

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 82-55

WASTE DISCHARGE REQUIREMENTS FOR:
THE CITY OF BURLINGAME AND
SAN MATEO DISPOSAL COMPANY -
BROWNING-FERRIS INDUSTRIES OF SAN MATEO COUNTY
LIMITED CLASS LI-2 SOLID WASTE DISPOSAL SITE
BURLINGAME, SAN MATEO COUNTY.

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

1. The Board adopted Waste Discharge Requirements Resolution No 695 on August 19, 1965 for the City of Burlingame Solid Waste Disposal Site, for the disposal of limited Group 2 and Group 3 (inert) wastes. The site is owned by and the sludge ponds are operated by the City of Burlingame and the solid waste disposal operation is operated by San Mateo Disposal Company Browning - Ferris Industries of San Mateo County, hereinafter jointly called the discharger.
2. The discharger proposed to operate, maintain and improve the existing site for disposal of limited categories of group 2 wastes such as paper, cardboard, cloth, glass, street refuse, yard clippings, and group 3 wastes.
3. Closure of the site is tentatively set for 1987. Ultimate use of the site is presently planned as an expansion of a City Park.
4. The site is located in the City of Burlingame, surrounded by Airport Boulevard separating it from San Francisco Bay on the North, presently undeveloped land on the East, a marsh and the Burlingame Lagoon, which are tributary to San Francisco Bay on the South, and a wastewater treatment plant and City park on the West, as shown in the maps (Attachments 'A' and 'B') which are incorporated herein and made part of this Order.
5. The site is situated on Former San Francisco Bay lands and is underlain by Bay Muds. Filling operations began in 1957, diking on the North, East and Eastern part of the South sides was completed in 1965. Areas to the East and West are also artificially filled. The San Andres Fault is about three and one-half miles west of the disposal site.
6. The site does not have a leachate collection system or a surface drainage control system.
7. The City is currently using inactive portions of the site for treated sewage sludge evaporation ponds. The influent sludge to the ponds is approximately 2-3% solids. The ponds are periodically scraped to remove the dried sludge, which is then stored in piles on-site. The City of Burlingame is solely responsible for the operation and maintenance of these ponds.

8. A geotechnical report on the ponds submitted to the Board by the City of Burlingame on January 15, 1982; self monitoring program reports on ground water and leachate levels submitted by the City; monitoring reports on the amount of sludge pumped to the evaporation ponds submitted by the wastewater treatment plant operator; and staff inspections indicate that some or all of the ponds are not adequate to prevent the seepage from the sludge ponds into the refuse.
9. The City of Burlingame began full operation of dewatering treatment plant sludge and disposing of the sludge cake at an off-site permitted disposal site in October 1982.
10. By letter dated January 11, 1982 the City of Burlingame indicated that they planned to upgrade 4 of the 21 ponds. The City intends to use the upgraded ponds as backup evaporation ponds in case of breakdown of the sewage treatment plant sludge dewatering equipment and for digester cleaning. The City intends to discontinue use of the remaining 17 ponds. The City may change the number of ponds to be upgraded. All upgraded ponds will meet Specifications C.1., C.2., and C.3.
11. Groundwater and leachate monitoring data submitted to the Board by the City indicates that the perimeter dikes may not be adequate to contain the site leachate. The perimeter dike is only on the North, East and Eastern part of the South sides. There is no perimeter containment dike on the West or Western part of the South sides.
12. The beneficial uses of San Francisco Bay and Burlingame Lagoon and the adjoining marsh are:
 - a. navigation
 - b. recreation
 - c. wildlife habitat
 - d. marine habitat
 - e. fish migration
 - f. commercial & sports fishing
 - g. shellfish habitat
 - h. rare and endangered species habitat
13. Subsequent to the modifications necessary to comply with this Order, this disposal site will meet the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15 for classification of the site as a Class II-2 disposal site to receive Limited Group 2 waste and Group 3 wastes.
14. 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.
15. 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.

16. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
17. This Order authorizes the continued operation of a publically 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 the City of Burlingame, San Mateo Disposal Company - Browning-Ferris Industries of San Mateo County (except where otherwise noted) and any other persons that shall own the land or operate this landfill shall comply with the following:

A. Prohibitions

1. The disposal of wastes 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, nor shall Group 2 wastes be disposed of in any position where they can be carried from the disposal site and discharged into waters of the State.
3. Group 1 wastes and hazardous wastes shall not be deposited or stored at this site.
4. Liquid Group 2 wastes or high moisture content Group 2 waste shall not be discharged at the site except with the expressed written approval of the Executive Officer. Sewage sludge placed in the sludge ponds which comply with the Specifications in C. of this Order are exempted.
5. Leachate from Group 2 wastes and ponded water containing leachate or in contact with refuse or ponded sludge shall not be discharged to waters of the State.
6. The following group 2 wastes shall not be deposited in the site:
 - a. Garbage from handling, preparation, processing or serving of food or food products;
 - b. Dead animals and portions thereof;
 - c. Water treatment residue such as solid, organic matter collected on screens and in settling tanks;
 - d. Sewage treatment residue such as solids from screens and grit chambers, sludge, dewatered sludge, and septic tank pumpings. Sludge or dewatered sludge may be placed in the ponds which comply with Specifications C. of this Order;
 - e. Infectious materials and hospital or laboratory wastes authorized for disposal to land by official agencies charged with control of plant, animal, or human disease; and
 - f. Pesticide containers.

7. Groundwater and surface waters shall not be degraded as a result of the solid waste disposal or sludge treatment operations.

B. Waste Disposal Specifications

1. Water used during disposal site operation shall be limited to a minimal amount reasonably necessary for dust control and fire suppression.
2. The entire 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 storms, floods and/or tidal action having a return frequency of once in 100 years.
3. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not be allowed to contact or percolate through group 2 wastes during disposal operation and for the active life of the site.
4. 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, to minimize infiltration of precipitation and to prevent ponding of water. All completed disposal areas shall be covered with a minimum of three feet of clean soil, one foot of which is compacted to attain a permeability no greater than 1×10^{-6} cm/sec.
5. The migration of methane gas from the landfill area shall be controlled as necessary to prevent the creation of a nuisance.
6. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.

C. Pond Specifications (sole responsibility of the City of Burlingame)

1. The bottoms and sides of the sludge evaporation ponds shall be isolated from underlying refuse and groundwaters by the presence of a soil barrier at least two (2) feet in thickness with a permeability of 1×10^{-6} cm/sec or the equivalent.
2. A two foot minimum pond freeboard shall be maintained in each of the ponds during the rainy season, October 1 - April 15; and one foot minimum during the dry season, April 16 - September 30. Exceptions to these freeboards may be considered by the Board upon submittal of a liquid balance demonstrating that waste containment will be provided.
3. The discharge of wastes to the evaporation ponds shall be limited to those wastes listed in Findings 10. Prior to placing sludge from digester cleaning operations into the ponds the discharger shall submit a report acceptable to the Executive Officer which address methods of controlling odors and demonstrating that adequate pond freeboards will be maintained.
4. The existing ponds not to be upgraded shall be cleaned of all sludge and regraded to eliminate ponding of any liquid.

D. Provisions

1. The discharger shall comply with all prohibitions, specifications and provisions of this Order immediately upon adoption except A.4., (as it relates to sewage sludge discharged into ponds) A.5., A.6., (as it relates to sewage sludge discharged into ponds) B.2., B.4., B.5., C.1., C.2., C.3., and C.4.

2. The discharger shall comply with the following time schedule to assure compliance with A.5., B.2., B.4., and B.5. The City of Burlingame shall comply with the following time schedule to assure compliance with A.4., (as it relates to sewage sludge discharged into ponds) A.6. (as it relates to sewage sludge discharged into ponds), C.1., C.2., C.3., and C.4.

a. To assure compliance with A.5:

<u>Task</u>	<u>Compliance Date</u>	<u>Report of Compliance Due</u>
(1) submit proposed plan to determine the adequacy of leachate containment	By Oct. 20, 1982	by Oct. 6, 1982
(2) report Findings which shall include a site hydrogeologic report, and submit a time schedule for implementing any necessary facilities.	by Jan. 14, 1983	by Jan 14, 1983
(3) achieve full compliance if additional facilities are needed.	by Sept. 1, 1983	by Sept. 15, 1983

b. To assure compliance with B.2:

<u>Task</u>	<u>Compliance Date</u>	<u>Report of Compliance Due</u>
(1) submit report determining adequacy of 100 year storm, flood and/or tidal protection, including a time schedule for remedial action, if necessary.	by Nov. 24, 1982	By Nov. 24, 1982

<u>Task</u>	<u>Compliance Date</u>	<u>Report of Compliance Due</u>
(2) achieve full compliance if additional facilities are needed.	by Sept. 1, 1983	by Sept. 15, 1983

c. The discharger shall submit a technical report by September 15, 1983 documenting compliance with Specification E.4 for those sections which are completed or provide a detailed plan and time schedule for achieving compliance, which is consistent with the closure plan.

d. The discharger shall comply with Specifications B.5 by submitting a plan with a time schedule by December 1, 1982 to monitor the migration of methane gas from this disposal site.

e. To assure compliance with A.4. (as it relates to sewage sludge discharge into ponds), A.6. (as it relates to sewage sludge discharged into ponds) C.1., C.2., C.3., and C.4., the City of Burlingame shall:

<u>Task</u>	<u>Compliance Date</u>	<u>Report of Compliance Due</u>
(1) Submit report documenting all ponds proposed for use comply with prohibitions A.4., A.6. and with Specifications C.1., C.2. and C.3.	by Oct. 27, 1982	by Oct. 27, 1982

(2) Submit report documenting status of compliance with C.4.; demonstration of over-flow protection from wet sludge ponds that remain through the next rainy season; and a time schedule for final compliance with Specification C.4.	by Oct. 1, 1982	by Oct 1, 1982
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3. A site closure plan shall be submitted for Board approval no later than September 1, 1983 which shall conform to Resolution No, 77-7.

adopted by this Board and State Water Resources Control Board guidelines dated July 1980. The site closure plan shall be prepared under the supervision of a registered engineer or a certified engineering geologist.

4. 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(s).
5. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
6. This Board considers the property owner and site operator to have a continuing responsibility for correcting any problems within their reasonable control 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
7. 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.
8. The discharger shall permit the Regional Board or its authorized representatives in accordance with California Water Code Section 13267(c):
 - 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.
9. Resolution No. 695 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 September 15, 1982.

FRED H. DIERKER
Executive Officer

Attachments:

A & B
Resolution 77-7

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Burlingame Landfill

Burlingame

NPDES NO. CA _____

ORDER NO. 82-55

CONSISTS OF

PART A

AND

PART B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

CITY OF BURLINGAME
CLASS II-2 SOLID WASTE DISPOSAL SITE
SAN MATEO COUNTY

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, and (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge., (3) to develop or assist in the development of effluent of other limitations, discharge prohibitions, national standards or performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board, including the methods specified in attached APPENDIX E.

Water and waste analyses shall be performed by a laboratory currently or previously approved for these analysis by the State Department of Health. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITIONS OF TERMS

1. Grab Sample means a sample collected at any time.

D. SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

The discharger is required to perform observations, sampling, and analyses according to the schedule in Part B.

E. RECORDS TO BE MAINTAINED

1. Written reports shall be maintained at the landfill site or office and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:
 - a. Identity of sampling and observation stations by number.
 - b. Date and time of sampling and/or observations.
 - c. Date and time that analyses are started and completed.
 - d. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to specific section of Standard Methods, is satisfactory.
 - e. Calculations of results.
 - f. Results of analyses and/or observations.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Written reports shall be filed quarterly (unless specified otherwise in Part B) by the fifteenth day of the following month. In addition, an annual report shall be filed as indicated in F-1-f. The reports shall be comprised of the following.

- a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the past months and actions taken or planned for correcting violations, such as operation modifications and/or plant facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. Monitoring reports and the letter transmitting reports shall be signed by the facility owner or manager. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

Monitoring reports shall be signed as follows:

- (1) In the case of corporations, by a principal Executive Officer at the level of vice-president or his duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates,
- (2) In the case of a partnership, by a general partner, or
- (3) In the case of a sole proprietorship, by the proprietor,
- (4) In the case of a municipal, State, or other public facility by either a principal Executive Officer, ranking elected official, or other duly authorized employee.

b. Compliance Evaluation Summary

Each report shall be accompanied by a compliance evaluation summary sheet prepared by the discharger. The report format will be prepared using the example shown in Appendix B.

c. Map or Aerial Photograph

A map or aerial photograph shall accompany the report showing sampling and observation station locations.

d. Results of Analyses and Observations

Tabulations of the results from each required analysis specified in Part B by date, time, type of sample, and station, signed by the laboratory director. The report format will be specified by the Regional Board.

e. List of Approved Analyses

- (1) Listing of analyses for which the discharger is approved by the State Department of Health.
- (2) List of analyses performed for the discharger by another approved laboratory currently or previously approved by the State Department of Health Service (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

f. Annual Reporting

By February 1 of each year, the discharger shall submit an annual monitoring report to the Regional Board covering the previous calendar year. The report shall contain:

1. Tabular and graphical summaries of the monitoring data obtained during the previous year.

2. Comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
3. A map showing the area in which filling has been completed during the prior calendar year.
4. Summary of the groundwater analyses indicating any change in the quality of the groundwater.

PART B

I. DESCRIPTION OF SAMPLING STATIONS & SCHEDULE OF SAMPLING, ANALYSES & OBSERVATIONS

A. WASTE MONITORING

1. Monthly, record the total volume and weight of a refuse (in cubic yards and tons) deposited on the site during the month, and the daily average. Report annually.
2. Monthly, record the volume of fill completed, in cubic yards, showing the location(s) and dimensions on a sketch or a map. Report annually.

The monthly records shall be maintained at the landfill office. Weight of the refuse shall be estimated and reported annually.

B. ON-SITE OBSERVATIONS

<u>Station</u>	<u>Description</u>
S-1 thru S-'n'	Observation stations located on any past or presently active portion of the waste site at grid squares delineated by a 500 foot grid network.
P-1 thru P-'n'	These stations shall be located at equidistant intervals not exceeding 500 feet around the perimeter of the active and once active portion of the disposal site excluding the area described by the 'S' stations.

<u>Station</u>	<u>Frequency of Observation</u>	<u>Observations</u>
All S Stations	<u>Weekly</u> throughout the year	1. Evidence of ponded water at any point on the disposal site. 2. Evidence of refuse not confined within disposal site or cell.

3. Evidence of erosion and/or "day-lighted" refuse.

4. Evidence of waste in contact with pools of surface water.

<u>Station</u>	<u>Frequency of Observations</u>	<u>Observations</u>
All P Stations	<u>Weekly</u> throughout the year	<ol style="list-style-type: none"> 1. Evidence of refuse not confined within a cell or parcel. 2. Evidence of odors: presence or absence, the characteristics, intensity, source, and distance of travel. 3. Evidence of leachate or water entering or leaving the disposal site, and estimated size of affected area.

All "P" and "S" stations must be monitored according to the above described frequency and report monthly October - March and quarterly April - September

C. SEEPAGE AND/OR LEACHATE MONITORING

<u>Station</u>	<u>Description</u>
L-1 thru L-'n'	At a point at which each discharge occurs from the disposal area or sludge pond. Include a map indicating locations of discharge(s).

<u>Station</u>	<u>Type of Sample</u>	<u>Analyses</u>	<u>Units</u>
All L Stations	<u>Daily</u> , grab sample at each leachate discharge	TOC Dissolved sulfide Odors Color pH Conductivity Lead Iron	mg/l mg/l mg/l description description electrometric units micromhos/cm mg/l mg/l

A report shall be made by telephone of any seepage or leachate leaving the disposal area immediately after occurrence. A written report shall be filed with this Board within five days and shall contain the following information: (1) Map showing locations(s) of discharge (2) Approximate flow rate (3) Nature of effect (i.e. discoloration of receiving water, size of affected area and (4) corrective measures undertaken.

D. GROUNDWATER AND PEIZOMETRIC GRADIENT MONITORING

<u>Station</u>	<u>Description</u>
G-1 thru G-6	These groundwater monitoring wells are located approximately as indicated on the attached map. These wells determine the level of subsurface water nearest to the ground surface.
LS-1 thru LS-3, and LS-5	These groundwater monitoring wells are located as indicated on the attached map, and as stated in the report entitled "Hydrogeology of the Burlingame Landfill Area Burlingame, California", i.e. LS-1 and LS-2 are along the northern edge of the site, LS-3 is in the Southeast corner and LS-5 is along the southern edge of the site. These wells monitor the lower sand.
GR-1 thru GR-7	Risers located in the filled and partially filled portions of the refuse site, opposite the above "G" groundwater monitoring wells, and at least 1 in the interior of the site. The risers depth is the bottom of the disposal site.

<u>Station</u>	<u>Type of Sample</u>	<u>Analyses</u>	<u>Unit</u>
All "GR" wells	Grab sample <u>quarterly</u> Report <u>quarterly</u>	Leachate level ele- vation pH Iron Lead	feet from known datum electrometric mg/l mg/l
All "G" and "L-S" wells	Grab sample <u>quarterly</u> for the "G" wells, and <u>semi-annually</u> for the "L-S" wells. Report <u>quarterly</u> .	water level elevation TOC TDS Total Kjeldahl Nitrogen (as N)	feet from known datum mg/l mg/l mg/l

<u>Station</u>	<u>Type of Sample</u>	<u>Analyses</u>	<u>Unit</u>
		Conductivity	micromhos/cm
		pH	electrometric
		Iron	mg/l
		Lead	mg/l

Prior to taking any grab samples, the LS groundwater wells shall be purged until EC, temperature and pH have stabilized. The EC, Temperature and pH readings shall be reported with the groundwater analysis. The G wells shall be purged two to three well volumes prior to taking samples.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Resolution No. 695 and the California Administrative Code.
2. Has been ordered in writing by the Executive Officer on the date ordered below and becomes effective immediately.
3. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger, and will be revised upon written agreement of the Executive Officer and the discharger.

ROGER B. JAMES
Executive Officer

DATE ORDERED September 27, 1984

Attachment:
"Appendix E"