

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 81-3

WASTE DISCHARGE REQUIREMENTS FOR:

TURK ISLAND COMPANY,
TURK ISLAND CLASS II-2 SANITARY LANDFILL
UNION CITY, ALAMEDA COUNTY

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

1. The Board previously adopted Waste Discharge Requirements as Resolution No. 68-43 and Order No. 78-99 for Turk Island Company (hereafter called the discharger) for the disposal of Group 2 and Group 3 wastes at its Class II-2 disposal site south of Union City, Alameda County. The site also operates with accordance with permits or orders issued by Union City and other local and state governmental agencies.
2. In February 1980 the discharger submitted a final site closure plan in accordance with this Board's Resolution No. 77-7. The closure plan addresses such items as final cover, site drainage and monitoring facilities, leachate movement control and methane gas movement control. Closure of the site is expected by 1983. Negotiations are currently underway with Union City to ultimately convert the landfill to a city owned and operated, open-space recreational area. This closure plan complies with all provisions of Resolution No. 77-7 except final cover depth. The plan proposes a two foot cover as compared to the required three foot cover. A two foot cover should be satisfactory given the lower moisture content waste accepted and the proposed maintenance program.
3. In late 1975 the discharger submitted two technical studies under the titles "Supplemental Stability Study - Turk Island Sanitary Landfill, Union City, California," July 1975 and "Phase II - Geotechnical Investigation and Design Studies, Turk Island Disposal Site, Union City, California," September 1975. The studies recommend that for stability purposes there be a 43' maximum height limit on the site.
4. The discharger is currently disposing of approximately 130,000 tons per year of Group 2 and 3 wastes in a 43 acre landfill which it has owned and operated since 1963. The disposal rate at the Turk Island site has increased dramatically over the past five years due to diversion of wastes from other terminated East Bay sites. This active disposal site is located in the western portion of a 107 acre parcel lying west of Union City Boulevard near the southwest tidal flinge of San Francisco Bay. The remaining 64 acres of the 107 acre parcel are undeveloped and are designated for Industrial Park use. The location of the site is shown on Attachment A which is made a part of this Order.

5. The site is underlain by impervious baymud to a depth of approximately 50 to 60 feet. The upper 20 feet is saturated with a low quality unusable ground water. The Newark aquifer lies beneath the site at a depth greater than 55 feet and is well protected by the overlying impervious baymud. An Alameda Flood Control District channel is located about three quarter miles south of the site and Alameda Creek is located approximately three quarter miles north of the disposal site.
6. The beneficial uses of Alameda Creek and San Francisco Bay are:
 - Recreation
 - Navigation
 - Habitat for waterfowl and migratory birds
 - Fish propagation
 - Esthetic enjoyment
7. The area within 1000 feet of the site includes salt ponds, residential, and agricultural land, and flood water storage basins.
8. The disposal site meets the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15, for classification as a Class II-2 disposal site to receive Group 2 and 3 wastes.
9. 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.
10. This 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.
11. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
12. This Order authorizes the continued operation of a privately owned Class II-2 solid waste disposal site. Such activity constitutes only minor modification to land and is thereby exempt from the provisions of the California Environmental Quality Act in accordance with Section 15104, Chapter 3, Title 14, California Administrative Code.

IT IS HEREBY ORDERED that, Turk Island Company and any other person who operates this site, shall comply with the following:

A. Waste Disposal Specifications

1. The disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. Group 2 wastes shall not be placed in or allowed to contact ponded water from any source whatsoever.
3. Group 1 wastes and hazardous wastes shall not be stored or deposited at this site.
4. Waste materials shall not be disposed of in any location where they can be carried from the disposal site and discharged into waters of the State.
5. Sewage sludge and high moisture content Group 2 wastes shall not be discharged at the site unless authorized in writing by the Executive Officer of this Board.
6. The discharger shall remove and relocate any wastes which are disposed of at this site in violation of the above requirements.

B. Leachate and Drainage Specifications

1. Leachate from Group 2 wastes and ponded water containing leachate or in contact with refuse shall not be discharged to waters of the State.
2. Water used during disposal site operation shall be limited to a minimal amount reasonably necessary for dust control and fire suppression.
3. The disposal area 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 one in 100 years.
4. Vertical and lateral hydraulic continuity with ground waters shall be prevented by the presence of a natural clay barrier of at least 5 feet in thickness and a permeability of 1×10^{-6} cm/sec or less or equivalent on the bottom and sides of disposal areas. If such a natural condition does not exist, an artificial barrier shall be constructed to meet the above specifications.
5. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through Group 2 wastes during disposal operation and for the active life of the site. The perimeter drainage ditches and all other facilities shall be designed to convey maximum anticipated storm runoff, and withstand differential settlement. These facilities shall be constructed over a natural ground or through lined channel or pipes.
6. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

a. Surface Water

Floating, suspended, or deposited macroscopic particulate matter or foam;

Bottom deposits or aquatic growths;

Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

b. Ground Water

Useable ground water shall not be degraded as a result of the solid waste disposal operation.

7. The migration of methane gas from the disposal site shall be controlled as necessary to prevent the creation of nuisance.
8. As portions of the site are closed, the exterior surfaces shall be graded to a minimum slope of three percent in order to promote lateral runoff of precipitation and to minimize the infiltration of precipitation, in addition, all completed disposal areas shall be covered with a minimum of two feet of uncontaminated material, one foot of which is compacted to attain a permeability no greater than 10^{-6} cm/sec.

C. Site Closure Specifications

1. This site shall continue to be operated and its closure completed in compliance with this Board's Resolution No. 77-7 and in accordance with the report, Site Closure Plan, Turk Island Disposal Site, Union City, Alameda County, California, dated January 1980. This plan includes specifications for all development and compaction, surface water drainage, slope stability, flood protection, leachate containment and final cover.

D. Prohibition

1. To assure site stability the final fill shall not exceed a maximum height of 43 feet above mean sea level.

E. Provisions

1. The discharger shall comply with Specifications B.8 and C.1 by July 1, 1981 for completed areas not yet covered and within 30 days after completion of new areas.
2. The discharger shall comply with all specifications and provisions of this Order immediately upon its adoption except as provided for in Provision E.1.

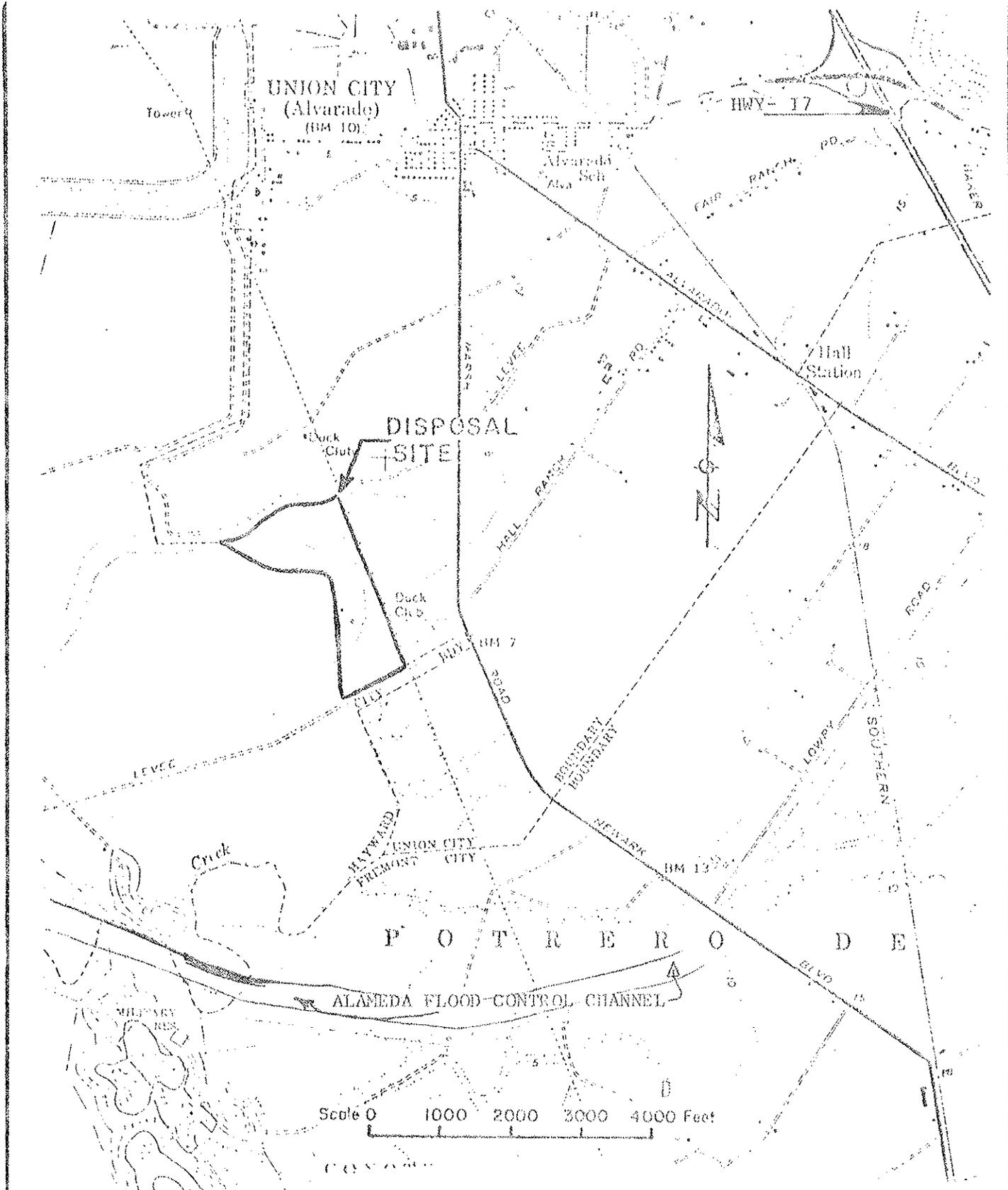
3. To assure compliance with Specification C.1, the discharger shall submit a report semi-annually describing the status of the site towards final closure. These reports shall be submitted by January 30th and July 30th of every year.
4. Within 30 days after the completion of filling of any portions of the disposal areas to final grade, submit documentations signed by a registered civil engineer or a certified engineering geologist that the exterior surfaces of these newly completed portions are covered and graded as described under item B.8 and C.1.
5. The discharger shall maintain a copy of the Order at the site or office so as to be available at all times to site operating personnel.
6. 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.
7. The use of any additional land outside of the existing 43 acre active disposal area shall not commence without the written approval of the Executive Officer. This approval shall be contingent on prior local agency approval and on technical demonstration satisfactory to Executive Officer that the area will comply with all applicable specifications of this Order.
8. 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.
9. 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 directed by the Executive Officer.
10. 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.
11. If a permit or operating authorization is denied or revoked by a local governmental agency, the Board will review this Order in the interests of protecting water quality.

11. The Boards Resolution No. 78-99 is 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 January 21, 1981.

FRED H. DIERKER
Executive Officer

Attachment:
Map



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

TURK ISLAND COMPANY - TURK ISLAND
 CLASS II-2 SANITARY LANDFILL
 UNION CITY, ALAMEDA COUNTY

ATTACHMENT A ORDER NO. - 81-3

DRAWN BY: _____ DATE: _____ DRWG. NO. _____