

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 87-037

REQUIRING IT CORPORATION, VINE HILL AND BAKER FACILITIES,
MARTINEZ, CONTRA COSTA COUNTY, TO CEASE AND DESIST DISCHARGING
WASTE IN VIOLATION OF WASTE DISCHARGE REQUIREMENTS AND THREATENING TO
DISCHARGE WASTE IN VIOLATION OF THE TOXIC PITS CLEANUP ACT OF 1984

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

1. IT Corporation (hereinafter called the Discharger) owns and operates Class I treatment and disposal sites called the Baker and Vine Hill facilities. There are twenty-two unlined and one temporarily closed surface impoundments at the two facilities. There is also a waste treatment complex at the Vine Hill facility. The sites are located east of Martinez in Contra Costa County and are adjacent to Walnut and Pacheco Creeks. The locations of the sites are shown in Attachment A, which is incorporated herein and made a part of this Order.
2. The Board adopted Waste Discharge Requirements (Order No. 78-76) on September 19, 1978, which prescribe prohibitions, waste disposal specifications, leachate and drainage specifications, and provisions designed to protect waters of the State.
3. Order No. 78-76 states in part:
 - "A. Prohibition
 1. The discharge of any waste or polluted runoff from the disposal areas to surface waters or groundwaters of the state is prohibited.
 - B. Waste Disposal Specifications
 2. Waste materials shall be confined to the disposal sites as shown on Attachment A at all times and shall not be placed in any position where they can be carried from the disposal sites and discharged into waters of the State."
4. Section 25208.6 of the California Health and Safety Code (Toxic Pits Cleanup Act of 1984 or TPCA) states that "when a Regional Board determines that a surface impoundment is polluting, or threatens to pollute, the waters of the State ..., the Regional Board shall either order the surface impoundments to close, if the Regional Board determines that requiring the installation of double liners and a leachate collection system and the conducting of groundwater monitoring, ..., does not provide reasonable assurance of protection against future migration into the vadoes zone or the waters of the state, or take both of the following actions:

- a. issue a cease and desist order pursuant to Section 13301 of the Water code prohibiting any discharge into the surface impoundment and require appropriate removal and remedial actions by the person or other responsible parties to clean up any pollution which may have occurred.
 - b. require the surface impoundments to comply with subdivision (a) of Section 25208.5. The Regional Board shall not grant an exemption for such a surface impoundment pursuant to subdivision (c) of Section 25208.5." (double liners, leachate collection system, groundwater monitoring)
5. Section 25208.5 of the California Health and Safety Code (TPCA) states "on or after after January 1, 1989, no person shall discharge any liquid hazardous waste or hazardous waste containing free liquids into a surface impoundment, unless the surface impoundment is double lined, ... equipped with a leachate collection system, and ground water monitoring is conducted,..."
 6. Section 25208.4 of the California Health and Safety Code (TPCA) states "a person shall not discharge liquid hazardous waste or hazardous waste containing free liquids into a surface impoundment, if the surface impoundment, or the land immediately beneath it, contains hazardous wastes and is within one-half mile upgradient from a potential source of drinking water."
 7. The surface impoundments at the Baker and Vine Hill facilities are not within one-half mile upgradient from a potential source of drinking water.
 8. The actual and potential beneficial uses of Walnut Creek are:
 - * Water contact recreation
 - * Non-contact water recreation
 - * Warm fresh water habitat
 - * Cold fresh water habitat
 - * Wildlife habitat
 - * Fish migration
 - * Fish spawning
 9. The actual and potential beneficial uses of Pacheco Creek are:
 - * Non-contact water recreation
 - * Warm fresh water habitat
 - * Cold fresh water habitat
 - * Wildlife habitat
 - * Fish spawning
 10. The actual and potential beneficial uses of local ground waters are:
 - * Industrial process water
 - * Industrial service supply
 - * Agricultural supply

11. On September 30, 1986, the Executive Officer issued Cleanup and Abatement Order No. 86-014 (CAO) to the Discharger. The CAO instructed the Discharger to summarize existing data, perform hydrogeologic investigations, and determine the status of the Baker and Vine Hill facilities with regard to the TPCA.
12. Finding 26 of the CAO states: "..., it is evident that surface impoundments at both Baker and Vine Hill threaten to pollute State waters. Specifically, the States waters that are threatened are adjacent surface waters and ground water under the site. ...".
13. Based on Finding 26 of the CAO, Task 13 (a) of the CAO instructed the Discharger to determine whether the installations of double liners, a leachate collection system, and implementing ground water monitoring could reasonably assure protection of State waters. If the Discharger determined that these measures would adequately protect State waters, then the Discharger should have proposed a time schedule for their implementation. If the Discharger determined that these measures would not adequately protect State waters, or if the Discharger chose not to implement these measures, then the Discharger was required to submit a closure proposal. Alternatively, individual ponds could be exempted from Task 13 (a) if the Discharger proved to the satisfaction of the Executive Officer that the individual ponds were not threatening to pollute State waters.
14. The Discharger chose to pursue the alternative, identified in Find 13 above, and submitted a report dated December 15, 1987, with supplemental reports dated February 13, 1987 and February 24, 1987, to show that the surface impoundments are not threatening to pollute State waters.
15. Based on the available evidence, the surface impoundments at the Baker and Vine Hill facilities are threatening to pollute State waters. Specifically, the surface impoundments are threatening to adversely impact the beneficial uses of Pacheco and Walnut Creeks.
16. The threat of pollution requires that the closure process, including pond liquid removal, should begin immediately. However, the degree of threat is small and does not warrant a more aggressive liquid removal schedule than that necessary to meet the statutory deadline of January 1, 1989, as specified in Section 25208.5 of the Health and Safety Code. Final closure should be completed as expeditiously as possible after liquid removal. Even if the surface impoundments at the Baker and Vine Hill facilities were not threatening to pollute State waters, the closure process should still begin immediately to assure compliance with Section 25208.5 of the Health and Safety Code.
17. Based on reports and evaluations cited in Finding 24 of the CAO, the Discharger is violating or threatening to violate Prohibition A.1 and Waste Disposal Specification B.2 of Waste Discharge Requirements, Order No. 78-76.
18. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) in accordance with Section 15321 Chapter 3, Title 14 of the

California Administrative Code because this is an enforcement action of a regulatory agency.

19. The Board has notified the Discharger and interested agencies and persons of its intent to issue this Order and has provided them with the opportunity for a public hearing and to submit their written views and recommendations.
20. The Board, in a public hearing, heard and considered all comments pertaining to this matter.

IT IS HEREBY ORDERED, pursuant to Section 13301 of the California Water Code, that IT Corporation, Vine Hill and Baker Facilities, Cease and Desist from violating Waste Discharge Requirements and from threatening to violate the Toxic Pits Cleanup Act of 1984 as follows:

1. By May 15, 1987, submit newly surveyed information on all twenty two surface impoundments at the Baker and Vine Hill facilities, including the Acme ponds. The surface areas and depth of ponds shall be measured and not from historic data. The information required for each pond is as follows:
 1. Surface area (acres)
 2. Total depth of pond including the two feet freeboard (feet)
 3. Depth of sludge as of May 1, 1987 (feet)
 4. Depth of liquid as of May 1, 1987 (feet)
 5. Liquid inventory as of May 1, 1987 (acre-feet)
2. By June 1, 1987, submit (1) a detailed projection for surface impoundment cover installation/removal for period of June through September 1987, and (2) a detailed plan and schedule for fully covering all the surface impoundments before the beginning of the 1987-88 winter rainy season, i.e. October 15, 1987.
3. By May 1, 1987, submit design and operation information on the dual stage mechanical evaporation system, for both the pilot and full scale, currently considered for the removal of pond liquids. Include the projected time-line for the installation and start up of the treatment system. The information shall be as detailed as possible given the information available by that date.
4. By July 1, 1987, submit a preliminary closure plan. The plan shall include descriptions of the various tasks leading to final closure. The tasks shall include, but not be limited to, operating the facilities to continually reduce liquid inventory, removing/treating pond liquids, removing/treating pond sludges, assessing the extent of contaminated soils beneath the ponds, removing/disposing of contaminated soil, and designing/constructing final containment structures. In areas where several alternatives are being considered to achieve a particular task, the plan shall include a description of each alternative. The alternatives should be ranked in terms of their likelihood of occurrence. The following should be identified for each of the alternatives:

1. Feasibility;
 2. Practically achievable liquid removal rate; and
 3. Time-line and key permitting requirement for the installation of the treatment unit(s), if applicable.
 4. Potential for creating a nuisance as defined in Section 13050 (m) of the California Water Code.
5. By December 1, 1987, submit a detailed closure plan for all the surface impoundments at both the Baker and Vine Hill facilities, including pond 102 B and the Acme ponds, in accordance with Article 9, Subchapter 15, Chapter 3, Title 23 of the California Administrative Code, and in accordance with 40 CFR 265 of the Resource Conservation and Recovery Act. The closure plan shall be of sufficient detail to provide the information necessary to allow the closure and post-closure permitting process to proceed. In addition to the prescribed requirements, the plan shall include a thorough examination of all the possible alternatives for removing the liquids from the hazardous waste surface impoundments. The alternatives should be ranked in terms of their likelihood of occurrence. The following should be identified for each of the alternatives:
1. Feasibility;
 2. Practically achievable liquid removal rate; and
 3. Time-line and key permitting requirement for the installation of the treatment unit(s), if applicable.
 4. Potential for creating a nuisance as defined in Section 13050 (m) of the California Water Code.
6. Measure the liquid inventory in each surface impoundments weekly and report the information monthly to the Board by the 10th day of the following month.
7. Operate the Baker and Vine Hill facilities such that the total liquid inventory in the surface impoundments at the two sites meets the following conditions:
- a. All surface impoundments shall contain no liquid hazardous waste or hazardous waste containing free liquids on or after January 1, 1989; and
 - b. Waste may continue to be received at the two facilities if the total liquid inventory is maintained below the allowable quantity for a particular month as calculated by Equation 1. Equation 1 is schematically represented, for informational purposes only, by the solid lines in Figure 1. If the inventory exceeds the quantity permissible for the particular month, as calculated by Equation 1, the Discharger shall immediately cease accepting waste at the two facilities. The Discharger shall not resume accepting waste until the inventory is more than five percent below the allowable quantity and the Discharger has received concurrence of that fact from the Board's staff.

for t = 8 to 11 months I = 55

for t = 12 to 20 months I = 122.2 - (6.11 x t)

where I = liquid inventory (% of inventory as of 5/1/87)
t = time after 5/1/87 (months); and

c. If the total liquid inventory exceeds the allowable quantity for a particular month as calculated by Equation 2, the Discharger must immediately actively reduce the liquid inventory. Equation 2 is schematically represented, for informational purposes only, by the dashed lines in Figure 1. Active measures to reduce liquid inventory may include trucking the liquids to another hazardous waste facility permitted to accept liquids or treating the liquids by appropriate means. The method of inventory reduction must receive verbal approval from the Board's staff prior to implementation.

EQUATION 2:

for t = 0 to 11 months I = 100 - (2.27 x t)

for t = 12 to 20 months I = 166.7 - (8.33 x t)

where I = liquid inventory (% of inventory as of 5/1/87)
t = time after 5/1/87 (months)

The Board's staff shall be notified immediately by telephone if the liquid inventory approaches within 5 percent of either of the limits specified in items (b) or (c) above. A followup report shall be submitted within 15 days of the notification.

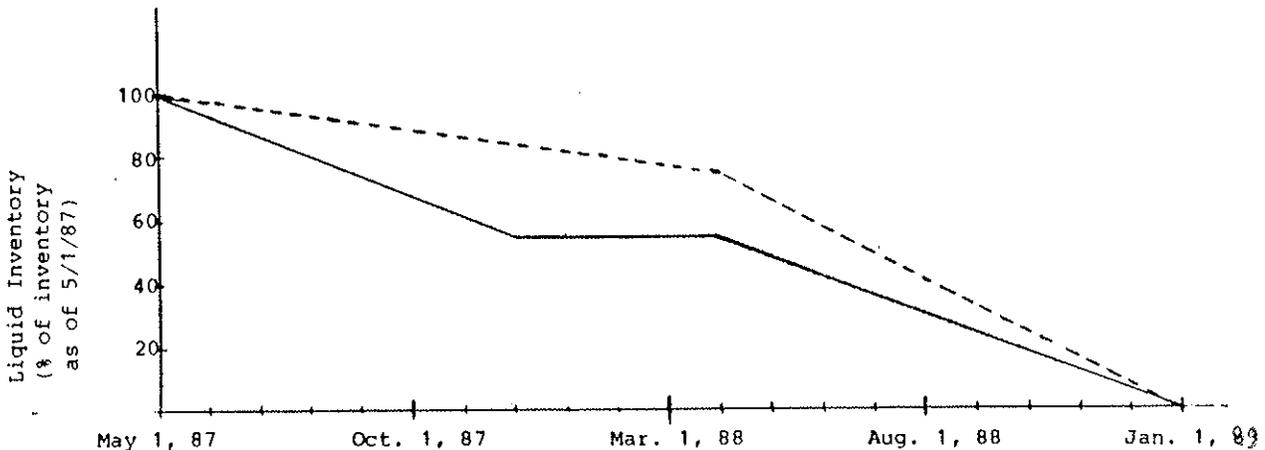
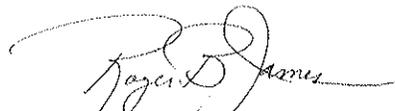


Figure 1

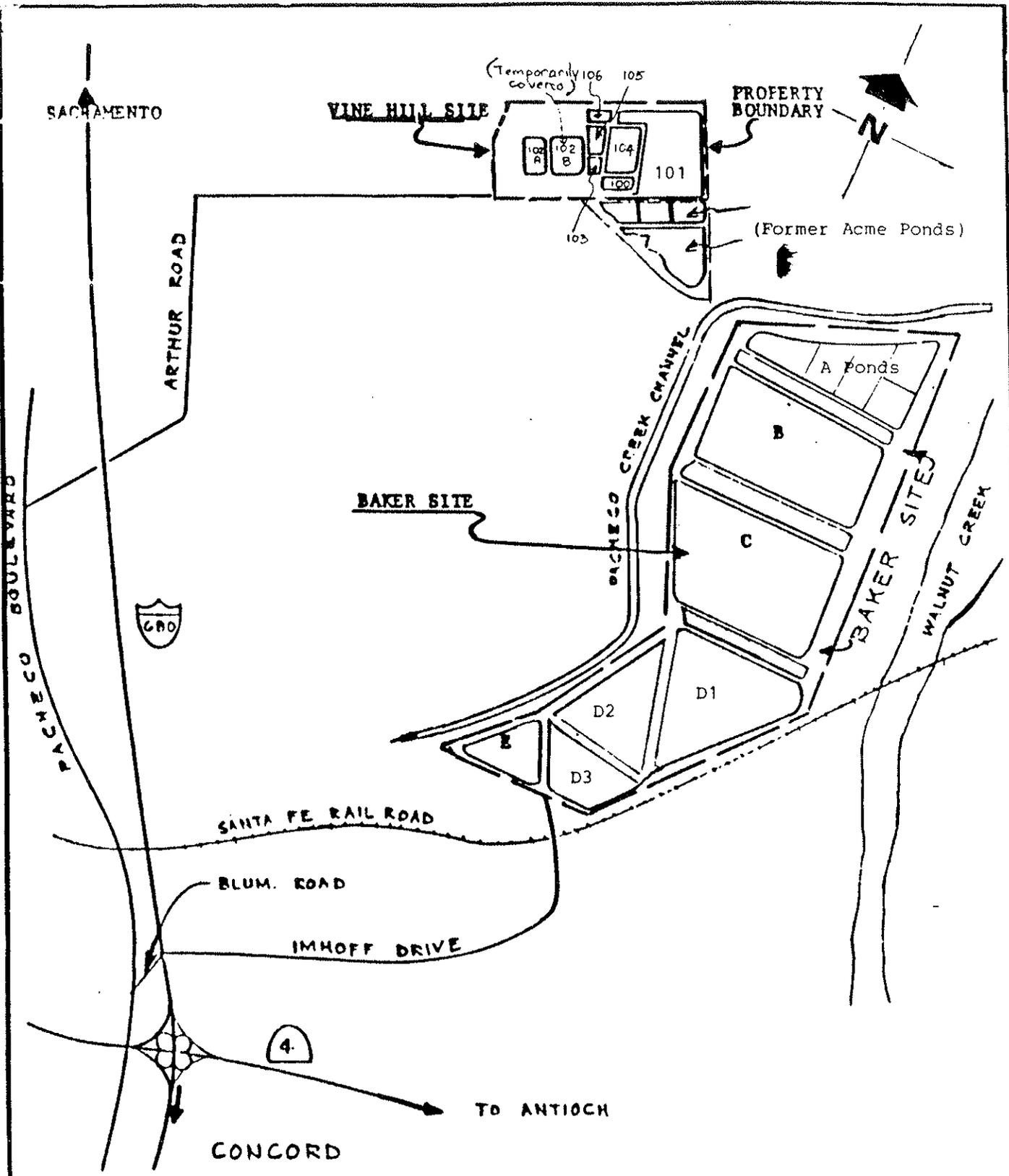
8. By June 1, 1987, the Discharger shall submit a proposal and time schedule for determining the possible impact of leaking waste constituents on the benthic biota of Walnut and Pacheco Creeks. The

8. By June 1, 1987, the Discharger shall submit a proposal and time schedule for determining the possible impact of leaking waste constituents on the benthic biota of Walnut and Pacheco Creeks. The proposal shall include, at a minimum, a benthic organism survey and an analysis of waste constituent concentrations in the creek sediments and in organism body tissue. The proposal shall cover Pacheco and Walnut Creeks adjacent to the Baker facility and background locations.
9. All submittals must be made as follows: two copies to the Board, one copy to the State Water Resources Control Board, one copy to the Department of Health Services, one copy to the Environmental Protection Agency, and one copy to the Contra Costa County Environmental Health Department.
10. If the Executive Officer finds that new monitoring data indicate an increased threat of pollution from the facilities, he is directed to bring this Order back to the Board for reconsideration of the compliance schedule contained herein.
11. If the Executive Officer finds that the Discharger has failed to comply with the provisions of this Order, he is authorized, after approval of the Board Chairman, to request the Attorney General to take appropriate action against the Discharger, including injunctive and civil remedies, if appropriate, or to issue a Complaint for Board consideration of administrative civil liabilities.

I, Roger B. James, 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 April 15, 1987.


ROGER B. JAMES
Executive Officer

Attachment:
A. Site map



LEGEND
 - - - - - PROPERTY BOUNDARY
 □ EVAPORATION & STORAGE-PONDS

STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION		
I T ENVIRONMENTAL CORPORATION & IT OIL CORPORATION		
LOCATION OF CLASS I DISPOSAL SITE MARTINEZ, CONTRA COSTA COUNTY ATTACHMENT A ORDER NO: 87-037		
DRAWN BY:	DATE:	DRWG NO.