water supply, industrial service water supply, and agricultural water supply. The beneficial uses of Central San Francisco Bay, as set forth in the Basin Plan, are as follows:
  - a. Navigation
  - b. Water contact recreation
  - c. Non-contact water recreation
  - d. Industrial service supply
  - e. Wildlife habitat
  - f. Fish spawning
  - g. Ocean, commercial, and sport fishing
  - h. Preservation of rare and endangered species
  - i. Fish migration
  - j. Shellfish harvesting
  - k. Estuarine habitat
  - 1. Industrial Service Supply
  - m. Industrial Process Supply
- 12. California Environmental Quality Act (CEQA): Operation of the Berth 10 Facility is the continued operation of an existing facility without significant expansion of use and is thus exempt from CEQA (Cal. Code Regs., tit. 14, §15301).

13. The Regional Water Board has notified the Port and interested agencies and persons of its intent to prescribe waste discharge requirements and has provided them with an opportunity to submit their written comments. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations, and guidelines adopted thereunder, that the Port shall comply with the following:

#### A. PROHIBITIONS

- 1. The direct discharge of wastes, including dredged sediment material or other earthen materials from construction or any other on-shore operation, in quantities sufficient to cause deleterious bottom deposits or turbidity or discoloration in excess of natural background levels in surface waters is prohibited.
- 2. The discharge shall not cause degradation of any water supply.
- 3. No material shall be placed in the designated rehandling containment area prior to a suitability determination by the DMMO and approval by Regional Water Board staff.
- 4. The dredged material shall remain within the designated rehandling containment area during the dewatering operations.
- 5. This Order does not allow for the take, or incidental take, of any special status species. The Port shall use appropriate protocols, as approved by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service, to ensure that dredge rehandling activities do not impact the Beneficial Use of the Preservation of Rare and Endangered Species.
- 6. Dust and odor from the dredged sediment disposal operation shall not cause a nuisance beyond the Facility boundary.
- 7. The discharge of any hazardous waste as defined in Title 23, Division 3, Chapter 15 of the California Administrative Code, at the Berth 10 Facility, is prohibited. Only dredged material that has been adequately characterized and demonstrated to be non-hazardous or inert may be handled at the Facility.

#### **B. SPECIFICATIONS**

- 1. During the transfer of dredged material from the transport scow to the interior of the Berth 10 Facility containment area, the site operator shall employ a splash board or other similarly effective method to bridge the area between the containment berm and the scow. The surface of the splash board shall be impermeable or covered in plastic or other impermeable material sufficient to catch all dredged material that may inadvertently fall from the bucket during material transfer and to prevent it from discharging into the Bay. The site operator shall clean accumulated dredged material from the splashboard as necessary to keep the material from discharging to the Bay.
- 2. Prior to completion of the dewatering process, the elevation of sediment at the Facility shall not exceed the top of the earthen and gravel berm portion of the containment structures. If the dewatered sediment is sufficiently dry, it may be piled in windrows to facilitate loading for

offsite disposal or reuse as long as the top of the windrows is not higher than the lowest elevation of the top of the containment structures.

- 3. The Port shall take special care to prevent any material from leaving the containment area in the form of mud flows or dust. The traffic openings in the northwest and southwest corners of the containment area shall be sealed with measures sufficient to prevent any material from flowing out.
- 4. The Berth 10 Facility shall be operated to prevent the inundation, washout, or erosion of stored sediments that could occur during a storm event.
- 5. All of the decant water from the dredged material placed at Facility, rainwater that falls onto the Facility, or stormwater from the Facility shall be contained within the berms and allowed to evaporate.

#### **C. PROVISIONS**

- 1. The Port shall comply with all Prohibitions, Specifications, and Provisions of this Order immediately upon adoption of this Order, or as provided below.
- 2. Dredged material offloading operations shall cease immediately whenever a violation of this Order is detected. The Port shall notify the Regional Water Board immediately and operations shall not resume until alternative methods of compliance are provided and have been approved by Regional Water Board staff.
- 3. All technical and monitoring reports required by this Order are required pursuant to California Water Code (CWC) section 13267. Failure to submit reports in accordance with schedules established by this Order, or failure to submit a report of sufficient technical quality acceptable to the Executive Officer, may subject the Port to enforcement action pursuant to CWC section 13268.
- 4. **Rehandling Episode Notification:** For each episode of rehandling at the Berth 10 Facility, the Port shall submit a complete written notification to Regional Water Board staff at least 30 days prior to receipt of dredged material. Each notification shall include the following information about the material proposed for rehandling: source location, estimated volume of dredged material to be delivered, copy of the DMMO suitability determination letter, or, if the DMMO has made the determination in a meeting but the suitability letter has not yet been issued by the DMMO Coordinator, a summary of the chemical and toxicity characterization data used by the DMMO to make the suitability determination, and the ultimate disposal or reuse location for the material after dewatering is complete.

## Due Date: 30 days prior to initiation of dredged material placement from each new dredging project

#### 5. Contingency and Corrective Action Reporting

A report to the Regional Water Board case manager shall be made by telephone and email of any accidental discharge or adverse condition immediately after it is discovered. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this Order, a significant spill of petroleum products or toxic chemicals, or other events that could

affect compliance. A written report shall be filed with the Regional Water Board within fifteen days thereafter. This report shall contain the following information:

- A qualitative description of the discharge(s) and the circumstances leading to the discharge(s), including date and time of discharge(s), weather conditions and tide stage (flood, ebb, or slack);
- A map showing the location(s) of discharge(s);
- Approximate flow rate and estimated volume of the discharge(s);
- Laboratory results if, based on the initial notification and nature of the accidental discharge, the Regional Water Board case manager requests sampling and analysis for particular pollutants potentially discharged; and
- Corrective measures underway or proposed.

#### 6. Annual Summary Report

The Port shall submit an Annual Summary Report on the operations of the Berth 10 Facility by March 1 of each year. This Annual Summary Report shall contain:

- a. A comprehensive discussion of the Facility's operations and performance during the past year, including any repairs or upgrades made (include estimated completion date if pending), any violations of this Order, and, if applicable, any corrective actions taken.
- b. A summary table of dredged material disposal or reuse showing dredged material source, volume of dried material, and location of final disposal or reuse.
- 7. The Port shall maintain a copy of this Order at the Facility so as to be available at all times to site operating personnel and dredging contractors.
- 8. The Regional Water Board considers the Port to have continuing responsibility for correcting any problems that arise as a result of the dredged material rehandling operations at the Facility.
- 9. The Port shall maintain all devices or design features installed in accordance with this Order, such that they continue to operate as intended without interruption, except as a result of failures that could not have been reasonably foreseen or prevented by the Port.
- 10. The Port shall permit the Regional Water Board or its authorized representative, upon presentation of credentials:
  - a. Entry upon the premises on which wastes are located or in which any required records are kept;
  - b. Access to copy any records required to be kept under the terms and conditions of this Order; and
  - c. Sampling of any discharge or groundwater covered by this Order.
- 11. This Order does not authorize commission of any act causing injury to the property of another or of the public; does not convey any property rights; does not remove liability under federal, State or local laws; and does not authorize the discharge of wastes without appropriate permits from other agencies.

12. This Order rescinds Order No. 98-019, except for enforcement purposes.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 8, 2013.

Bruce H. Wolfe
Executive Officer

Attachments:

Figure 1 – Location Map Figure 2 – Facility Plan

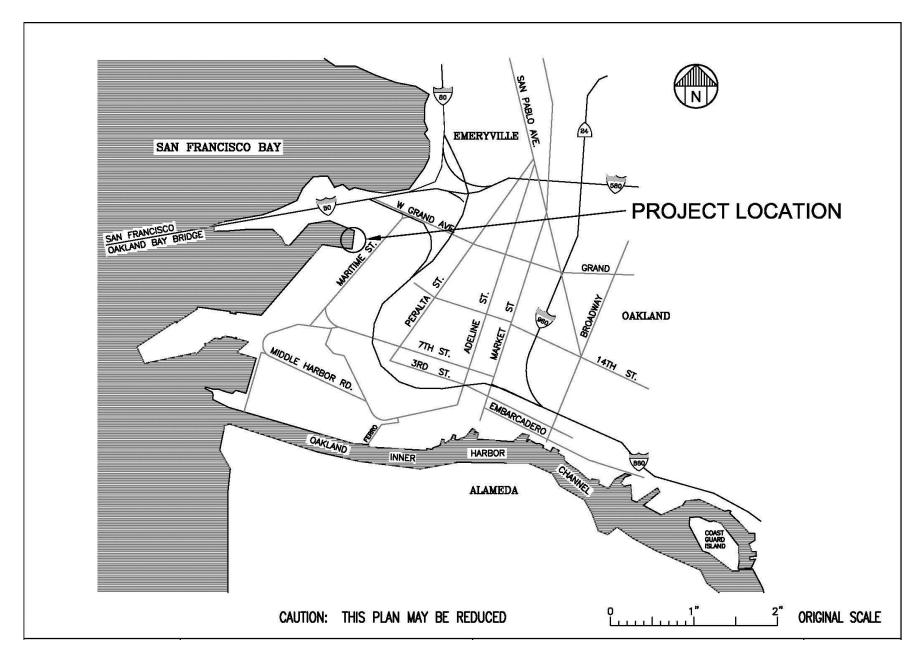


Figure 1. Port of Oakland Berth 10 Location Map

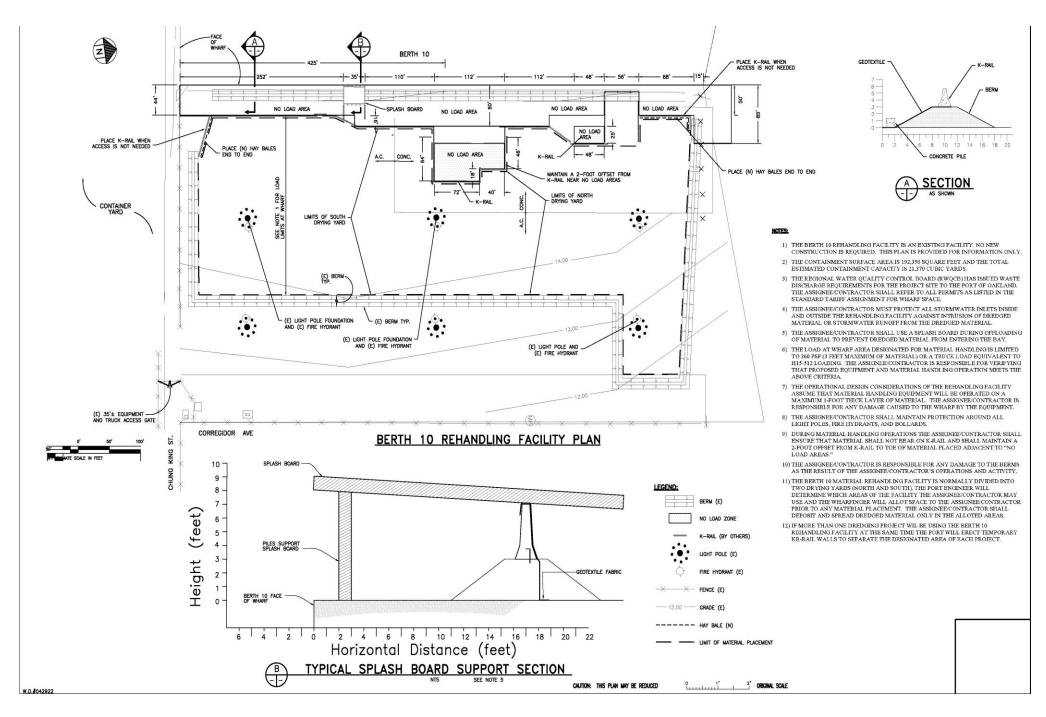


Figure 2. Port of Oakland Berth 10 Rehandling Facility Plan