

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 79-114

WASTE DISCHARGE REQUIREMENTS FOR:

RICHMOND SANITARY SERVICE
RICHMOND, CONTRA COSTA COUNTY

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

1. Richmond Sanitary Service, hereinafter called the discharger, currently disposes of Group 1, Group 2 and Group 3 wastes at a site which it owns located adjacent to San Pablo Bay at the foot of Parr Boulevard in Richmond, as shown in Attachment A, which is incorporated herein and made part of this Order. The discharger submitted a Master Plan for its Class I site including reports on soils, engineering, geologic, hydrological and hydrogeological design criteria for existing and proposed Class I waste disposal facilities, dated September 22, 1975 and October 6, 1975. Additional reports on dike integrity and site stability have been submitted.
2. On March 16, 1976, this Board adopted Order No. 76-28 prescribing waste discharge requirements for the disposal of Group 1, Group 2 and Group 3 wastes at this site. On February 21, 1978, this Board amended the boundaries of the authorized disposal site area in Order No. 78-9.
3. On April 27, 1979, the discharger submitted a Report of Waste Discharge requesting that the boundaries of the disposal site be further amended to include an area at the northerly portion of the site. This area is shown as the cross-hatched area on Attachment B, which is incorporated herein and made a portion of this Order.
4. The Richmond Sanitary Service site comprises approximately 350 acres of marshland, tideland, and other lands presently behind dikes, approximately half of which contains waste materials. A portion of this area which does not contain waste material will be returned to tidal action. At present about 15 acres of the site are used for the disposal of Group 1 wastes. A recent settlement in a jurisdictional dispute between the discharger and the Army Corps of Engineers has clarified potential use of the land. The State Lands Commission is still engaged in an ownership dispute over a portion of the site. The various waste disposal areas on the site are shown on Attachment B. These areas are as follows:
 - IA - Existing Class I pond for disposal of liquid Group 1 wastes.
 - IB - Existing Class I barrel storage area.
 - ICP - Class I retention pond for spills.
 - II - Area where Group 2 and Group 3 wastes such as household and commercial refuse, garbage, demolition debris, etc. are disposed (formerly areas IIA and IID).

- A - Potential disposal area authorized by Army Corps of Engineers (formerly a portion of I_C).
 - B - Potential disposal area subject to Army Corps of Engineers jurisdiction and a portion subject to State Lands Commission ownership dispute (formerly area II_B and a portion of I_C).
 - C - Area to be returned to tidal action (formerly area II_C) and subject to Army Corps of Engineers jurisdiction and State Lands Commission ownership dispute.
5. The site is located in an area that is underlain by a considerable thickness of impermeable, organic, soft, highly compressible silty clay with interbedded layers of peat, sand, and shells. The Hayward fault lies about one and one-fourth miles east of the site. The site is bounded on the west by San Pablo Bay and on the south by the San Pablo Sanitary District effluent channel. San Pablo Creek is northerly of the site. The silty sand and sand layers represent ancient stream channels that traversed the area to the bay. Lateral continuity with waters of the State through these materials has been precluded by construction of an impermeable dike keyed to Bay mud around the Class I disposal area and around the Class II disposal area. Usable ground waters beneath the site are protected by 180 feet or more of clay zones which serve as an effective aquiclude. The isolated sand and gravel beds underlying the site at relatively shallow depths are discontinuous and contain only meager quantities of unusable brackish water.
6. This disposal site meets the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15, for classification of a portion of the site as a Class I disposal site suitable to receive Group 1, Group 2, and Group 3 wastes, and for classification of another portion of the site as a Class II-1 disposal site suitable to receive Group 2 and Group 3 wastes, some limited Group 1 waste and some high moisture content Group 2 waste.
7. This project is an ongoing project where the permit or entitlement from the lead agency (Contra Costa County and City of Richmond) were issued prior to April 5, 1973. It therefore is exempt from CEQA pursuant to Section 15070(b) of the Resources Agency Guidelines.

8. The beneficial uses of San Pablo Bay and San Pablo Creek are:

Recreation
Fish migration and habitat
Habitat and resting for waterfowl and migratory birds
Industrial water supply
Esthetic enjoyment
Navigation

9. The land within 1000 feet of the site is used for industrial facilities.
10. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in April 1975 and this Order implements the water quality objectives stated in that plan.
11. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
12. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Richmond Sanitary Service and any other persons that shall own the land or operate this landfill shall comply with the following:

A. Waste Disposal Specifications -General, Areas I_A, I_B, I_{CP} and II

1. The treatment or disposal of wastes shall not create a nuisance as defined in Section 13050 (m) of the California Water Code.
2. Group 1 wastes shall be confined to areas I_A and I_B at all times except as provided for in Section C.3. of this Order. These wastes, or any water that has contacted these wastes, shall not be discharged from these disposal areas I_A and I_B to surface or ground waters of the State.
3. Group 2 and 3 wastes shall be confined to areas I_A, I_B, and II.
4. Water used during disposal site operations shall be limited to a minimal amount reasonably necessary for purposes of dust control and fire suppression.

B. Waste Disposal Specifications - Areas I_A, I_B and I_{CP}

1. Vertical or lateral movement of wastes from areas I_A, I_B, and I_{CP} shall be prevented by an impermeable dike surrounding these areas. This dike shall be keyed into impermeable natural substrata and this dike shall provide a minimum of five feet of material having a permeability not to exceed 1×10^{-8} cm/sec.

2. Disposal areas I_A, I_B, and I_{CP} shall be protected from washout or erosion of wastes or covering material or from any threat of inundation by tidal or flood waters.
3. A minimum freeboard of two feet shall be maintained in waste pond I_A.
4. For barrel disposal areas, each layer of containers shall be covered with a minimum of one foot of compacted soil.
5. Barrel disposal area I_B shall not have an elevation greater than 43 feet above mean sea level nor slopes steeper than 8:1 except for the easterly slope which shall be no steeper than 4:1.
6. Each of the active barrel disposal areas shall be graded and provided with a temporary berm to prevent the discharge of wastes or rain-water containing wastes from area I_B.
7. The liquid level in pond I_{CP} shall be maintained such that sufficient capacity exists to accept two million gallons from the Class I pond (area I_A) and, during the period October 1 through April 30 the expected quantity of runoff from the tributary area equivalent to a 100 year 7 day storm.

C. Waste Disposal Specifications - Area II

1. Wastes shall not be disposed of at any position where they can be carried from the disposal site and discharged into waters of the State.
2. Group 2 wastes shall not be placed in or allowed to contact ponded water from any source whatsoever.
3. Liquid wastes, high moisture content waste or Group 1 waste shall not be discharged in area II except as provided for in Attachment C which is incorporated in and made a part of this Order. The Executive Officer may, in writing, add to or modify the list of wastes contained in Attachment C.
4. Leachate from Group 2 waste or ponded water containing leachate shall be confined to areas I_A, I_B and II.
5. Disposal area II shall be protected from any washout or erosion of wastes or covering material, and from inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.
6. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes deposited in area II.

7. Vertical and lateral hydraulic continuity with ground or surface waters in area II shall be prevented by the presence of a natural or artificial clay barrier surrounding the area which is keyed into impermeable substrata and has a thickness of at least five feet and a permeability of 1×10^{-6} cm/sec or less.
8. The exterior surfaces of the disposal area shall be covered and graded to promote lateral runoff of precipitation and to prevent ponding.
9. The migration of methane gas from Group 2 waste shall be controlled as necessary to prevent creation of a nuisance.
10. The slopes and maximum elevations necessary to assure site stability shall conform to those recommended in stability analysis submitted by the discharger and approved by the Executive Officer.

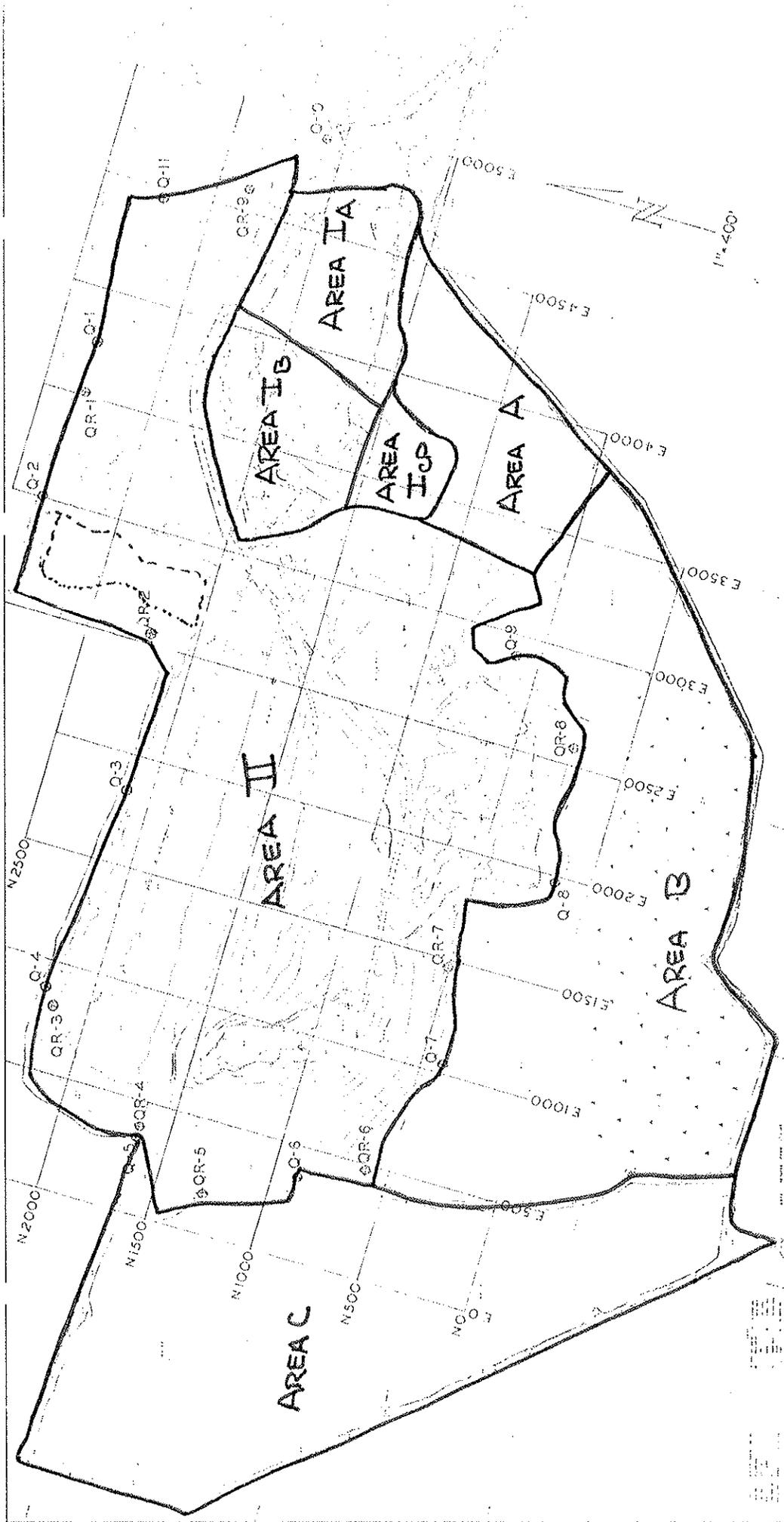
D. Provisions

1. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.
2. The discharger shall comply with all portions of this Order except C.10. immediately upon adoption.
3. The discharger shall submit a time schedule for compliance with specification C. 10 within 30 days of approval of the stability analysis by the Executive Officer. This time schedule shall provide for forthwith compliance and be approved by the Executive Officer.
4. The discharger shall submit a contingency plan acceptable to the Executive Officer by November 30, 1979 on the methods to be used and equipment and manpower availability to repair possible seismic damage to areas I_A and I_B.
5. The discharger shall submit a site closure plan to the Board no later than November 1, 1980. This plan shall conform to Resolution 77-7 adopted by this Board.
6. The discharger shall maintain a copy of the Order at the site so as to be available at all times to site operating personnel.
7. The discharger shall maintain a legible record using a reporting form indicated by the Board of the volume and type of each Group 1 waste received at the site and the manner and location of disposal. The record shall be maintained for a period of not less than ten years, with the records to be forwarded to the Board if disposal operations cease.
8. The discharger shall file with this Board a report of any material change or proposed change in the character, location or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours or ownership of the disposal area.

9. This Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.
10. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program which may be directed by the Executive Officer.
11. The discharger shall permit the Regional Board:
 - (a) Entry upon premises on which waste are located or in which any required records are kept,
 - (b) Access to copy any records required to be kept under terms and conditions of this Order,
 - (c) Inspection of monitoring equipment or records, and
 - (d) Sampling of any discharge.
12. This Board's Order Nos. 76-28 and 78-9 are hereby rescinded.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on September 18, 1979.

FRED H. DIERKER
Executive Officer



RICHMOND SANITARY SERVICE
 SELF-MONITORING PROGRAM
 CLASS II DISPOSAL AREA
 "S", "Q" AND "CR" STATIONS