Purpose: RCRA Facility Assessment

Site: Bay Area Environmental
1125 Hensley Street
Richmond, California
Contra Costa County

Site EPA ID Number:	CAT080014079
TDD Number:	F9-8909-069
Program Account Number:	FCA1189CAA
Report Prepared By:	Matthew Williams
Date of Visual Site Inspection:	November 2, 1989
Report Date:	February 1, 1990
FIT Review/Concurrence:	James R. Jones 1/29/90
Submitted To:	Paul La Courreye Site Screening Coordinator EPA, Region IX

ecology and environment, inc.

160 SPEAR STREET, SAN FRANCISCO, CALIFORNIA 94105, TEL. 415/777-2811

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1. INTRODUCTION

On November 13, 1987 the U.S. Environmental Protection Agency (EPA) revised procedures for planning and implementing off-site response actions. This policy, "Revised Procedures for Planning and Implementation of Off-Site Response Actions," amends the original off-site policy issued in May 1985 and incorporates changes required under Section 121(d)(3) of the Superfund Amendments and Reauthorization Act of 1986 (SARA). The purpose of the off-site policy is to prevent Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) wastes from contributing to present or future environmental problems by directing these wastes to treatment facilities determined to be environmentally sound. This determination will be made by conducting Resource Conservation and Recovery Act (RCRA) Facility Assessments (RFAs) at RCRA-regulated sites that curently accept, or may in the future accept, CERCLA wastes. Bay Area Environmental has been identified by the EPA as a facility requiring an RFA to determine if the facility is environmentally sound and can accept CERCLA wastes.

The RFA, which evaluates a facility's acceptability under the off-site policy, consists of two stages. The first stage, the Preliminary Review (PR), consists of an off-site drive-by of the facility and an evaluation of existing information to identify and characterize potential releases to the environment. This information is used to focus the investigative activities of the second stage of the RFA, the Visual Site Inspection (VSI), which consists of an on-site visit. The VSI confirms and supplements information obtained during the PR stage regarding potential or actual releases at the facility, and determines if sampling or remedial measures are necessary.

This report summarizes information obtained by Ecology and Environment, Inc.'s Field Investigation Team (FIT) during the PR and VSI regarding releases from the facility and the site's eligibility for listing on the National Priorities List (NPL). Information sources utilized include interviews and file searches at the California Department of Health Services (DHS) and a site visit with officials of Bay Area Environmental.

2. FACILITY DESCRIPTION

The Bay Area Environmental facility (BAE) is located at 1125 Hensely St., Richmond, California (see Figure 2-1, Site Location Map). BAE occupies 0.8 acres in an industrial part of the city. The facility consists of two hazardous waste storage sheds, loading areas, a maintenance shop-staging area, and a laboratory for determining the contents of drums shipped to the facility (see Figure 2-2, Facility Map). BAE operates a permitted hazardous waste transfer facility. BAE is permitted to store 84 55-gallon drums each of acids, toxics, and oxidizers, 105 drums of caustics, and 53 drums of flamables (see Appendix C for a complete list of acceptable wastes). The facility stores wastes until a truckload (approximatley 80 drums) can be assembled, and then ships the waste via truck to class I disposal facilities.

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In 1987 the facility graded the area between the acids/pesticides/caustics shed and the flammables/oxidizers shed so that the area drains to the north. Berms were installed along the northwestern and northeastern edges of the facility to control run-off from the facility. A locking drain valve was also installed in the northern corner of the facility near Amstan Way (see Figure 2-2). The combination of the berms and the locking drain valve allow the facility to prevent drainage from the portion of the facility between the storage sheds should a spill occur.

Wastes that are brought to the facility are screened using the Hazard Categorization System (a series of simple tests to determine an unknown chemical's properties, e.g., flammability or corrosivity) to determine which of the storage bays should receive the waste. The facility also operates a laboratory on site to conduct more detailed analyses of wastes brought to the facility. Samples from some drums are collected to determine the constituents of a particular drum and to prevent the entrance of prohibited wastes into the facility.

2.1 REGULATORY INVOLVEMENT

The California Dept. of Health Services (DHS) is in the process of filing a complaint against Bay Area Environmental with the state Attorney General's Office (1). The complaint arises from a July 20, 1987 acid spill that took place at the 1125 Hensley St. facility and caused a release of acid gas and mist to the atmosphere. The spill occurred when four polypropylene tanks containing an acid-metal mixture (30% nitric acid, 30% sulfuric acid, 30% hydrochloric acid, and 10% metal/water mix) reacted photolytically, causing pressure and heat to build up in the tanks. The pressure build-up burst the tanks, releasing approximately 500 to 900 gallons of the mixture (2). Metals contained in a sample from one of the tanks were nickel, copper, chromium, zinc, cobalt, lead, cadmium, molybdenum, vanadium, barium, and silver (3). Of these, only nickel occurred above the Total Threshold Limit Concentration (TTLC) of 2000 mg/Kg (3).

Following the spill, soil samples were taken in the affected area at depths of 6 and 12 inches along a 10-foot square grid. The samples were analyzed for metals and pH. Results of the sample analyses indicated a pH range between 3.7 and 9.0 (3). Two of the samples had nickel levels of 41 and 74 mg/Kg, which are above the Soluble Threshold Limit Concentration (STLC) of 20 mg/Kg (3). At the conclusion of sampling activities, BAE excavated the area and removed the contaminated soil to a Class I disposal facility. The cleanup was supervised by the California Regional Water Quality Control Board (RWQCB), who gave BAE permission to asphalt the area upon completion of sampling and cleanup activities (4,5). There does not appear to have been a post-cleanup sampling effort.

The BAE facility is listed in the RCRA database as a generator, transporter, and a treatment, storage, or disposal facility. The facility has RCRA permits for the transport and storage of hazardous wastes. Currently, BAE has applied to DHS to change its Part B permit to allow treatment of hazardous materials (6). BAE is requesting that the permit allow the use of Transportable Treatment Units (TTUs) for on-site and off-site treatment of client generators waste streams. BAE's initial

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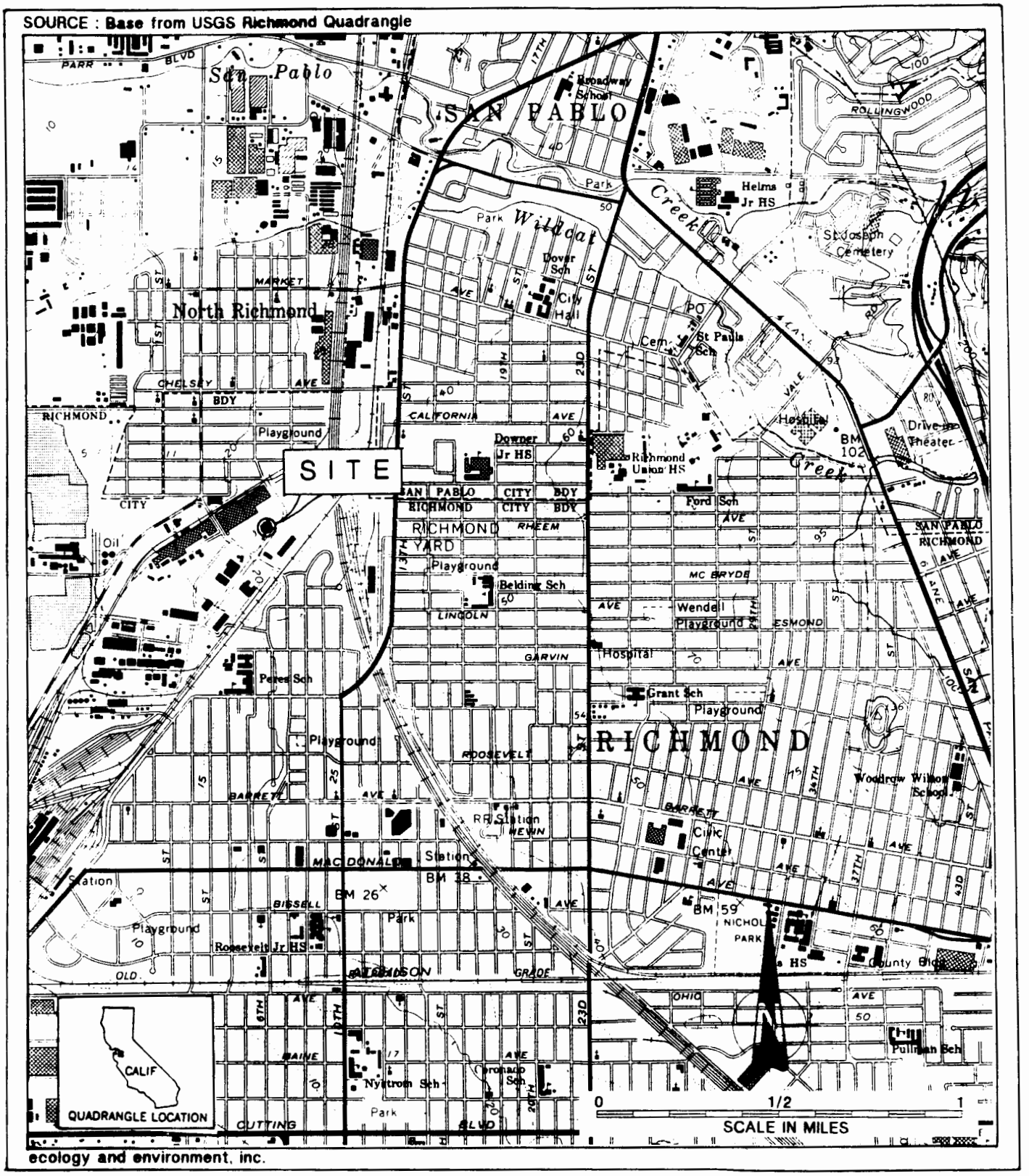

Figure 1 SITE LOCATION MAP
BAY AREA ENVIRONMENTAL
1125 HENSLEY STREET
RICHMOND, CA

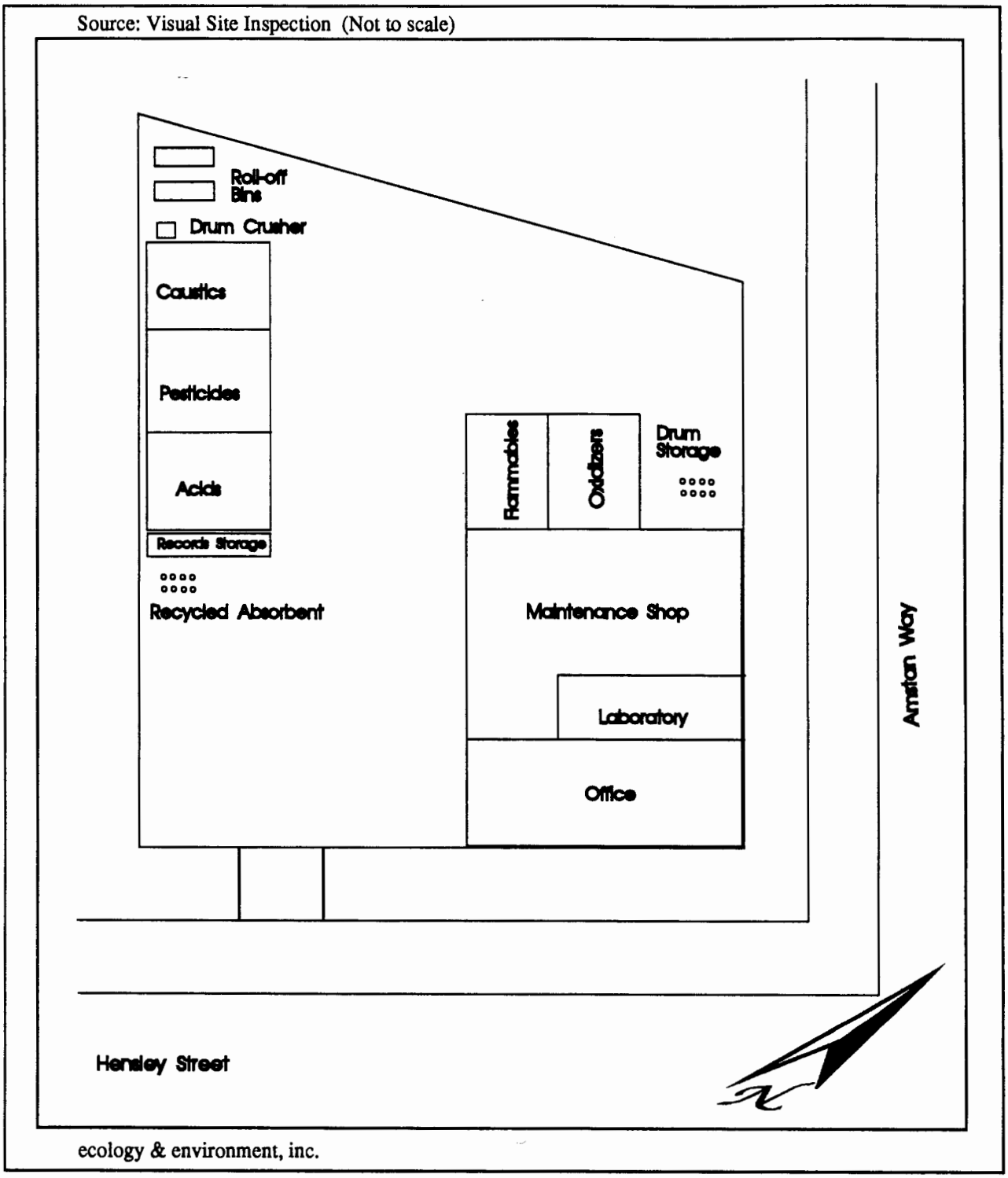

FIGURE 2
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3. DESCRIPTIONS OF INDIVIDUAL SOLID WASTE MANAGEMENT UNITS

Distinct Solid Waste Management Units (SWMUs) have been identified to evaluate potential on-site sources of releases to air, surface water, groundwater, soil, and subsurface gas. A SWMU is defined as any discernible waste management unit at a facility from which hazardous constituents might migrate, irrespective of whether the unit was intended for the management of solid and/or hazardous waste. FIT identified eight SWMUs at the site.

3.1 ACID/PESTICIDE/CAUSTIC STORAGE SHED

3.1.1 Information Summary

Unit Description

The acids/pesticides/caustics storage shed is divided into three bays that are used for the interim storage of acids, pesticides, and caustics (see Figure 2-2, Facility Map). The shed's floor is a 5-inch concrete slab. The slab is divided into the three bays by 6-inch concrete berms, so that each bay is bermed and open to the front of the shed (7). The slab slopes to the rear of the bay so that liquids spilled in the bays will flow to the rear (7). The bays have no drainage outlet (8). The shed is protected from rain by a corrugated steel roof supported by steel I-beams. The walls are also constructed of corrugated steel. The front of the shed is open (9).

The acid bay is permitted to have a maximum of 84 drums stored at any one time, the pesticide bay is permitted for 84 drums, and the caustics bay is permitted for 105 drums (10). At the time of the VSI there were 46 drums in the acid bay, 58 drums in the pesticide bay, and 28 drums in the caustic bay.

Date of Start-up

BAE was permitted on August 2, 1983 to operate a temporary storage facility for hazardous waste generators. The acids/pesticides/caustics shed was built in 1982 (10).

Date of Closure

The acids/pesticides/caustics shed is still operational.

Wastes Managed

This unit manages acid, pesticide, and caustic wastes (see Appendix C) (8). The acid/pesticides/caustics shed has a permitted capacity of 84 55-gallon drums of acid, 84 drums of pesticides, and 105 drums of caustics.

Release Controls

The acids/pesticides/caustics shed is covered, bermed, and slopes to the rear to prevent drainage to the outside. Each bay in the shed can contain 10 percent of the stored volume without overflowing, and the cement has a chemical resistant coating (10). The area is inspected every day before the facility opens for business, and again before the facility closes (8).

History of Releases

At approximately 8:00 a.m. on June 23, 1988, during the morning inspection, a BAE employee discovered a small hole in one of the drums stored in the acid bay. The drum leaked an estimated 10 gallons of liquid, covering approximately 80 to 100 square feet. The liquid did not escape outside of the acid bay. Cleanup of the liquid was completed by 9:00 a.m. BAE notified DHS and filed an incident report (11).

From 12:10 to 12:15 p.m. on September 9, 1988, a vapor was released from a drum containing acetic anhydride. The drum was repacked, and the acetic anhydride was neutralized to raise the pH to 6 by using sodium hydroxide. BAE notified DHS and filed an incident report (12).

3.1.2 Conclusions

Soil/Groundwater Release Potential

The potential for the acids/pesticides/caustics storage shed to release contaminants to soil or groundwater is minimal since the containment provided by the berms and sloping floor appears adequate. The shed is monitored with sufficient frequency to detect spills, and the likelihood of a spill large enough to overflow the containment is small since it would require the simultaneous catastrophic rupture of several drums.

Surface Water Potential

The potential for a release to surface water is also small since the shed has no drainage. The berms protect the shed from run-on surface waters, and the shed is protected from rain.

Air Release Potential

The potential for a release to air is also low since the wastes are stored in sealed, 55-gallon drums. Except for the acetic anhydride vapor incident, there have been no other recorded releases from this unit.

3.2 FLAMMABLES/OXIDIZERS SHED

3.2.1 Information Summary

Unit Description

The flammables/oxidizers shed is located adjacent to the maintenance shop (see Figure 2-2, Facility Map). The flammables/oxidizers shed is separated from the maintenance shop by a fire wall, which forms the east wall of the shed (8). The shed's floor is a 5-inch concrete slab divided into two bays by 6-inch concrete berms (7). The edges of the slab are also bermed to prevent run-off. The roof is corrugated steel held up by steel I-beams. The north and south walls are made of corrugated steel, and the front (west wall) is open. The two bays drain to concrete lined sumps, which have no outlet (8).

Date of Start-up

The flammables/oxidizers shed was built in 1982; it was permitted to operate under BAE's permit from the DHS, dated August 2, 1983 (10).

Date of Closure

The flammables/oxidizers shed is currently in operation.

Wastes Managed

The wastes managed consist of flammables and oxidizers (see Appendix C). The shed has a permitted capacity of 84 drums of oxidizers and 53 drums of flammables.

Release Control

The flammables/oxidizers shed is built with a bermed, sloping floor that drains into two concrete sumps with no outlets. Each bay drains into a separate sump (8). The bays in the flammables/oxidizers shed can contain 10% of their volume, and have been treated with a chemical resistant coating, as required by BAE's operating permit (10). The flammables bay and the oxidizers bay are inspected once a day in the morning before the facility opens, and quickly once more before the facility closes.

History of Release

There have been no recorded releases from the flammables/oxidizers shed.

3.2.2 Conclusions

Soil/Groundwater Release Potential

The potential for a release of contaminants from the flammables/oxidizers shed to soil or groundwater is minimal due to the sloping floor and the

lack of drainage from the concrete sumps to the outside. The shed is monitored with sufficient frequency to detect spills. The likelihood of a spill large enough to overwhelm the capacity of the respective bays and sumps is small since it would require the simultaneous catastrophic failure of several drums.

Surface Water Potential

The potential for a release to surface water is also small since the shed has no drainage. The berms protect the shed from run-on surface waters, and the shed is protected from rain.

Air Release Potential

The potential for an air release is also low since the wastes are stored in sealed, 55-gallon drums.

3.3 DRUM CRUSHER

3.3.1 Information Summary

Unit Description

The drum crusher is located to the west of the acids/pesticides/caustics shed (see Figure 2-2, Facility Map). The facility consolidates wastes, and the leftover, empty drums are crushed and placed in roll-off bins adjacent to the crusher (9). The crusher sits on an asphalt portion of the BAE lot that has been lined with a plastic tarp (see Appendix B, Photodocumentation). Although the crusher has no cover or run-off control, during its operation mobile berms are placed around, and a drip pan is put under the crusher (9). The BAE facility does not rinse the drums from the consolidation process before crushing them (9).

Date of Start-up

The drum crusher has been in operation at the BAE facility since mid-1989 (13).

Date of Closure

The drum crusher is still operational.

Wastes Managed

The wastes managed by the drum crusher are used drums that contained acids, pesticides, caustics, flammables, or oxidizers, and were emptied during the consolidation of wastes (8).

Release Control

There are no release controls installed on the drum crusher. However, during crushing operations, mobile berms are placed around the unit, and the drum crusher is then placed on top of a drip pan to catch any wastes that might remain in the drums (9).

History of Release

There have been no recorded releases of wastes from the drum crusher.

3.3.2 Conclusions

Soil/Groundwater Release Potential

The potential for a release to soil or groundwater from the drum crusher is moderate since the drip pan may be insufficient to contain a release, and the asphalt surface beneath the drum crusher would not be adequate to contain solvents. The drums are not rinsed before crushing (9).

Surface Water Potential

The potential for a release to surface water from the drum crusher is minimal due to the residual quantities of the wastes managed by the unit and the locking drain valve and berms installed to prevent spills from reaching the street.

Air Release Potential

The potential for residual quantities of hazardous materials to vaporize or sublimate from the drums is moderate since the drum crusher has no vapor release controls.

3.4 ROLL-OFF BINS

3.4.1 Information Summary

Unit Description

The facility operates two covered roll-off bins that are used for containing and transporting the crushed drums to a class I facility (8). The bins are located just west of the acids/pesticides/caustics shed and rest on a portion of the asphalted section of the BAE lot (see Figure 2-2, Facility Map). The asphalt is covered with a plastic tarp. The bins are heavy enough that they have damaged the asphalt (see Appendix B, Photodocumentation). Once the bins are filled, they are transported to a Class I landfill to be emptied, and replacement bins are brought by the supplier (13).

Date of Start-up

The facility began using roll-off bins to contain crushed drums in mid-1986 (13).

Date of Closure

The bins are still operational.

Wastes Managed

The roll-off bins are used to contain and transport the crushed drums from the drum crusher (8).

Release Control

The roll-off bins are constructed of steel; a plastic liner is placed between the bins and the asphalt surface of the BAE yard.

History of Release

There is no evidence of a release from the roll-off bins.

3.4.2 Conclusions

Soil/Groundwater Release Potential

The potential for a release to soil or groundwater from the roll-off bins to the soil is small since the wastes handled (crushed drums) contain only residual quantities of hazardous substances, and the bins are adequately constructed to contain these quantities.

Surface Water Potential

The possibility of a surface water release is also small since the openings to the bins are high, and a spill is unlikely.

Air Release Potential

The potential for an air release from the roll-off bins is moderate. The possibility exists for hazardous substances to sublimate or vaporize from the crushed drums; however, since the drums contain only residual amounts of hazardous substances, documentation of an observed release is unlikely.

3.5 MAINTENANCE SHOP - DRUM STAGING AREA

3.5.1 Information Summary

Unit Description

The drum staging area is inside the maintenance shop. During days when the facility collects household hazardous wastes, the maintenance shop is used as a staging area to sort the wastes. Also, if BAE receives a drum whose contents are unknown, the maintenance shop is used to identify the contents (9).

The floor of the maintenance shop is a concrete slab (8). The walls and ceiling are made of corrugated steel. The front of the shop is a large roll-up door (8,9). The staging area is not bermed from the rest of the maintenance shop, but the maintenance shop does not drain to the outside (8,9). If drum sampling is to take place in the maintenance shop, mobile berms are set up (9). Once the drum contents have been identified, the drum is taken to the appropriate storage bay (9).

Date of Start-up

The maintenance shop was built in 1982; its operation is allowed under BAE's permit from the DHS, dated August 2, 1983 (10).

Date of Closure

The maintenance shop and the staging area are still in operation.

Wastes Managed

The wastes managed by the maintenance shop/drum staging area are: acids, pesticides, caustics, flammables, and oxidizers (see Appendix C).

Release Control

There are no release controls installed in the maintenance shop/drum storage area. Mobile berms, the lack of outside drainage, and supervision of wastes are relied on to contain possible spills.

History of Release

There is no record of releases from the maintenance shop/drum staging area.

3.5.2 Conclusions

Soil/Groundwater Release Potential

The maintenance shop/drum staging area appears to have adequate containment due to the concrete floor.

Surface Water Potential

The potential for a release to surface water from the maintenance shop/drum staging area is small since the area has no drainage to the outside, and the wastes staged are monitored until they have been identified and placed in the appropriate bay.

Air Release Potential

The potential for an air release from this unit is also minimal since the drums are only opened for sampling purposes, and the wastes are supervised until they are placed in the appropriate bay.

3.6 POLYPROPYLENE ACID STORAGE TANKS

3.6.1 Information Summary

Unit Description

In June of 1987 four polypropylene tanks containing waste acids were brought to the BAE facility. These tanks were stored outside the acid

bay, where they underwent a photolytic reaction that caused them to burst. These four polypropylene tanks were manufactured by the Rotational Molding Company of Gardenia, California (14). The tanks had a U.S. Department of Transportation exemption that allowed them to be used for the storage and transport of materials classified as acids (14). Each tank had a 300-gallon capacity. They were stored to the west of the acids/pesticides/caustics shed. At the time of their installation, the surface of the BAE lot to the west of the maintenance shed was covered with gravel instead of asphalt (2).

Date of Start-up

The tanks were brought to BAE in July 1987 (2).

Date of Closure

The tanks were removed in July 1987 as part of the cleanup process (2).

Wastes Managed

The wastes stored in the polypropylene tanks were acids containing 30% nitric, 30% hydrochloric, and 30% sulfuric acids, and a 10% metal/water mix (3).

Release Control

The polypropylene tanks had no release controls installed.

History of Release

A spill occurred when four polypropylene tanks containing an acid-metal mixture (30% nitric acid, 30% sulfuric acid, 30% hydrochloric acid, and 10% metal/water mix) reacted photolytically, causing pressure and heat to build up in the tanks (2). The pressure build-up burst the tanks, releasing approximately 500 to 900 gallons of the mixture (2). The

metals contained in a sample of one of the tanks were nickel, copper, chromium, zinc, cobalt, lead, cadmium, molybdenum, vanadium, barium, and silver (3). Of these, only nickel occurred above the Total Threshold Limit Concentration (TTLC) of 2000 mg/Kg (3).

Following the spill, soil samples were taken in the affected area at depths of 6 and 12 inches along a 10-foot grid. The samples were analyzed for metals and pH. Results of the sample analyses indicated a minimum pH of 3.7 and a maximum of 9.0 (3). Two of the samples had nickel levels of 41 and 74 mg/Kg, which are above the Soluble Threshold Limit Concentration (STLC) of 20 mg/Kg. At the conclusion of sampling activities, BAE excavated the area and removed 50 cubic yards of contaminated soil to a Class I disposal facility (15). RWQCB supervised the cleanup and gave BAE permission to asphalt the area upon completion of sampling and cleanup activities (4,5).

3.6.2 Conclusions

Soil/Groundwater Release Potential

The tank rupture in July 1987 allowed hazardous wastes to reach the soil. Soil samples were collected along a 10-foot grid throughout the affected area and analyzed for metals (3). The results of the analyses indicated nickel contamination, and 50 cubic yards of contaminated soil were removed as part of the cleanup operation (15). The depth to groundwater at the site is 5.5 feet (16). There is no potential for any future release since these tanks have been removed (2,15,8).

Surface Water Potential

The potential for a surface water release from this SWMU is unlikely since the nearest surface water, Wildcat Creek, is 0.75 miles from the site (17). Also, since the spill occurred onto a gravel surface, run-off was less likely than absorption through the soil.

Air Release Potential

The acid spill on July 20, 1987 can be considered an observed release of hazardous waste based on the written accounts given of the emissions from the burst tanks by DHS and the Richmond Police, and the results of a sample taken from one of the tanks documenting its contents (3). There is no potential for future emissions since the SWMU has been removed (2,8,15).

3.7 OLD DRUM CRUSHER

3.7.1 Information Summary

Unit Description

The old drum crusher was set up in the maintenance shop in order to crush the drums that were emptied in the waste consolidation process. It appears that the crusher was not isolated from the rest of the maintenance shop during crushing activities (13). After crushing, drums were placed in roll-off bins for disposal off site (13).

Date of Start-up

The facility began using the drum crusher in mid-1986 (13).

Date of Closure

The old drum crusher was taken out of service in June 1989 and sent to a metal recycler in October 1989 (9,13).

Wastes Managed

The wastes managed from the old drum crusher were empty drums from the consolidation of wastes (see Appendix C).

Release Control

There were no release controls installed on the drum crusher (13).

History of Release

There is no history of release from the old drum crusher.

3.7.2 Conclusions

Soil/Groundwater Release Potential

The potential for a release to soil or groundwater from the old drum crusher is low due to the low quantity of hazardous constituents remaining in the drums handled by the crusher. Adequate containment appears to have been provided since the unit was operated on top of a concrete slab inside the maintenance shop. The drums are not rinsed as part of the crushing process.

Surface Water Potential

The potential for a surface water release from the drum crusher is minimal due to the small quantity of wastes managed by the unit, and that the containment provided by the maintenance shop appears to have been adequate.

Air Release Potential

The potential for residual quantities of hazardous material to vaporize or sublimate from the drums is moderate. However, since only residual amounts of hazardous wastes remain in the drums, documentation of an observed release is unlikely.

3.8 DRUM LOADING AREAS

3.8.1 Information Summary

Unit Description

The drum loading area is in front of the maintenance shop (see Figure 2-2, Facility Map). Drums are unloaded from trucks and then stored in the

appropriate bay (9). The drums are loaded into the drum staging area until they can be accurately categorized and placed in the appropriate bay (13).

Date of Start-up

The drum loading area was built in 1982; it was permitted to operate under BAE's permit from the DHS, dated August 2, 1983 (10).

Date of Closure

The loading areas are still operational.

Wastes Managed

The wastes managed by the drum loading areas are: acids, pesticides, caustics, flammables, and oxidizers (see Appendix C). Wastes on-site appear to be adequately contained at this time.

Release Control

In 1987 BAE installed a locking drain valve and asphalt berms to prevent the migration of hazardous substances to the street (8,9,13).

History of Release

On January 6, 1989 a drum that had been shipped to BAE from the Alameda Naval Air Station containing nitric acid cracked as it was being loaded onto a flatbed truck (18). The drum released approximately 25 gallons of nitric acid (18). The driver of the truck was splashed with the acid and required first aid and emergency room treatment, but was released the same day. BAE personnel cleaned up the spill. Although the amount released was below the Federal Reportable Quantity (1000 lbs) for nitric acid, BAE made an initial report to the Contra Costa County Office of Emergency Services and filed a report detailing the incident with the DHS on January 11, 1989 (18).

3.8.2 Conclusions

Soil/Groundwater Release Potential

A moderate possibility exists for spills to reach the soil or groundwater due to the condition of the asphalt surfacing the loading area. The asphalt is cracked in places and shows severe signs of compaction due to the weight of heavy equipment and trucks. Waste solvents have the greatest potential to infiltrate the damaged asphalt.

Surface Water Potential

The potential for a release to surface water is small since the area has a locking drain valve to prevent spills from reaching the street. The process of loading and unloading drums is unlikely to release quantities of waste large enough to overflow the locking valve.

Air Release Potential

The potential for a release to air is small since the wastes are loaded and unloaded in sealed containers.

Table 3-1

SUMMARY OF SWMUs AND POTENTIAL RELEASES

(SW = surface water, GW = groundwater)

	SWMU:	Wastes Managed:	Years in Use:	Potential to Release:	
1.	Acids/Pesticides/Caustics Sheds	Acids, Pesticides, Caustics	1983 to present	Air: SW: Soil/GW:	Low Low Low
2.	Flammables/ Oxidizers Shed	Flammables, Oxidizers	1983 to present	Air: SW: Soil/GW:	Low Low Low
3.	Drum Crusher	Crushed Drums	mid-1989 to present	Air: SW: Soil/GW:	Moderate Low Moderate
4.	Roll-off Bins	Crushed Drums	mid-1986 to present	Air: SW: Soil/GW:	Moderate Low Low
5.	Maintenance Shop/Drum Staging Area	Acids, Pesticides, Caustics, Flammables, Oxidizers	1983 to present	Air: SW: Soil/GW:	Low Low Low
6.	Polypropylene Acid Storage Tanks	Acid	1987	Air: SW: Soil/GW:	Observed Low High
7.	Old Drum Crusher	Crushed Drums	mid-1986 to mid-1989	Air: SW: Soil/GW:	Moderate Low Low
8.	Drum Loading Area	Acids, Pesticides, Caustics, Flammables, Oxidizers	1983 to present	Air: SW: Soil/GW:	Low Low Moderate

4. ENVIRONMENTAL SETTING

4.1 PHYSICAL SURROUNDINGS

The facility is located at 1125 Hensley Street, Richmond, California in Contra Costa County. The land use around the facility is an industrial park. The closest dwellings are single-family residential homes approximately 700 yards from the facility (17). The estimated population within 0.25 miles of the site is 1000 people (19).

4.2 GEOLOGY

The BAE site is located between San Francisco Bay and San Pablo Bay, an area underlain by recent Pleistocene alluvium, dune sand, terraces, and river deposits (20). The water bearing strata are close to the surface and subject to salt water intrusion (21). The site is underlain by stiff to very stiff, silty and sandy clays to an explored depth of 35 feet (16).

4.3 HYDROLOGY

4.3.1 Surface Water

There are four surface water bodies within 2 miles of the site. They are: Wildcat Creek, 0.75 miles north of the site; San Pablo Creek, 1.25 miles north of the site; San Pablo Bay, 1.65 miles west of the site; and San Francisco Bay, 1.75 miles south of the site. There are also two wetlands within 2 miles of the site: the Wildcat Creek wetlands and the San Pablo Creek wetlands (17). These two wetlands are the home of two federally designated endangered species: the salt marsh harvest mouse and the California clapper rail (22). There have been no observed releases to surface water. The two-year, 24 hour rainfall in the area is 3 inches (23). The slope of the intervening terrain is 0.2 percent (17).

4.3.2 Groundwater

Monitoring wells were installed at the site in December 1988 as part of a geotechnical investigation of the site to gather information needed for the facility's revised RCRA Part B application. During monitoring well installation, groundwater was initially encountered beneath the site at a depth of 14 to 18 feet (16). At the end of monitoring well drilling activities, the static water level had risen to 9 feet. Prior to well development activities, groundwater levels had risen to between 5.5 and 7 feet. The rise in water level indicates that the groundwater in the area is possibly confined (16).

5. HRS FACTORS

The revised Hazard Ranking System (rHRS) was developed for EPA by the MITRE Corporation to numerically rank hazardous waste sites for placement on the National Priorities List (NPL) under CERCLA. The following rHRS factors, as they apply to Bay Area Environmental, are listed and described individually in the following sections.

5.1 WASTE TYPE/QUANTITY

The facility is permitted to hold 410 drums of hazardous materials. The permit allows 84 drums of acids, 84 drums of pesticides, 84 drums of oxidizers, 105 drums of caustics, and 53 drums of flammables (10). Some of the drums have high concentrations of hazardous constituents, while others, particularly the drums used to collect household hazardous materials, have lower concentrations (see Appendix C). Wastes on site appear to be adequately contained at this time.

The 1987 acid release represents a quantity of 500 to 900 gallons of hazardous waste.

5.2 GROUNDWATER

Groundwater was initially encountered beneath the site at a depth of 14 to 18 feet (16). At the end of monitoring well drilling activities, the water had risen to 9 feet. Prior to well development activities, groundwater levels had risen to between 5.5 and 7 feet. The rise in water level indicates that the groundwater in the area is possibly confined (16). The site is underlain by stiff to very stiff, silty and sandy clays to an explored depth of 35 feet (16). The shallow depth to groundwater increases the potential to release should wastes escape secondary containment.

Groundwater in the area is not used for drinking due to the high salinity of the aquifer (21). Drinking water for the city of Richmond is supplied by the East Bay Municipal Utilities District (EBMUD) (24).

There are approximately 100 operational private wells within 4 miles of the site. None of the wells are used for drinking water (25). All of the private wells are used for industrial purposes or irrigation. Some of the wells are considered agricultural wells since they provide water for flowering plants and, possibly, food for private consumption (21). The closest private well is 0.25 miles from the site (25).

Monitoring wells were installed at the site in December 1988 (16). Surface soils were taken and analyzed for organics. Trichloroethylene (TCE) was detected in one of the samples at 0.7 µg/Kg (26). The monitoring wells were sampled for CAM 17 metals; none were detected except barium, which was found at 0.1 mg/l (24). The federal Maximum Contaminant Limit for barium is 5 mg/l. FIT was unable to determine the source of the TCE or the barium detected in these samples.

5.3 SURFACE WATER

There are four surface water bodies within 2 miles of the site. They are: Wildcat Creek, 0.75 miles north of the site; San Pablo Creek, 1.25 miles north of the site; San Pablo Bay, 1.65 miles west of the site; and San Francisco Bay, 1.75 miles south of the site. There are also two wetlands within 2 miles of the site: the Wildcat Creek wetlands and the San Pablo Creek wetlands (17). These two wetlands are the home of two federally designated endangered species: the salt marsh harvest mouse and the California clapper rail (22). There have been no observed releases to surface water. The two-year, 24 hour rainfall in the area is 3 inches (23). The slope of the intervening terrain is approximately 0.2 percent (17). The asphalt area of the facility is bermed and drains through a locking drain valve into Amstan Way or Hensley Street (8).

The potential for a release to surface water at this site is low, since the acids/pesticides/caustics shed and the flammables/oxidizers shed do not drain to the outside. The potential for a release from the roll-off bins or the drum crusher is low, since these SWMUs manage only residual wastes, and the berms and locking valve on the asphalt area would prevent any release from draining directly into the street. The SWMU with the

highest potential is the loading area. However, since unloading activities require human supervision, the possibility of an uncontained release from the loading area is also low.

5.4 AIR

A spill occurred when four polypropylene tanks containing an acid-metal mixture (30% nitric acid, 30% sulfuric acid, 30% hydrochloric acid, and 10% metal/water mix) reacted photolytically, causing pressure and heat to build up in the tanks (2). The pressure build-up burst the tanks, releasing approximately 500 to 900 gallons of the mixture (2). The metals contained in a sample of one of the tanks were nickel, copper, chromium, zinc, cobalt, lead, cadmium, molybdenum, vanadium, barium, and silver (3). Of these, only nickel occurred above the Total Threshold Limit Concentration (TTLC) of 2000 mg/Kg (3). Following the spill, soil samples were taken in the affected area at depths of 6 and 12 inches along a 10-foot grid (3). The samples were analyzed for metals and pH. Results of the sample analyses indicated a minimum pH of 3.7 and a maximum of 9.0 (3). Two of the samples had nickel levels of 41 and 74 mg/Kg, which are above the Soluble Threshold Limit Concentration (STLC) of 20 mg/Kg. At the conclusion of sampling activities, BAE excavated the area and removed the contaminated soil to a Class I disposal facility. The California Regional Water Quality Control Board (RWQCB) supervised the cleanup. BAE was given permission to asphalt the area upon completion of sampling and cleanup activities (4,5).

The acid spill on July 20, 1987 can be considered an observed release of hazardous waste based on the written accounts given of the emissions from the burst tanks by the DOHS and the Richmond Police, and the results of a sample taken from one of the tanks to document its contents (2,3). There is no potential for future emissions since the tanks have been removed (2,8,15).

The facility employs approximately 15 people. Land use around the BAE facility is predominately industrial. FIT estimates that there are approximately 110,000 people within 4 miles of the site (19).

5.5 ON-SITE

The site is surrounded by a fence and has a 24-hour alarm system (8). Therefore, the potential for residents in the area to come into contact with the wastes on site is low. FIT estimated the population within 1 mile of the site to be 16,000 people (19).

6. SUMMARY OF VISUAL SITE INSPECTION

On November 2, 1989, Matt Williams, Min Yao, and Jim James of E&E FIT met with John Yap and Bobbi Rockenbaugh of Bay Area Environmental for a visual site inspection of the facility. Mr. Yap and Ms. Rockenbaugh provided the following information about Bay Area Environmental.

The facility covers an area of 0.8 acres and has a storage capacity of 411 drums. BAE employs approximately 15 people. The facility maintains a mail box on the outside of the fence that contains an inventory of the wastes on site. The inventory is updated every one to two weeks. The facility receives wastes from clients, and stores them until there is enough for a shipment to a disposal facility. Most wastes are sent to Chemical Waste Management's Kettleman Hills facility, but waste solvents are also sent to recyclers. Some of the recyclers used are Enviro Safe, Solvent Service, and Romic.

The maintenance area is used to store fresh absorbent for packing small containers into 55-gallon drums. The facility reuses absorbent that has not been contaminated. The recycled absorbent is stored in 55-gallon drums next to a large metal container that is used to store BAE's records. BAE maintains records back to 1981.

The acid/pesticides/caustic storage building is divided into three bays, each with a concrete floor that slopes to the rear and 6-inch berms on three sides. FIT counted 46 drums in the acid bay, 58 drums in the pesticides bay, and 28 drums in the caustic bay.

The facility receives its 55-gallon drums from Tom's Barrel Supply. The area currently used for the drum crusher/roll-off bin was formerly used for acid storage. The acids were stored in polypropylene tanks. These tanks were removed after an incident in 1987 when they burst, releasing an acid mist to the air. At the time of the inspection, there was one drum crusher and two roll-off bins on a plastic tarp in the storage area.

After viewing the acid/pesticides/caustic storage shed, FIT proceeded to the flammable/oxidizer building. The building is divided into two bays, one for flammables and one for oxidizers. The bays have 6-inch berms on three sides and are lined with concrete, which slopes to a sump in the middle of the bay. The sump has no outlet. FIT counted 47 drums in the flammables bay and 52 drums in the oxidizer bay.

After returning to the main building, FIT proceeded to the BAE lab. Lab-generated wastes are packed on site and sent to Kettleman Hills for disposal.

At this point the facility tour concluded and FIT returned to Mr. Yap's office to conduct the post-tour interview. J. Jesus Magana, of Bay Area Environmental's holding company, First Environmental Group, was present for the interview.

Mr. Magana stated that Bay Area Environmental plans to expand its operations by adding transportable treatment units (TTUs). The units have been purchased, and BAE is currently awaiting DHS approval. The TTUs would be used for several processes, including oil/water separation and acid neutralization. Mr. Magana stated that before Bay Area Environmental built its facility, the site was single-family residential housing.

At this point the interview concluded. FIT left the site at 11:45 a.m.

7. REMOVAL CONSIDERATIONS/INTERIM MEASURES

The site is a currently active hazardous waste transfer and storage facility. The wastes on site appear adequately contained and there are no emergency removal considerations or interim measures required.

8. CONCLUSIONS

The Bay Area Environmental (BAE) facility, located at 1125 Hensley Street in Richmond, California, is an active transfer station for the interim storage of hazardous wastes. Wastes are collected from hazardous waste generators and stored until sufficient quantity accumulates for a load to be sent to a Class I disposal site. The facility handles acids, pesticides, caustics, flammables, and oxidizers (see Appendix C).

On July 20, 1987 an observed release of an acid/metal mist to air occurred at the BAE facility. The release resulted from the rupture of four 300-gallon polypropylene tanks. Since the 1987 spill, three incidents involving the release of hazardous wastes have occurred at the facility. The facility was able to contain the releases in all three cases. The Solid Waste Management Units (SWMUs) at the site appear to be in good condition, with the exception of the loading areas, which have cracked and degraded asphalt.

The Bay Area Environmental facility does not appear to be eligible for inclusion on the National Priorities List based on the following factors:

- Wastes on site appear to be adequately contained;
- Low groundwater target population;
- Low surface water release potential;
- Low on-site exposure potential; and
- No observed release to surface water or groundwater.

9. EPA RECOMMENDATIONS

	Initial	Date
High-Priority LSI under CERCLA	_____	_____
Medium-Priority LSI under CERCLA	_____	_____
No Further Action Planned under CERCLA	_____	_____
Further Action Planned under RCRA	_____	_____

Notes:

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APPENDIX A

CONTACT LOG AND REPORTS

CONTACT REPORT

AGENCY/AFFILIATION: Bay Area Environmental		
DEPARTMENT:		
ADDRESS/CITY: 1125 Hensely Richmond		
COUNTY/STATE/ZIP: Contra Costa California 94806		
CONTACT(S)	**TITLE**	**PHONE**
1. John Yap	Facility Manager	(415) 233-8001
2. Bobbi Rockenbaugh		(415) 233-8001
E & E PERSON MAKING CONTACT: Matthew Williams		**DATE:** 11/2/89
SUBJECT: Facility Tour of Bay Area Environmental		
SITE NAME: Bay Area Environmental	**EPA ID#:** CAT080014079	

FIT personnel Jim James (safety officer), Matthew Williams, and Min Yao conducted a Visual Site Inspection (VSI) of the Bay Area Environmental (BAE) facility on November 2, 1989. The VSI consisted of a safety interview to explain Ecology & Environment's (E&E) safety proceedures, a tour of the facility and an on-site interview with representatives of BAE. Present for BAE were Mr. John Yap and Ms. Bobbie Rockenbaugh. Photos were taken to document FIT's description of the site. FIT developed a safety plan for the site which involved the use of a portable organic vapor analyzer (OVA) to monitor for volitile organics (VOCs). FIT personnel also carried an alert dosimeter (RadMini), a cyanide detector, and an exposimeter/oxygen monitor. FIT arrived on-site at 9:25 am and met with Mr. Yap and Ms. Rockenbaugh to explain E&E's safety proceedures. After the initial meeting, Mr. Yap led a tour of the facility, starting with the Maintenance shop. The tour then went to the acids/pesticides/caustics shed. FIT counted 46 drums inthe acids bay, 58 drums in the pesticides bay, and 28 drums in the causitcs bay. FIT members observed no unlabled drums, or drums stored in the incorrect bay. The tour then proceeded to the drum crusher/roll-off bin area. At this time Mr. Yap stated that the polypropylene tanks that failed in 1987 were located in the drum crusher/roll-off bin area. The area has been asphalted since the spill. The asphalt in this area showed significant signs of damage caused by the heavy equipment used to unload the roll-off bins. The bins themselves were sitting on small pads to prevent the bin wheels from digging into the asphalt. The tour then proceeded to the flammables/caustics shed. Signs of damaged to the asphalt were apparent in front of the flammables/caustics shed in the form of truck tire marks. At this time Mr. Yap stated that the facility had been recently paved, and that they were dissatisfied with the results, mainly due to the soft nature of the asphalt. FIT observed several areas where the asphalt was cracked or showed signs of damage due

to trucks or equipment. FIT counted 47 drums in the flammables bay and 52 drums in the oxidizers bay. Again, no improperly labled or stored drums were observed. The tour then proceeded to the area north of the FO shed, where empty drums used in the storage bays were stacked. At this time Mr. Yap stated that drums from the consolidation process were stored here and that an "observation judgement" system was used in the reuse of drums to prevent the mix of incompatiable substances if the drum was to be reused. The tour then proceeded to the moinitor well locations. Mr. Yap stated that the monitor wells had been put in after the 1987 spill, but had not been sampled since their initial development.

Mr. Yap, in response to FIT questions, discussed the possible locations for tank storage, or the storage of transportable treatment units on-site. The locations identified were east of the APC shed in what is no parking, the area south of the FO shed, and the area north of the FO shed that is now used for drum storage (see figue 2). Mr. Yap stressed that these locations were tenative, and subject to approval of the DHS.
The tour then proceeded to BAE's laboratory, where Mr. Yap described BAE's proceedures for determining the constituents of drums brought to the faciltiy. Mr. Yap stated that lab wastes were lab packed and stored in the appropriate bay until shipped off-site. Mr. Yap said that these were the only wastes generated on-site, and that the wastes shipped to the facility, including the drums crushed by the facility are considered generated by the shipper.

The tour was concluded at 10:55 am and at 11:00 FIT began the on-site interview with BAE pesonnel in the facility operations office. Mr. Yap and Ms. Rockenbaugh were joined by J. Jesus Magana, chief executive officer for First Environmental Group, the holding company for BAE. At the start of the interview Mr. Yap stated that he had checked with his operations supervisor, and that his earlier statement about the reuse of drums emptied during the consolidation of wastes was not the case. He stated that he had been incorrect and that BAE crushed those drums without reuseing them. All the drums stored to the north of the FO shed had come from Tom's Barrel, BAE's supplier of drums. At this time Mr. Yap and Mr. Magana described the TTU's they planned to have based at the site. The units had been purchased from S.O.S. in South San Francisco and would engage in oil/water separation, acid neutralization, and other processes. Mr. Magana said that the units had been purchased in conjunction with Reidel Inc. and had been out of service for approximately 18 months. Mr. Yap went on to describe BAE sampling proceedures, and the use of the HazCat system to identify wastes. Mr. Yap said that all wastes were screened by the HazCat system. When asked if the facility ever went beyond its capacity, Mr. Yap stated that at one point there had been a misunderstanding between BAE and the DHS in regards to the capactity of the flammables bay. Mr. Yap attributed the exceedence of capacity found in the (date) inspection to this misunderstanding. The interview was conluded at 11:45 am and FIT departed the site at this time.

mw/bae/cr

CONTACT REPORT

AGENCY/AFFILIATION: California Department of Health Services		
DEPARTMENT: Toxic Substances Control Division		
ADDRESS/CITY: 5850 Shellmound St Emeryville		
COUNTY/STATE/ZIP: Alameda California 94608		
CONTACT(S)	**TITLE**	**PHONE**
1. Patrcia Payne		(415) 540-3008
2.		
E & E PERSON MAKING CONTACT: Matt Williams		**DATE:** 10/31/89
SUBJECT: Permit Status of Bay Area Environmental		
SITE NAME: Bay Area Environmental	**EPA ID#:** CAT080014079	

Ms. Payne said that the DHS is currently in the process of filing a complaint against Bay Area Environmental for the 1987 acid release with the California Attorney General's office. Ms. Payne also said that there were other violations stemming from an inspection following the release that were included in the complaint.

mw/bae/cr

CONTACT REPORT

AGENCY/AFFILIATION: California Department of Health Services		
DEPARTMENT: Toxic Substances Control Division		
ADDRESS/CITY: 5850 Shellmound Emeryville		
COUNTY/STATE/ZIP: Alameda California 94608		
CONTACT(S)	**TITLE**	**PHONE**
1. Martina Jung		(415) 540-3539
2. David Tao		(415) 540-3934
E & E PERSON MAKING CONTACT: Matthew Williams		**DATE:**10/31/89
SUBJECT: Permit Status of Bay Area Environmental		
SITE NAME: Bay Area Environmental	**EPA ID#:**CAT080014079	

Ms. Jung said that the Bay Area Environmental facility was currently in the process of filing for an amendment to its RCRA part B application. The facility wanted its permit to include the use of Transportable Treatment Units and an expanded capacity to treat and handle wastes. Ms. Jung said that the DHS was reviewing the permit and was waiting on the completion of an Environmental Impact Report.

1/19/90

David Tao was contacted to clarify the reasons requiring an EIR from BAE. David said that the City of Richmond had considered the proposed expansion to be more than a revision of BAE's operating plan, and that therefore a new permit would be required. The City of Richmond is the lead agency for the EIR, and the DHS has concurred with the view that a new permit will be necessary before the expansion can take place.

mw/bae/cr

CONTACT REPORT

AGENCY/AFFILIATION: Bay Area Environmental		
DEPARTMENT:		
ADDRESS/CITY: 1125 Hensley Richmond		
COUNTY/STATE/ZIP: Contra Costa California 94801		
CONTACT(S)	**TITLE**	**PHONE**
1. John Yap		(415) 233-8001
2.		
E & E PERSON MAKING CONTACT: Matthew Williams		**DATE:**11/16/89
SUBJECT: Operational practices at Bay Area Environmental		
SITE NAME: Bay Area Environmental	**EPA ID#:** CAT080014079	

Mr. Yap stated that the openings to the two sheds were not protected by doors of any kind, but that the maintenance shop had a roll-up door. He said that the drums that were crushed by the facility were from the consolidation of wastes, and that they were not rinsed prior to crushing. He stated that a drip pan was placed under the drum crusher when crushing operations were to take place. Mr. yap said that the maintenace shop was used as a drum staging area when the facility conducted sampling of drums with unkown constituents, or when the facility conducted household hazardous waste days. Mr. Yap said that drums were unloaded from trucks and taken to the appropriate bay if the constituents were known.

mw/bae/cr

CONTACT REPORT

AGENCY/AFFILIATION: Bay Area Environmental		
DEPARTMENT:		
ADDRESS/CITY: 1125 Hensley St Richmond		
COUNTY/STATE/ZIP: Contra Costa California 94801		
CONTACT(S)	**TITLE**	**PHONE**
1. John Yap	Facility Manager	(415) 233-8001
2.		
E & E PERSON MAKING CONTACT: Matthew Williams		**DATE:**12/1/89
SUBJECT: Operational practices at the BAE facility		
SITE NAME: Bay Area Environmental	**EPA ID#:** CAT080014079	

Mr. Yap stated that the BAE facility had started using the new drum crusher in mid-1989. He said that the facility started using roll-off bins in mid 1986, and that when the bins were full they were taken off site by the supplier and new bins brought. He said that the old drum crusher began being used in mid-1986 and that it was taken out of service in mid-1989, and taken to a metal recycler in October 1989. Mr. Yap did not know what precautions were taken during the use of the old drum crusher.

mw/bae/cr

CONTACT REPORT

AGENCY/AFFILIATION: East Bay Municipal Utilities District		
DEPARTMENT:		
ADDRESS/CITY: Richmond		
COUNTY/STATE/ZIP: California		
CONTACT(S)	**TITLE**	**PHONE**
1. Karen Allen		(415) 891-0674
2.		
E & E PERSON MAKING CONTACT: Matthew Williams		**DATE:**12/6/89
SUBJECT: Source of drinking water for the city of Richmond		
SITE NAME: Bay Area Environmental	**EPA ID#:** CAT080014079	

Ms. Allen said that the city of Richmond received its water from the San Pablo Reservoir, and that the water came mostly from the Sierra foothills and the Pardee Reservoir.

mw/bae/cr

CONTACT REPORT

AGENCY/AFFILIATION: Contra Costa County		
DEPARTMENT: Richmond Health Center		
ADDRESS/CITY: Richmond		
COUNTY/STATE/ZIP: Contra Costa, California		
CONTACT(S)	**TITLE**	**PHONE**
1. Rodger Chin		(415) 374-3141
2.		
E & E PERSON MAKING CONTACT: Matthew Williams		**DATE:** 12/21/89
SUBJECT: Ground water use in the Richmond area		
SITE NAME: Bay Area Environmental	**EPA ID#:** CAT080014079	

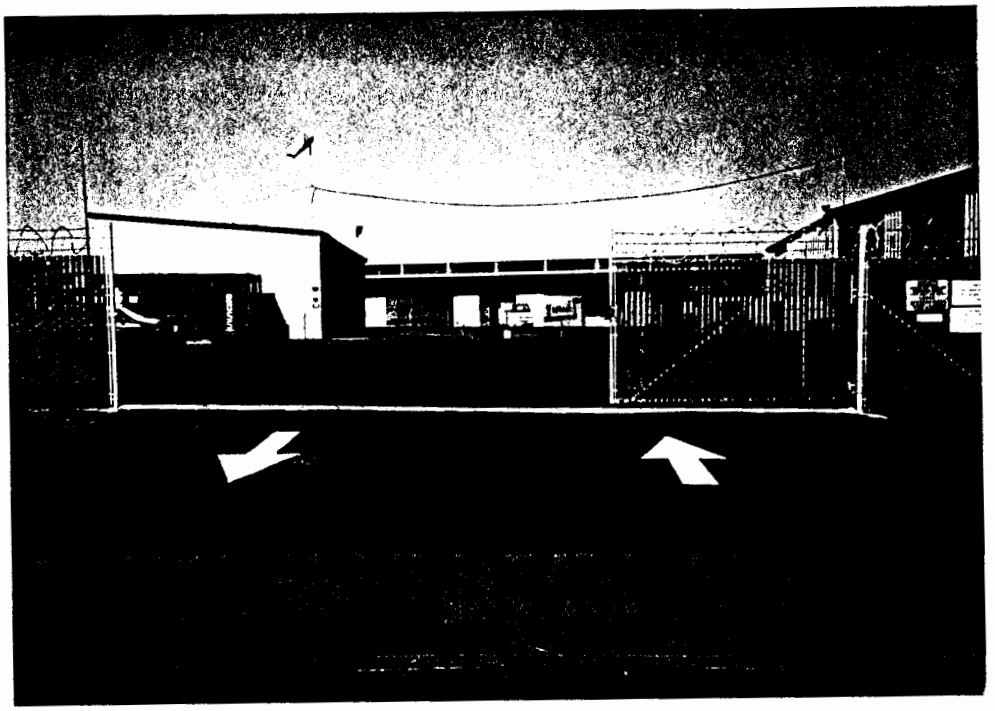
Mr. Chin stated that there are a number of ground water wells in the area of Bay Area Environmental that are used for agricultural purposes. He said that the primary use was for nurseries, but that there was no drinking water use that he was aware of mainly due to the salinity of the aquifer.

mw/bae/cr

APPENDIX B

PHOTODOCUMENTATION

FIELD PHOTOGRAPHY LOG SHEET



DATE: 11/2/89

TIME: 9:25 AM

DIRECTION:

West

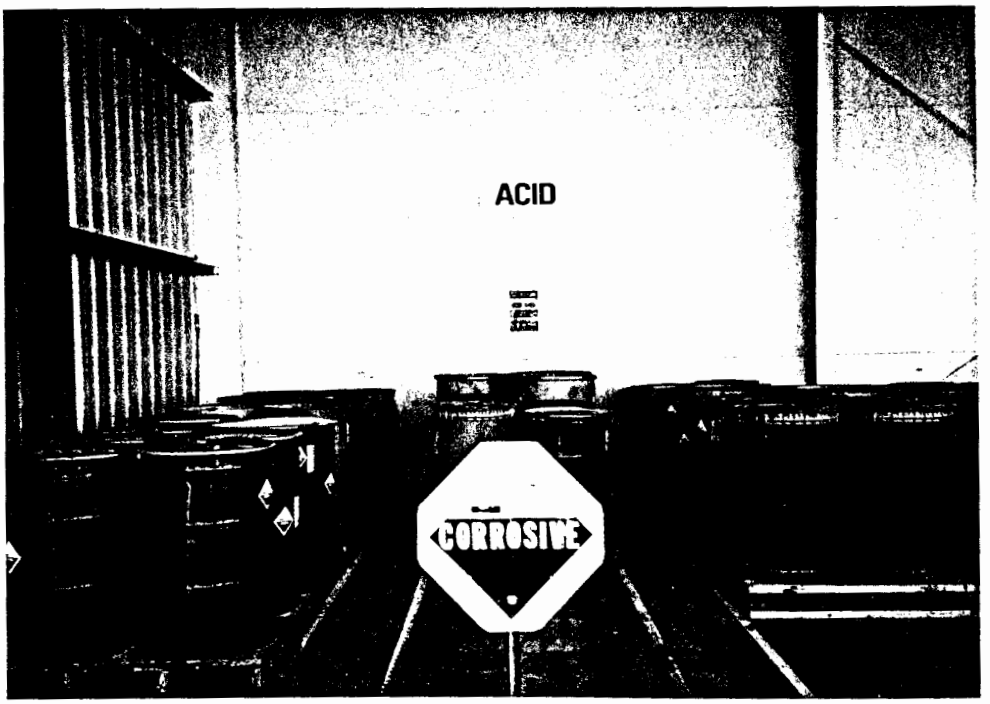
WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams

DESCRIPTION: Facility entrance, the Acids/Pesticides/Caustics shed is visable at the left of the picture.



DATE: 11/2/89

TIME: 10:00 AM

DIRECTION:

South

WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams

DESCRIPTION: Acids bay of the Acids/Pesticides/Caustics shed.

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mw/bae/fpls

FIELD PHOTOGRAPHY LOG SHEET

DATE: 11/2/89

TIME: 10:10 AM

DIRECTION:

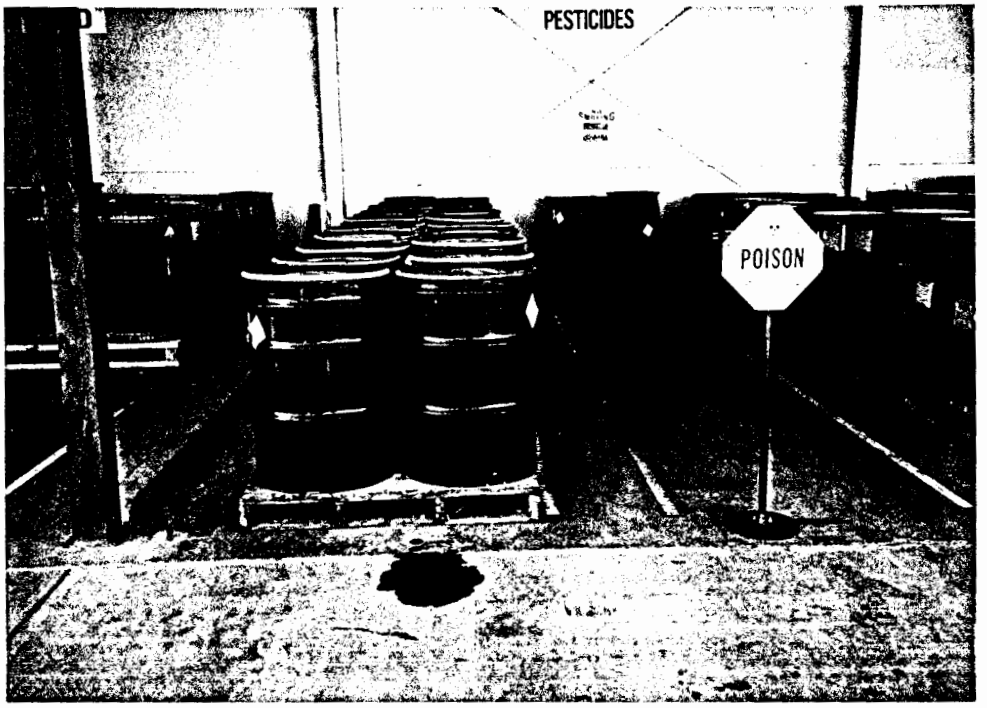
South

WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams



DESCRIPTION: Pesticides bay of the Acids/Pesticides/Caustics shed.

DATE: 11/2/89

TIME: 10:20 AM

DIRECTION:

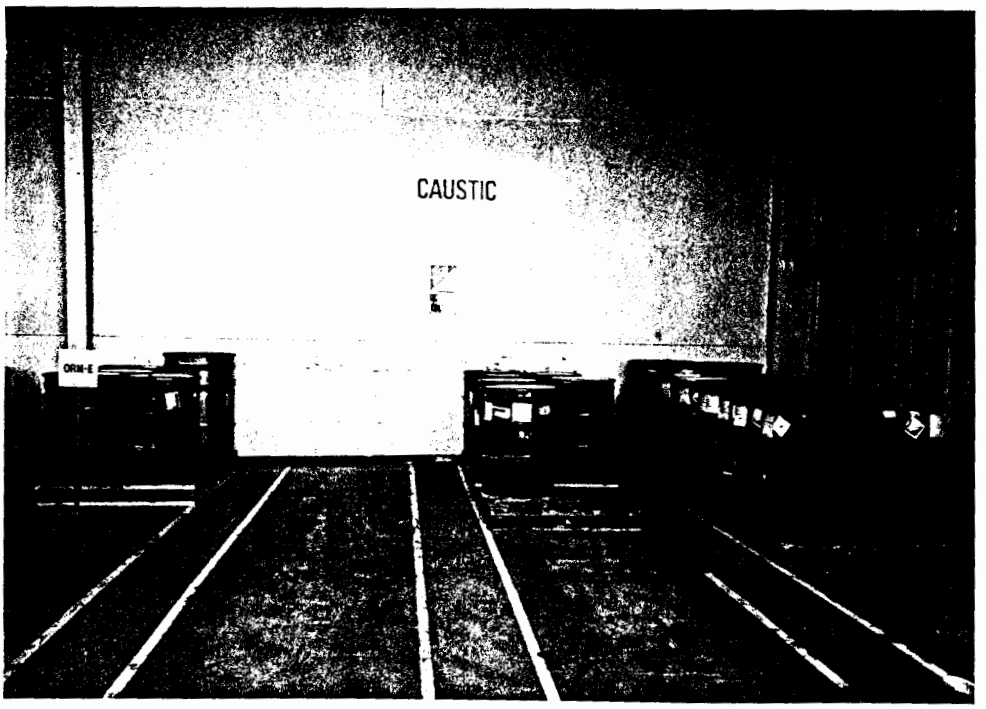
South

WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams



DESCRIPTION: Caustics bay of the Acids/Pesticides/Caustics shed.

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mw/bae/fpls

FIELD PHOTOGRAPHY LOG SHEET

DATE: 11/2/89

TIME: 10:30 AM

DIRECTION:

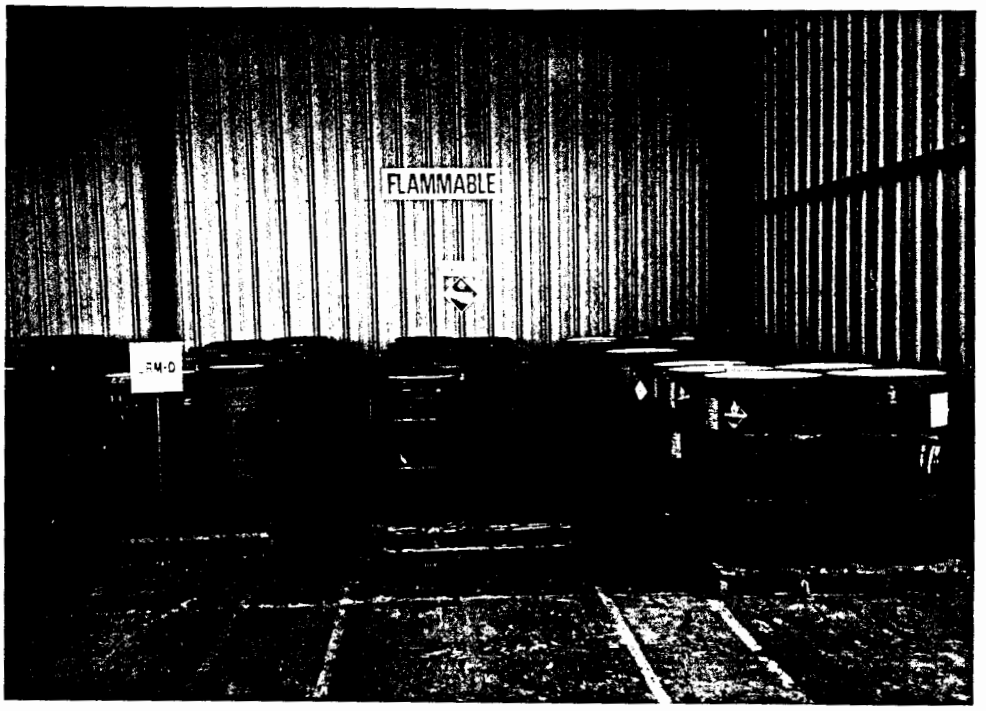
East

WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams



DESCRIPTION: Flammables bay of the Flammables/Oxidizers shed.

DATE: 11/2/89

TIME: 10:40 AM

DIRECTION:

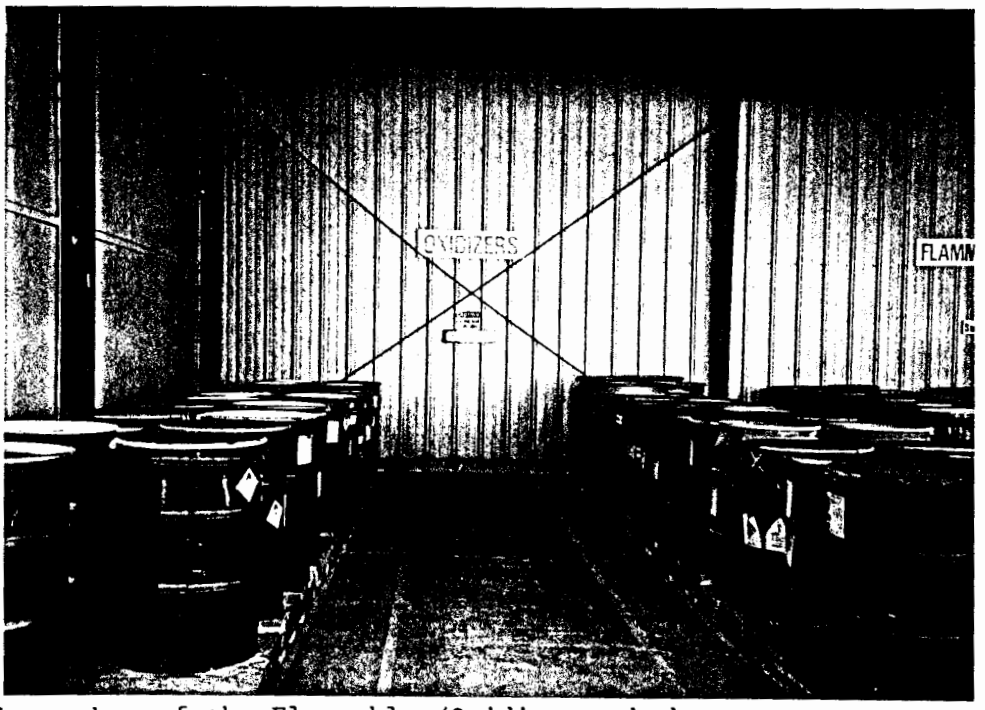
East

WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams



DESCRIPTION: Oxidizers bay of the Flammables/Oxidizers shed.

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mw/bae/fpls

FIELD PHOTOGRAPHY LOG SHEET

DATE: 11/2/89

TIME: 10:35 AM

DIRECTION:

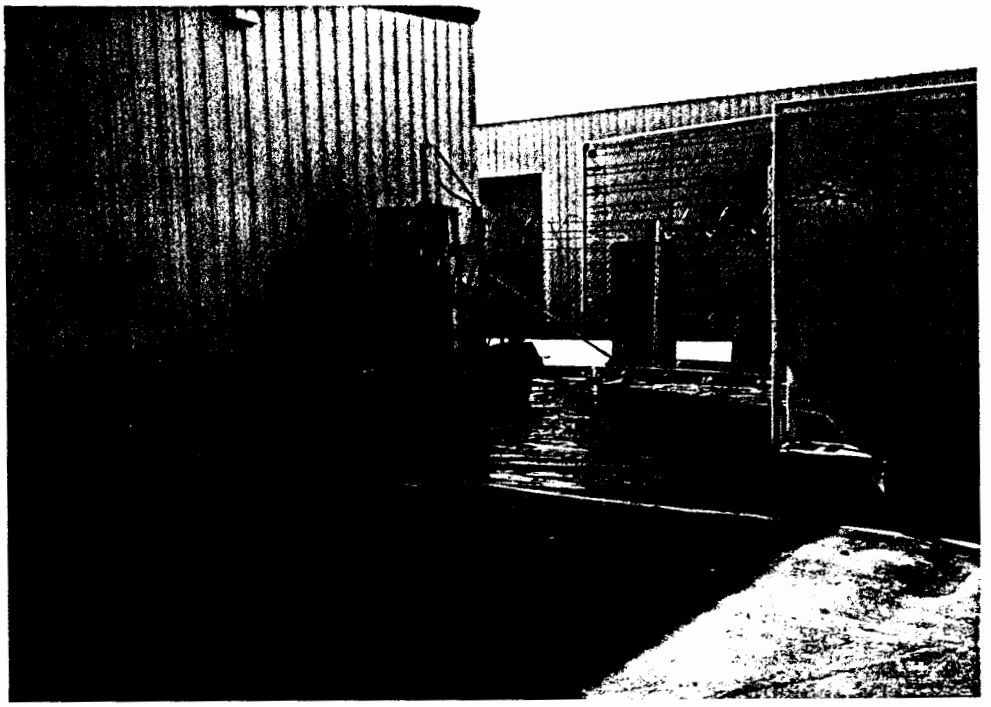
Southeast

WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams



DESCRIPTION: The drum crusher, visable on the left is the wall of the Acids/Pesticides/Caustics shed. A roll-off bin is visable to the right. Note the damaged asphalt at the base of the roll-off bin.

DATE: 11/2/89

TIME: 10:35 AM

DIRECTION:

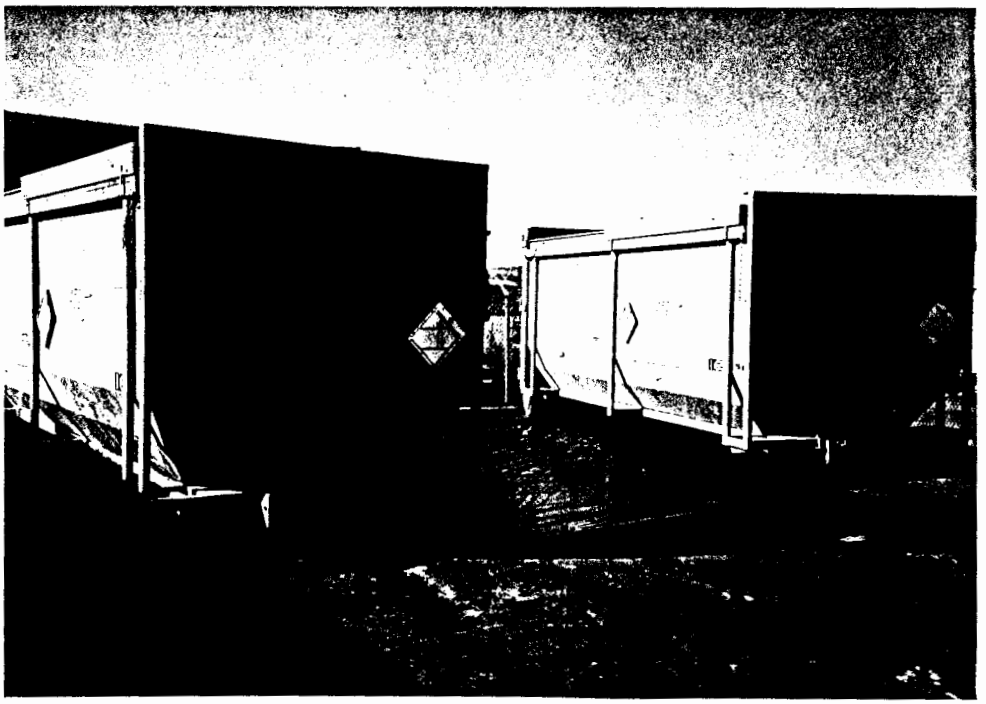
Southwest

WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams



DESCRIPTION: Roll-off bins for the crushed drums. Note damaged asphalt in the foreground.

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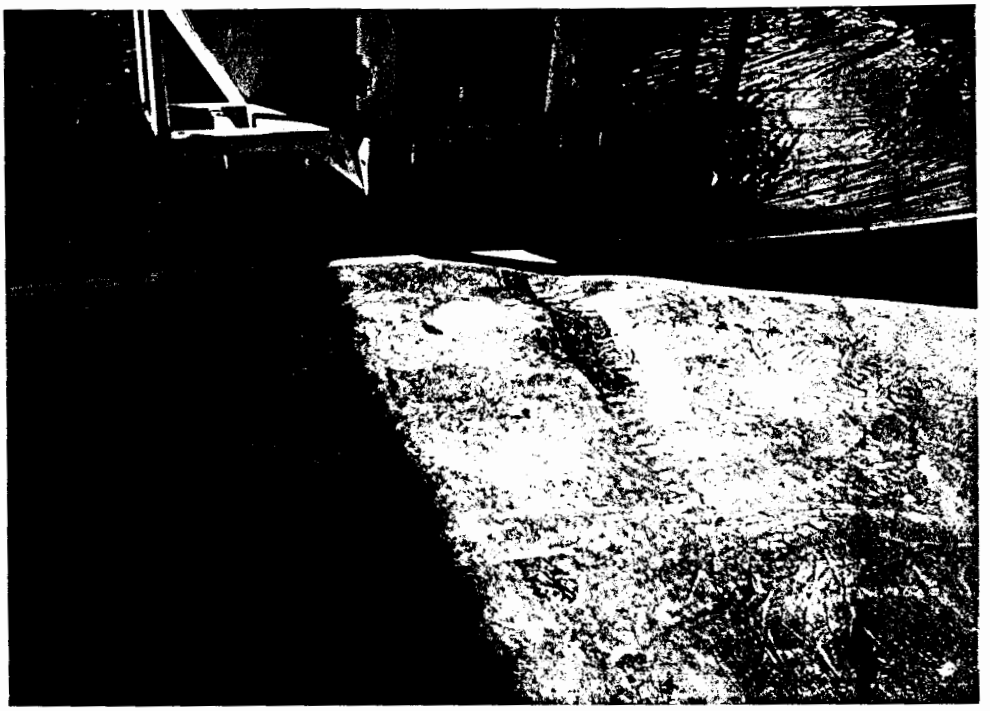
mw/bae/fpls

FIELD PHOTOGRAPHY LOG SHEET



DATE: 11/2/89

TIME: 10:35 AM

DIRECTION:

South

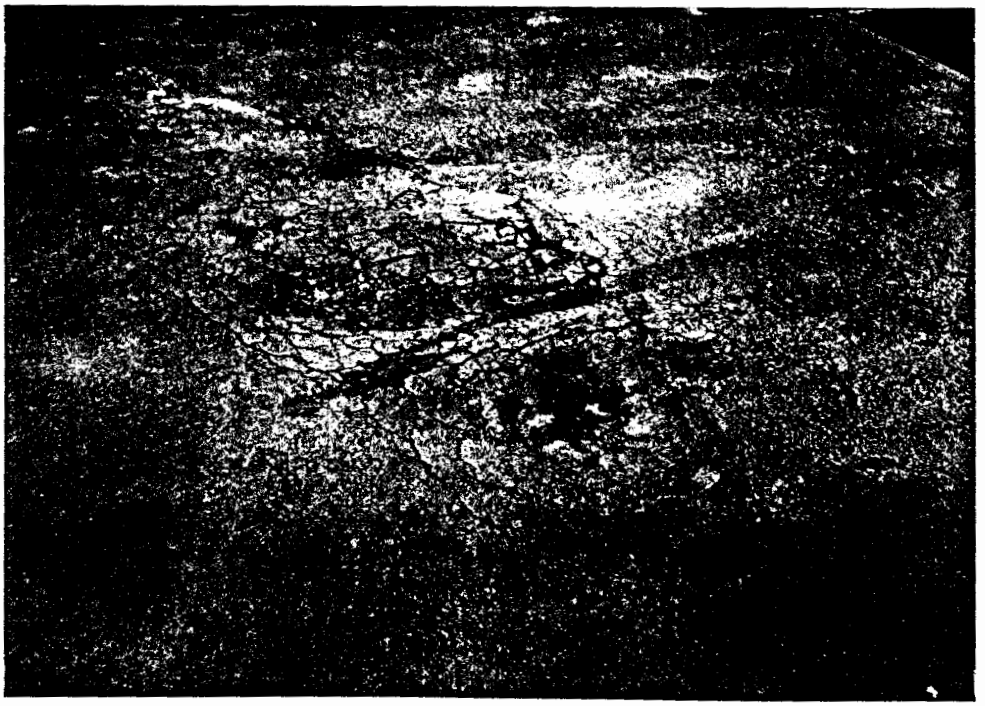
WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams

DESCRIPTION: Damaged asphalt in front of roll-off bins, damage appears to be from unloading the boxes.



DATE: 11/2/89

TIME: 10:35 AM

DIRECTION:

South

WEATHER:

Clear

PHOTOGRAPHED BY:

Matt Williams

DESCRIPTION: Damaged asphalt in the center of the BAE yard, near the roll-off bins.

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mw/bae/fpls

APPENDIX C

DESCRIPTION OF ACCEPTABLE WASTES

The facility is permitted by the California Department of Health Services to handle the following wastes under Hazardous Waste Facility Permit number CAT 080014079: acids, toxics, oxidizers, caustics, and flammables. The facility is allowed to have 84 55-gallon drums each of acids, toxics, and oxidizers, 105 drums of caustics, and 53 drums of flammables.

The facility is allowed to handle Extremely Hazardous Wastes (EHW) in accordance with the California Code of Regulations, Title 22, sections 66065 and 66685, which state that the wastes must be accompanied by an Extremely Hazardous Waste Disposal Permit issued to the generator by DHS. The permit must accompany the EHW and its manifest from the point of generation to disposal. The BAE facility will not accept the following: radioactive materials, pressurized gas cylanders, shock sensitive materials, pyrophorics, and unidentified wastes.

The facility is prohibited from the following: handling wastes in bulk; burning wastes; handling Class A explosives, as defined in Sections 173.51 and 173.53 of Title 49 of the Code of Federal Regulations; handling wastes containing polychlorinated biphenyls (PCBs); and handling greater than 5 gallons of water-reactive wastes.

The facility is in the process of applying for a new RCRA Part B permit that would change some of the provisions it currently operates under, particularly with respect to quantity of wastes handled.

STATE OF CALIFORNIA — ENVIRONMENTAL PROTECTION AGENCY

PETE WILSON, *Governor*

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

REGION 2
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737
(510) 540-2122

January 18, 1995

Mr. Robert Lowell
Manager of Environmental Compliance
California Advanced Environmental Technology Corporation
1125 Hensley Street
Richmond, California 94801

Dear Mr. Lowell:

APPROVAL OF RCRA FACILITY INVESTIGATION (RFI) WORKPLAN FOR CALIFORNIA ADVANCED ENVIRONMENTAL TECHNOLOGY CORPORATION (CAETC), EPA ID NO. CAT 080 014 079

The Department of Toxic Substances Control (DTSC) has reviewed your RFI Workplan dated October 31, 1994. DTSC accepts that the five Solid Waste Management Units (SWMUs) that had to be investigated as part of the Hazardous Waste Permit have been adequately characterized in the RFI. Your Workplan also included prior investigation sampling results that indicate no contamination at these SWMUs. We find these sampling results acceptable also.

DTSC approves CAETC's RFI Workplan. There is no requirement to proceed onto the next phase of the corrective action process which would have been a RFI Report and Corrective Measures Study.

Sincerely,

Lester Kaufman, Chief
Facility Permitting Branch

cc: Lily Herskovits
US EPA - Region IX
75 Hawthorne St.
San Francisco, California 94105