160 Spear Street, Suite 1380
San Francisco, California
94105-1535

415/957-0110

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ICF TECHNOLOGY INCORPORATED

PRELIMINARY ASSESSMENT

SUBMITTED TO: Paul LaCourreye, U.S. Environmental Protection Agency

PREPARED BY: Belinda Peters, ICF Technology, Incorporated BJP

THROUGH: Melanie Nesterenko, Ecology and Environment, Inc.

DATE: September 13, 1990

SITE: Mike Roberts Color Productions

TDD#: F9-9005-045

EPA ID#: CAD009133190

6707 Bay St. Emeryville

PROGRAM ACCOUNT#: FCA1502PAA

FIT REVIEW/ CONCURRENCE: James M. James 9/19/96

COPY: Fit Master File
Don Plain, California Department of Health Services
Steven Ritche, Regional Water Quality Control Board

1. INTRODUCTION

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the U.S. Environmental Protection Agency (EPA) has tasked ICF Technology, Inc.'s Field Investigation Team (FIT), subcontractor to Ecology and Environment Inc., to conduct a Preliminary Investigation of Mike Roberts Color Productions in Emeryville, CA. This report summarizes FIT's investigative efforts.

2. SITE DESCRIPTION

2.1 Site Location and Owner/Operator History

The Mike Roberts Color Productions (MRCP) site is located at 6707 Bay Street, Emeryville, California (Township 1S, Range 3W, Section 9, Mount Diablo baseline and meridian Latitude 37° 51' 00", Longitude 122° 17' 30") (1). A site location map is presented in Figure 1. From March 1979 until February 1989 the facility operated as a color printing, lithography, and off-set printing business on a 4.6-acre lot (2,3,4,5). The site property is located in an area zoned for commercial and office use; however, areas surrounding the property are also used by industry and residences. The property is bounded to the west and north by the Ashby Avenue off-ramp of northbound Interstate-80, on the east by Bay Street, and on the south by Votainer, a trucking company (6). The MRCP facility consisted of a 14,624 square foot, 2-story business office complex adjoining a 43,300 square foot printing and light manufacturing warehouse (2). There was also an exterior waste drum storage area, and 3 underground storage tanks at the site (2,5,7).

The entire site was paved, with the exception of planted strips in the area of the business office, but only the waste drum storage area was fenced (8). A facility layout map is presented in Figure 2.

According to aerial photographs, until 1947 the site was a part of San Francisco Bay, which was gradually filled in with various landfill material through the 1950s (6). From the 1940s until the late 1950s, a municipal waste dump existed on the land parcel directly south of MRCP. Refuse such as glass, concrete and miscellaneous organics that were found in auger tailings from monitoring wells installed on-site, indicate that the dump may have extended onto the MRCP property at one time (6).

The first known operator at the MRCP site was Dymo Industries who leased the property from the Annuity Board Southern Baptist Convention, the property owner, beginning in March 1963. Dymo Industries processes included the manufacture of label tape punchers and label tape. The property was sold to MRCP in March 1979 when Dymo Industries was purchased by the Esselte Pendaflex Corporation and the operation moved to the east coast (5). MRCP operated at the facility until the company declared bankruptcy and subsequently went out of business in February 1989 (3,4). The property was sold to Nady Systems, the current facility operator, in March 1990 (4). Nady Systems currently manufactures wireless communications systems at the facility, including headphones, microphones, and walkie talkies (36).

Figure 1 Site Location Map

Mike Roberts Color Productions
6707 Bay Street
Emeryville, CA 94608

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Source: U.S. Department of the Interior, Geological Survey. Oakland West. 7.5 Minute Series (Topographic) 1959. Photorevised 1980.

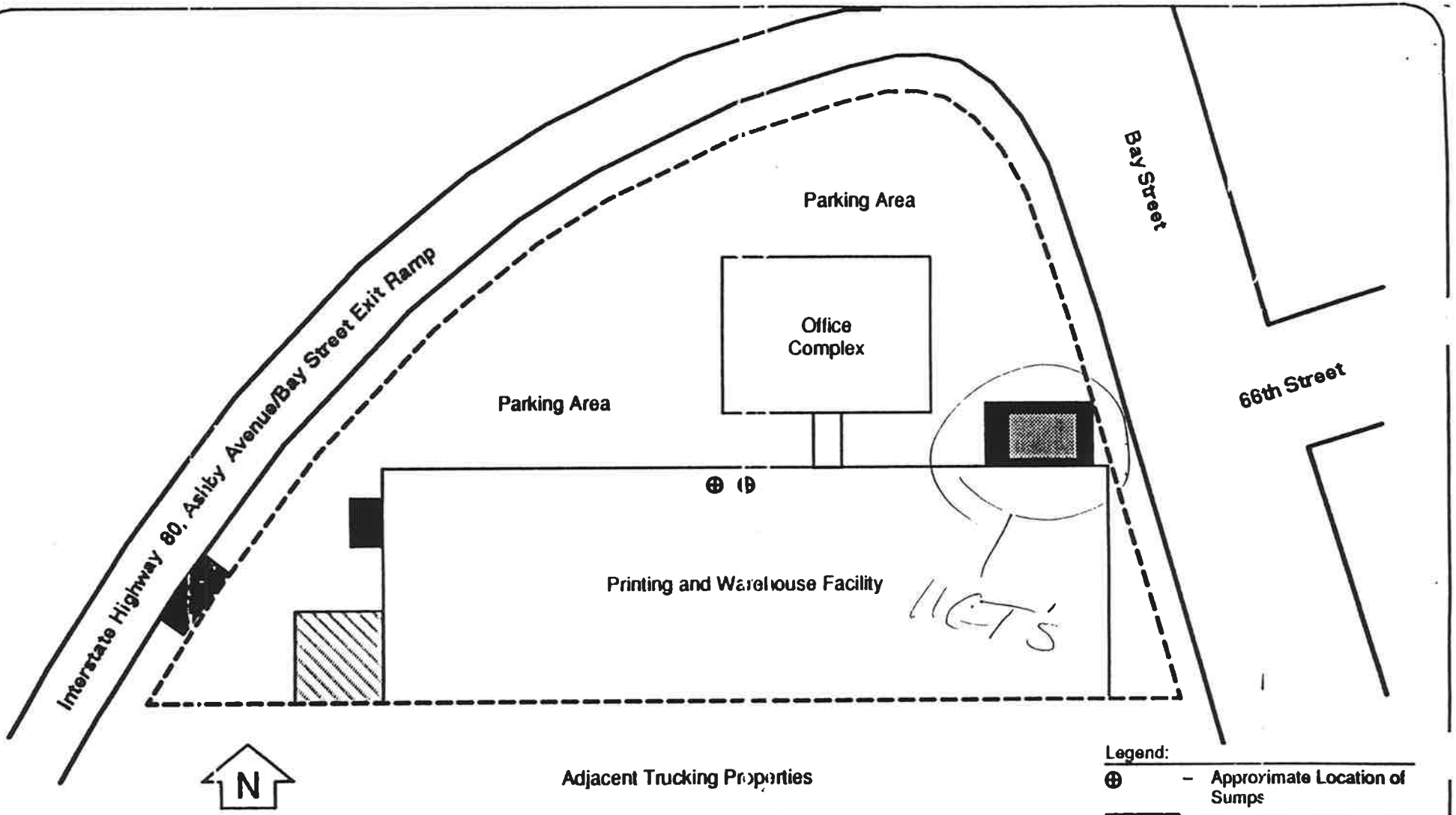

Figure 2 Facility Layout Map

Mike Roberts Color Productions
6707 Bay Street
Emeryville, CA 94608

Source L&W Environmental Services, Inc. Site Plan August 25, 1989; SCS Engineers. Site Plan January 17,1990.

2.2 Facility Process and Waste Management

2.2.1 Historical

In the 1940s until the late 1950s, a municipal waste dump existed on the land parcel south of MRCP, which may have extended onto the MRCP property at one time (6). Dymo Industries, a manufacturer of label tape punchers and label tape, operated at the facility from 1963 until it was sold to MRCP in 1979 (5).

MRCP initially manufactured colored postcards and later expanded into color printing, lithography, and off-set printing operations (3). These operations required the use of printing inks composed of pigments or dyes in a drying oil base, either with or without added resins, dryers, or thinners. The dying compounds probably also contained petroleum oils. In heat set inks, similar to those used at the former facility, the principal dyes used are rhodamines, auramines, and thioflavins (9). No further information on MRCP operations is available. MRCP used a variety of chemicals during their period of operation. A list of some of these chemicals is presented in Appendix C (35).

A fenced area located behind the warehouse was used as a storage area for 55-gallon drums containing wastes generated by MRCP processes. Wastes contained in these drums included waste printing ink, spent solvent cleaning compounds, volatile and semi-volatile organic compounds, and color pigments (10). Raw materials and products were stored in the warehouse (2,6). Waste photographic developing solutions produced in MRCP processes were discharged in the warehouse into 4 drains which led to sumps that drained into the city sewer system (7). There were no regulatory permit requirements for the discharge of photographic wastes into the city sewer system at the time of MRCP operations (38).

No known hazardous waste treatment occurred on site. Waste-containing drums were reportedly stored in the drum storage area from the time of generation until the facility began closure procedures in 1989 (10). There was no off-site disposal of hazardous materials from the facility during its operational history. In March 1990, a total of 89 waste-containing drums were removed from the site (10,11). Several of the drums were transported to The Kiesel Company (EPA ID# MOT300011160) for thermal destruction of the contents. Other drums were transported to Gibson Oil Refinery (EPA ID# CAD980883177), and Bay Area Environmental (EPA ID# CAT080014079).

Three underground storage tanks were discovered by MRCP during closure procedures in February 1989. These tanks were installed by Dymo Industries, the previous site operator, to store virgin methyl isobutyl ketone (MIBK) and methyl ethyl ketone (MEK) prior to its use in their processes (5). The 3 underground storage tanks were also excavated and removed upon facility closure and transported to Erickson, Incorporated (EPA ID# CAD009466392) for disposal. The product remaining in the tanks at the time of excavation was transported to Romic Chemical Corporation (EPA ID#CAD009452657) for disposal (16).

There are no records of any regulatory agency involvement with the site closure or hazardous material disposal procedures (39,40).

2.2.2 Current

MRCP went out of business in February 1989 after filing bankruptcy proceedings (3,4). No MRCP personnel or equipment are currently present at the facility (5,8). All hazardous materials used in the former MRCP printing processes have reportedly been removed from the site (13,14).

Currently, Nady Systems is operating at the facility, apparently occupying only the office building (5,8). Nady Systems manufactures wireless communications systems (36). There is no information available on the hazardous substances Nady Systems may be using on site.

3. APPARENT PROBLEM

The Alameda County Department of Environmental Health (County Health) performed an inspection of MRCP in January 1989, and cited the facility for several hazardous waste management violations (16). MRCP was entered into CERCLIS files in February 1989 following a phone complaint concerning the drums of chemicals stored behind the facility building (37).

In 1989 and 1990 a series of environmental site assessments were initiated because of a proposed property ownership transfer (4). The assessments consisted of on-site soil and groundwater investigations which were performed by 2 environmental consulting firms contracted by MRCP (4,6,7). A total of 8 soil borings and 6 monitoring wells were installed on site in the 2 investigations (see Figure 3)(6). Results from these investigations showed the presence of elevated levels of total petroleum hydrocarbons (TPH) as diesel (up to 5,050 mg/kg), TPH as gasoline (up to 300 mg/kg), oil and grease (up to 45,000 mg/kg), lead (up to 4,300 mg/kg), zinc (up to 266,200 mg/kg), volatile organic compounds (VOCs) (such as benzene up to 50 ug/kg), and slightly elevated levels of polychlorinated biphenyls (PCBs), polynuclear aromatics (PNAs), and other heavy metals in subsurface soils (6,7,15). Shallow groundwater samples from on-site monitoring wells showed the presence of similar contaminants found in the subsurface soils: VOCs (such as benzene up to 12 ug/L), TPH as gasoline and diesel (up to 103 mg/L), oil and grease (41 mg/L), and slightly elevated levels of heavy metals (6). Contaminants detected on site, such as TPH as gasoline and diesel, lead, and benzene, are likely excluded from CERCLA consideration under the Petroleum Exclusion provisions (41).

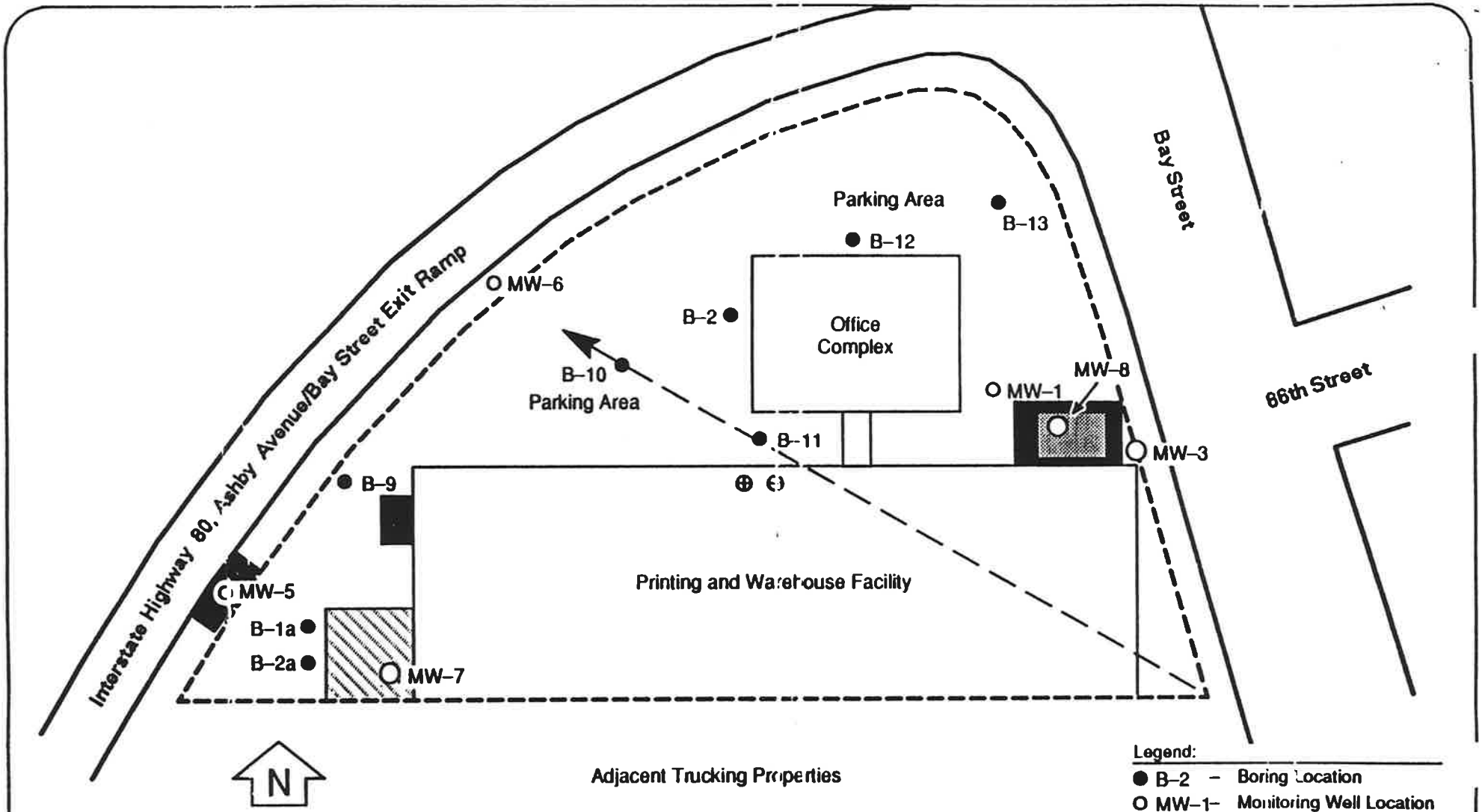

Figure 3 Soil Boring and Monitoring Well Locations

Mike Roberts Color Productions
6707 Bay Street
Emeryville, CA 94608

Source: L&W Environmental Services, Inc. Site Plan August 25, 1989; SCS Engineers. Site Plan January 17,1990.

SOB005-2

Hazardous materials were formerly stored on site in 55-gallon drums in a fenced area behind the warehouse, and in 3 underground storage tanks on the Bay Street property boundary (2,5,7). According to the MRCP contractors, soil and groundwater contamination by VOCs, lead, zinc, and MIBK is likely a result of chemical leakage from these storage areas (6). The contractors for MRCP also suggested that other on-site contaminants such as TPH, PCB, and oil and grease are most likely a result of contaminant migration from the municipal waste dump which was present on the property adjacent to MRCP in the 1940s and 1950s or from other contaminated sites in the area (6,7). One contractor report listed 41 sites in the immediate area of MRCP which have documented hydrocarbon contamination of both soil and groundwater (6).

After the discovery of the contaminants in subsurface soil and underlying groundwater, MRCP contracted for the installation of an on-site soil vapor recovery system and a groundwater remediation system. Two previously existing monitoring wells and 4 newly installed vapor extraction wells located in areas near the former underground storage tanks and waste drum storage area were used in the remediation systems. The extracted vapor is discharged directly to the atmosphere through a vertical exhaust vent and no air stripper towers are used (17). Groundwater is pumped from three on-site extraction wells into an activated carbon treatment unit. The effluent water is discharged to the sanitary sewer system (17). These two systems were activated in July 1990, and according to contractors, require approximately 4 to 6 months to reduce contamination levels to "acceptable limits" (12,17). Permit applications were submitted in February 1990 to the Bay Area Air Quality Management District (BAAQMD) and East Bay Municipal Utilities District (EBMUD) for the operation of the 2 remedial systems (17).

In a related investigation performed by contractors for MRCP in August 1989, asbestos was detected in pipe joint insulation, vinyl asbestos floor tile, and rolled floor covering throughout the business office (18). There is no information that any asbestos removal has occured at the former facility.

4. REGULATORY INVOLVEMENT

There is no file information indicating any federal or state agency involvement with MRCP while the facility was active (39,40). In January 1989, the MRCP facility was inspected by County Health in an attempt to "identify those industries within Alameda County which generate hazardous waste streams" (16). County Health cited MRCP for 3 violations: storage of hazardous waste on-site for longer than 90 days without a license; lack of a secondary containment system in the hazardous waste storage area; and disposal of hazardous waste on site without a permit resulting in the stained pavement in the waste drum storage area (16,19).

Permit applications for the soil vapor recovery and groundwater remediation systems on the site were submitted by MRCP to BAAQMD and EBMUD in February 1990, and a letter

was filed informing the BAAQMD that the facility remediation systems were to be operational by July 1990 (17,20).

MRCP is not listed in the May 3, 1990 RCRA database, or the January 1, 1990 Bond Expenditure Plan (33,42).

5. HRS FACTORS

The Hazard Ranking System (HRS) is a scoring system used to assess the relative threat associated with actual or potential releases of hazardous substances from sites. It is the principal mechanism EPA uses to place sites on the National Priorities List (NLP). EPA has proposed revisions to the HRS, pursuant to the Superfund Amendments and Reauthorization Act of 1986 (SARA). FIT has evaluated the following proposed revised HRS factors relative to this site.

5.1 Waste Type and Quantity

The hazardous materials used and generated by the printing processes of MRCP included printing inks, solvent cleaning compounds, volatile and semi-volatile organic compounds, and color pigments (see Appendix C)(10,35). The highest contaminant concentrations found on the site are summarized in Table 5-1.

TABLE 5-1: RESULTS OF SOIL AND GOUNDWATER SAMPLING

Contaminant	Concentration in Groundwater	Concentration in Soil	Detection Limit	Maximum Concentration Limit
Total Petroleum Hydrocarbons	103 mg/L	5,050 mg/kg	10	NA
Oil and Grease	41 mg/L	45,000 mg/kg	NA	NA
Lead	NA	4,300 mg/kg	12	50
Zinc	NA	266,200 mg/kg	0.4	NA
Benzene	12 µg/L	50 µg/kg	5	5

Source: SCS Engineers. Environmental Assessment, 6707 Bay Street, Emeryville, CA. January 30, 1990.

NA = Information not available.

Note: Total petroleum hydrocarbons, oil and grease, lead and benzene are likely excluded from CERCLA consideration under Petroleum Exclusion provisions.

Wastes generated by MRCP were contained in 55-gallon drums stored in a fenced area located behind the warehouse. The area was paved, but was covered with no secondary containment system (2,7). Materials stored in the drums consisted of printing inks. solvent cleaning compounds, volatile organic compounds, and color pigments. Drums remained in this area from the time of generation until their removal during site closure procedures in 1989. Eighty-nine drums were removed and sampled for pH, oil solvents, phenol, oxidant sulfide, halogenated hydrocarbons, flammability, combustibility, and percent solids at that time (10).

Three underground storage tanks were discovered at the site during closure procedures in February 1989. The capacities of the tanks were 2,000, 1,650, and 3,200 gallons. The tanks were installed by Dymo Industries, the previous site operator, to store MIBK and MEK used in their processes (5). At the time of discovery, the 2,000 gallon tank contained approximately 700 gallons of product, and the 3,200 and 1,650 gallon tanks contained 350 and 220 gallons respectively (7). The tanks were emptied and then removed during the site closure procedures (10,12,34). There is no information on the condition of the tanks upon their discovery.

Runoff from the asphalt-paved site channels into an area in the western corner of the property. Hydrocarbons and high concentrations of VOCs were found in shallow soil samples taken from on-site and off-site areas (7). As a result, 1,750 cubic yards of soil were excavated from these areas (see Figure 3), and stockpiled at the site for approximately 5 months until its disposal in January 1990 (15,16).

In January 1989, the Alameda County Department of Environmental Health inspected the facility. Staining of the pavement in the waste drum storage area was noted, and was considered evidence of spills (16). According to MRCP contractors, MIBK (up to 8 mg/kg in soil), VOCs (such as benzene up to 12 μg/kg in soil and 50 μg/kg in water), lead (up to 4,300 mg/kg in soil), and zinc (up to 266,200 mg/kg in soil) detected in both on-site soils and groundwater are likely to have been the result of leakage from the 3 storage tanks and the waste storage drums. The VOC, lead, and zinc contamination is apparently more widespread than the MIBK contamination, and was evident in several soil boring samples throughout the property (6). The estimated area of contamination by these chemicals is approximately 200,000 square feet (2,6). Contaminants detected on site such as benzene and lead, are likely excluded from CERCLA consideration under the Petroleum Exclusion provisions (42).

Contractors for MRCP concluded that other contaminants such as TPH, PCB, and oil and grease found in on-site soils and groundwater are most likely a result of contaminant migration from the municipal waste dump which was present on the property adjacent to MRCP in the 1940s and 1950s or from other contaminated sites in the area (6,7).

5.2 Groundwater

MRCP is located near San Francisco Bay in an area where the soil composition is generally heterogeneous fill. During the development of the Emeryville area, which was formerly tidal wetlands, fill material was mixed with the naturally occurring Clear Lake Clay. The resulting soil layer is approximately 97 inches deep, and is characterized by poor drainage and very slow permeability (21). There is no specific information on aquifers underlying Emeryville, as groundwater is not used as a source of drinking water in the area (22). The annual net precipitation for Emeryville is 11.77 inches (23,24).

Beneath the asphalt pavement, the on-site soils consist of approximately 5 feet of loose gravel and sand overlying 4 feet of gravely clay and 1 foot of sand (2). Groundwater is first encountered beneath the MRCP site at approximately 10 feet below ground surface (bgs) (10). Underlying the groundwater is another layer of stiff clay (2).

Drinking water for the city of Emeryville is provided by East Bay Municipal Utilities District (EBMUD) which receives its water from the Pardee and Camanche Reservoirs on the Mokelumne River (22,25). These reservoirs are located approximately 70 miles east of Emeryville in the Sierra Nevada foothills (26). Cities, or portions of cities, located within 4 miles of the site include Richmond, El Cerrito, Albany, Kensington, Oakland, and Berkeley (1). Drinking water for all these cities is supplied by EBMUD via distant surface water sources (26). Groundwater in the Emeryville area is used for industrial purposes only (22). Three industrial wells are located in the vicinity of the site. The closest industrial well is located at the intersection of Hollis and 63rd Streets, approximately 0.33 mile south of the site (1,22).

Sampling of on-site subsurface soil and groundwater was conducted by contractors for MRCP in 1989 and 1990 (see Table 5-1).

There were no background samples taken for either soil or groundwater analyses. Current on-site soil contamination is apparently restricted to subsurface soils and groundwater contained beneath asphalt pavement (15,16).

An observed release to groundwater can likely be documented due to the presence of MIBK in soil and groundwater samples taken from a boring adjacent to the former MIBK and MEK storage tanks. MIBK was not present in soil and groundwater samples taken from upgradient borings on site (6).

5.3 Surface Water

The Berkeley Aquatic Park is located less than 0.25 mile downslope and north of MRCP, and San Francisco Bay is located approximately 0.33 mile downslope and west of the site. The surface runoff from MCRP is to the northwest (1). Berkeley Aquatic Park is comprised

of three small lakes surrounded by a grassy park and picnic area. Information on the specific uses of the park were unavailable, however among its uses appear to be picnicing and waterskiing (1,8). San Francisco Bay is used for commercial and sport fishing, boating, commercial shipping, navigation, and swimming (27). The annual commercial fish catch of Pacific herring in the San Francisco Bay is approximately 10,000 tons (28). The Emeryville Marina is located on San Francisco Bay approximately 0.33 mile west of the site (1). The marina has a fishing pier, a boat launch ramp, and is a habitat for water birds (1,29). Four state or federally designated endangered species and 1 state designated threatened species, the California clapper rail (Rallus longirostris obsoletus), the California black rail (Laterallus jamaicensis coturniculus), the California least tern (Sterna antillarum browni), the Salt marsh harvest mouse (Reithrodonromys raviventris), and the Santa Cruz tar plant (Holocarpha macradenia) inhabit areas such as those found at the aquatic park and around the bay (29).

Emeryville is located in a 100-year floodplain (30). The 2-year, 24-hour precipitation in the area is 3.0 inches (31).

The likelihood that a past release from the site to the nearby surface water has occurred appears to be high because there is evidence of past chemical leakage or spills and no secondary containment system was present in the drummed waste storage area. In addition, during closure activities excavated contaminated soil was stored uncovered on the site for approximately 5 months before disposal (2,6,15,16). The potential for a future release to surface water appears to be low because all hazardous waste-containing drums and excavated soil have been removed from the site and the entire site is asphalt-paved (10,11,12,16).

5.4 Air

The MRCP facility is located in a commercial, industrial and residential area. Approximately 50 employees of Nady Systems currently occupy the office building on the property (5,6). Approximately 262,000 residents live within 4 miles of the site (see Table 5-2)(32).

Four state or federally designated endangered species and 1 state designated threatened species, the California clapper rail (Rallus longirostris obsoletus), the California black rail (Laterallus jamaicensis coturniculus), the California least tern (Sterna antillarum browni), the Salt marsh harvest mouse (Reithrodonromys raviventris), and the Santa Cruz tar plant (Holocarpha macradenia) inhabit areas within 4 miles of MRCP (29).

The likelihood that a past release from the site to the air has occured exists because there is evidence of leakage or spills from waste-containing drums, and excavated contaminated soil was stored uncovered at the site for approximately 5 months before disposal. There was also evidence of contaminated surface soils at the site (2,6,15,16). The present potential for

a release via the air route appears to be low because all hazardous waste containing drums and excavated soil have been reportedly removed from the site (10,11,12).

Table 5-2	
Location	**Population**
On-Site	50
0 to 0.25 miles	1,909
0.25 to 0.5 miles	3,118
0.5 to 1 mile	24,371
1 to 2 miles	67,652
2 to 3 miles	85,164
3 to 4 miles	79,802

Source: California 1980 Census of Population and Housing Summary, Tape File 1A; Peters, Belinda, ICF Technology, Inc., and Gates, Robert P., Law Offices of Erskine and Tulley. Telephone conversation. August 6, 1990.

5.5 On-Site

Approximately 30,000 people reside within 1 mile of the MRCP site (see Table 5-1) (32). The former facility is located in an area of commercial, light industrial, and residential uses (6). Approximately 50 employees of Nady Systems currently occupy the office building at the site (5,6). The property is completely paved with the exception of planter strips by the office building. The facility is unfenced with the exception of the former waste drum storage area (8).

The potential for an on-site exposure appears to be low at this time because all current documented contamination occurs in soil and groundwater beneath asphalt pavement, and all hazardous wastes have reportedly been removed from the site (6,8).

6. SUMMARY OF FIT INVESTIGATIVE EFFORTS

On June 19, 1990 at approximately 10:15 AM, FIT members Belinda Peters and Adam Ng, of ICF Technology, Inc., conducted a site drive-by of the Mike Roberts Color Productions site in Emeryville, California. Observations recorded during the site drive-by are presented in the Site Drive-by Observations Report (8). No on-site inspection or interview was conducted because the facility has been vacated by MRCP. Photographs were taken during the drive-by and are presented in Appendix C.

7. EMERGENCY RESPONSE CONSIDERATIONS

The MRCP facility ceased operations in March 1990 and MRCP has since vacated the premises. During facility vacating activities, MRCP disposed of all the waste-containing drums and the 3 underground storage tanks present on site (4,6,8). Current on-site contamination appears to be restricted to the subsurface and is completely covered by asphalt pavement (6,8). Remedial actions currently performed at the site include soil vapor recovery and groundwater remediation (17). Emergency removal considerations do not appear to be warranted at this time.

8. SUMMARY OF HRS CONSIDERATIONS

Mike Roberts Color Productions (MRCP), formerly located at 6707 Bay Street, Emeryville, California, operated a color printing, lithography, and off-set printing business at the site from March 1979 until February 1989. Hazardous wastes generated by MRCP included waste printing ink, solvent cleaning wastes, waste volatile and semi-volatile organic chemicals, color pigments, and waste photographic developing solutions. All generated hazardous wastes were stored in 55-gallon drums in a fenced area on-site, with the exception of the photographic developing solutions which were disposed of directly to drains into the city sanitary sewer. Dymo Industries, a previous operator of the property, reportedly used methyl isobutyl ketone (MIBK) and methyl ethyl ketone (MEK) in a label tape production process. The MIBK and MEK were stored in 3 underground storage tanks on site. When MRCP vacated the facility, all drums containing hazardous waste were removed from the site and the underground tanks were excavated and removed. Various samples collected and analyzed at the time the facility was being vacated showed the presence of elevated levels of total petroleum hydrocarbons (TPH, as gasoline and diesel), oil and grease, MIBK, volatile organic compounds (such as benzene), lead, zinc, polychlorinated biphenyls, trace amounts of polynuclear aromatics hydrocarbons, and heavy metals either in the on-site soil or in the underlying groundwater. According to the MRCP contractors, soil and groundwater contamination by VOCs, lead, zinc, and MIBK is likely a result of chemical leakage from the underground storage tanks and drums. The contractors for MRCP also suggested that other on-site contaminants such as TPH, PCB, and oil and grease are most likely a result of contaminant migration from the municipal waste dump which was present

on the property adjacent to MRCP in the 1940s and 1950s or from other contaminated sites in the area. A soil vapor recovery system and a groundwater remediation system have been installed at the site in an attempt to alleviate the contamination.

Groundwater beneath the MRCP site is first encountered at approximately 10 feet below ground surface. The regional groundwater is used for industrial purposes only. Drinking water for the city of Emeryville is imported from the distant Pardee and Camanche Reservoirs which are fed by the Mokelumne River. An observed release to groundwater can likely be documented because MIBK has been found in on-site soils and groundwater samples taken from a boring immediately adjacent to the former undeground storage tanks, MIBK was not detected in the soil or groundwater samples collected elsewhere on the site.

Berkeley Aquatic Park and San Francisco Bay are located 0.25 and 0.33 miles downslope of MRCP, respectively. Berkeley Aquatic Park is used for picnicing and waterskiing, and San Francisco Bay is heavily used for commercial and sport fishing, swimming, boating, commercial shipping, and navigation. The likelihood that a past release from the site to the nearby surface water has occurred appears to be high because there is evidence of past chemical leakage or spills and no secondary containment system was present in the drummed waste storage area. In addition, during facility vacating activities excavated contaminated soil was allowed to be stored uncovered on the site for approximately 5 months before disposal. The potential for a future release to surface water appears to be low because all hazardous waste-containing drums and excavated soil have been removed from the site and the entire site is asphalt paved.

Approximately 262,000 residents live within 4 miles of the former MRCP site, and 30,000 residents live within 1 mile of the site. The present potential for an air or on-site exposure appears to be low because all documented on-site contamination is subsurface and completely covered with asphalt pavement.

The significant HRS factors associated with the site are:

- high likelihood of documenting an observed release of hazardous substances from the site to surface water; and
- extensive near-by surface water uses.

9. EPA RECOMMENDATION

	Initial	Date
No Further Remedial Action Planned		
~~Medium~~ Low Priority SSI	PL	9.28.90
High Priority SSI		

Notes:

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29. California Department of Fish and Game. Natural Diversity Data Base, Oakland West and Richmond, California Quadrangles. April 1, 1989.

30. U.S. Department of the Interior, Geological Survey professional paper 942. Flood Prevention and Land Use Planning. 1977.

31. U.S. Department of Commerce, NOAA, National Weather Service. NOAA Atlas II, Precipitation-Frequency Atlas of the West, Volume XI-California. 1973.

32. California 1980 Census of Housing and Population Summary, Tape File 1A

33. RCRA Database. May 3, 1990.

34. L and W Environmental Services, Inc. Final Report/Tank Removal. November 3, 1989.

35. Mike Roberts Color Productions, Interoffice Memorandum: List of Suppliers and Products Requiring Material Safety Data Sheets. Undated.

36. Peters, Belinda, ICF Technology, Inc., and "receptionist", Nady Systems, Inc. Telephone conversation. August 22, 1990.

37. Anonymous phone complaint reported to Paul LaCourreye, U.S. Environmental Agency. February 16, 1989.

38. Peters, Belinda, ICF Technology, Inc., and Chapman, Jo, East Bay Municipal Utilities District, Wastewater Treatment Division. Telephone conversation. August 23, 1990.

39. Peters, Belinda, ICF Technology, Inc., and Cruz, Doris, California Department of Environmental Health. Telephone conversation. June 7, 1990.

40. Peters, Belinda, ICF Technology, Inc., and File Coordinator, California Regional Water Quality Control Board. Telephone conversation. June 7, 1990.

41. 1984 Petroleum Exclusion. 40 CFR Sections 101(14) and 101(33).

42. Bond Expenditure Plan. January 1, 1990.

APPENDIX A

Contact Logs

and

Contact Reports

PA/SI Contact Log

Facility Name: Mike Roberts Color Productions
Facility ID: CAD009133190

Name	Affiliation	Phone #	Date	Information
* Bob Tasto	U. S. Department of Fish and Game	(415) 688-6360	5/30/90	See Contact Report.
Doris Cruz	California Department of Health Services	(415) 540-3800	6/7/90	No File Information.
File Coordinator	California Regional Water Quality Control Board	(415) 464-1255	6/7/90	No File Information.
Kate Caskey	East Bay Municipal Utilities District	(415) 451-3444	6/11/90	See Contact Report.
Juan Arreguin	Emeryville, Public Works Department	(415) 654-6161	6/12/90	See Contact Report.
John Cummings	SCS Engineers	(415) 829-0661	6/20/90	See Contact Report.
Robert P. Gates	Erskine and Tulley	(415) 392-5431	6/20/90	See Contact Report.
Robert P. Gates	Erskine and Tulley	(415) 392-5431	8/6/90	See Contact Report.
"receptionist"	Vady Systems	(415) 652-2411	8/22/90	Vady Systems manufactures wireless communications systems such as microphones, walkie-talkies and headphones.
Jo Chapman	East Bay Municipal Utilities District, Wastewater Treatment Divisions	(415) 465-3700 ext. 205	8/23/90	At this time there are no regulatory permits necessary for sewer discharge from photographic processes. Only the quantities of discharged silver are monitored.

* Past Contact Report Used to Evaluate Current Site.

SITE DRIVE-BY OBSERVATIONS REPORT

ICF Technology, Inc.
Field Investigation Team (FIT)
160 Spear Street, Suite 1380
San Francisco, CA 94105
(415) 957-0110

OBSERVATIONS MADE BY: Belinda Peters and Adam Ng, ICF Technology, Inc.

DATE: June 19, 1990

SITE NAME: Mike Roberts Color Productions

EPA ID#: CAD009133190

The following observations were made during the site drive-by:

The entire site is paved with the exception of planter boxes near the office building. The site is completely unfenced with the exception an area behind the warehouse which apparently was used for drum storage. The facility appears to be vacant, and moving-out procedures are occurring. There are some workers in one of the buildings. There appear to be some monitoring wells at the front of the property.

Berkeley Aquatic Park is located adjacent to the facility. There is a grassy picnic area near one of the lakes and the larger lake has a waterski ramp.

CONTACT REPORT

Agency/Affiliation: California Department of Fish and Game

Department/Region:

Address/City: 411 Burgess Drive, Menlo Park

County/State/Zip: San Mateo, California 94025

CONTACT	TITLE	PHONE
Bob Tasto		(415) 688-6360

Person Making Contact: Kate Dragolovich, Ecology and Environment, Inc.

Date: May 30, 1990

Subject: Fisheries in the Southern Portion of the San Francisco Bay

Site Name: Mike Roberts Color Productions (from Redwood Shore Landfill, CAD9824102343)

EPA ID#: CAD009133190

Commercial fishing in San Francisco bay is limited to Pacific Herring. The main fisheries for Pacific Herring are where the thickest spawning areas are. These areas are in the central and north bay. There is sporadic spawning in the south bay. The annual fishery quota for Pacific Herring for the entire San Francisco Bay is 10,000 tons.

CONTACT REPORT

Agency/Affiliation: East Bay Municipal Utilities District

Department/Region:

Address/City: P. O. Box 24055, Oakland

County/State/Zip: Alameda, CA 94623

CONTACT	TITLE	PHONE
Kate Caskey		(415) 451-3444

ICF Person Making Contact: Belinda Peters Date: June 11, 1990

Subject: Water Supply for East Bay Municipal Utilities District

Site Name: Mike Roberts Color Productions EPA ID#: CAD009133190

The city of Emeryville's drinking water is supplied by East Bay Municipal Utilities District (EBMUD). EBMUD serves 1.1 million customers, and receives its water from the Camanche and Mokelumne Reservoirs.

CONTACT REPORT

Agency/Affiliation: Emeryville Public Works Department

Department/Region: Engineering Department

Address/City: 2200 Powell Street, Emeryville

County/State/Zip: Alameda, CA 94608

CONTACT	TITLE	PHONE
Juan Arreguin	Engineer	(415) 654-6161

ICF Person Making Contact: Belinda Peters Date: June 12, 1990

Subject: Drinking Water and Well Information for the City of Emeryville

Site Name: Mike Roberts Color Productions EPA ID#: CAD009133190

The city of Emeryville receives all of its drinking water from East Bay Municipal Utilities District. Local groundwater is not used as a drinking water supply. There are 3 industrial wells in the city, located at Park & Holden Streets, San Pablo and Park streets and at Hollis and 63rd streets. The depth to the groundwater in Emeryville is 1 foot below ground surface. He has no information on the aquifers in the area or on the floodplains.

CONTACT REPORT

Agency/Affiliation: SCS Engineers

Department/Region:

Address/City: 6761 Sierra Court, Suite D, Dublin

County/State/Zip: Contra Costa, CA 94568

CONTACT	TITLE	PHONE
John Cummings	Engineer	(415) 829-0661

ICF Person Making Contact: Belinda Peters Date: June 20, 1990

Subject: Background Information on Mike Roberts Color Productions

Site Name: Mike Roberts Color Productions EPA ID#: CAD009133190

The facility closed down approximately two years ago, in early 1989, after going bankrupt when one of the principals died. At one time they made color postcards. More recently they did color printing, lithography, and off-set printing. They used solvents, dyes and paints which they stored on site. He has their certificate of disposal. There has been sampling done and there is some remediation going on. He needs to contact the lawyer for the site, who is his actual client, to find out how he can get me the information needed and best deal with the situation.

CONTACT REPORT

Agency/Affiliation: Erskine and Tulley

Department/Region: 580 Market Street, 6th Floor, San Francisco

Address/City:

County/State/Zip: San Francisco, California 94104

CONTACT	TITLE	PHONE
Robert P. Gates	Attorney	(415) 392-5431

ICF Person Making Contact: Belinda Peters Date: June 20, 1990

Subject: General Information on Mike Roberts Color Productions

Site Name: Mike Roberts Color Productions EPA ID#: CAD009133190

Mike Roberts Color Productions (MRCP) went bankrupt and subsequently went out of business in February of 1989. The property was owned by a group of individuals who used to work for MRCP; their company is called MRCP Realty. MRCP Realty sold the property on March 15, 1990 to Nady Systems.

In May of 1989 a notice of violation was filed by the county of Alameda for storage of barrels containing inks and solvents behind the building. A site assessment was performed and the materials were disposed of.

Mr. Gates began his association with MRCP when they were undergoing negotiations for a sale to the Martin Group which already owns a great deal of land in Emeryville. Before the sale, some soil testing was conducted and contamination was discovered. There was a dispute over whether the contamination was from MRCP or whether it was "historical background" or contamination from previous owners. MRCP claimed it was historical background contamination, but the sale fell through.

During the site assessment underground tanks that were previously not known about were discovered on the front of the property. There have been water and vapor extraction systems have been installed at the site. There was also contamination found on the back of the site which MRCP claims is coming from another site. L & W Environmental Services was working on the site during this time; however, the job is currently being handled by SCS Engineers.

CONTACT REPORT

Agency/Affiliation: Erskine and Tulley

Department/Region:

Address/City: 580 Market Street, 6th Floor, San Francisco

County/State/Zip: San Francisco, CA 94104

CONTACT	TITLE	PHONE
Robert P. Gates	Attorney	(415) 392-5431

ICF Person Making Contact: Belinda Peters Date: August 6, 1990

Subject: Further Information on Mike Roberts Color Productions

Site Name: Mike Roberts Color Productions EPA ID#: CAD009133190

Dymo Industries was MRCP's predecessor at the site. They had a sale-lease from the Annuity Board Southern Baptist Convention starting in March 1963 and it was sold to MRCP in March 1979. Dymo Industries made label tape gadgets and label tape. Dymo Industries is now Esselte Pendaflex Corporation located on the east coast. The Methyl Isobutyl Ketone storage tanks on-site were from Dymo Industries and MRCP was unaware of their existence until they started vacating the site. MIBK was used in making the labeling tape. MRCP did not use MIBK. For more information on this, I should contact John O'Connor, general counsel for Esselte Pendaflex Corporation at (516) 741-3200, 71 Clinton Road, Garden City, New York 11530.

Nady Systems now occupies the office and warehouse of MRCP; there are approximately 50 people at the site.

APPENDIX B

Photographic Documentation
of the former Mike Roberts Color Productions facility
in Emeryville, California
Photos were taken by Belinda Peters and Adam Ng, ICF Technology, Inc.
on June 19, 1990 during a site drive-by.

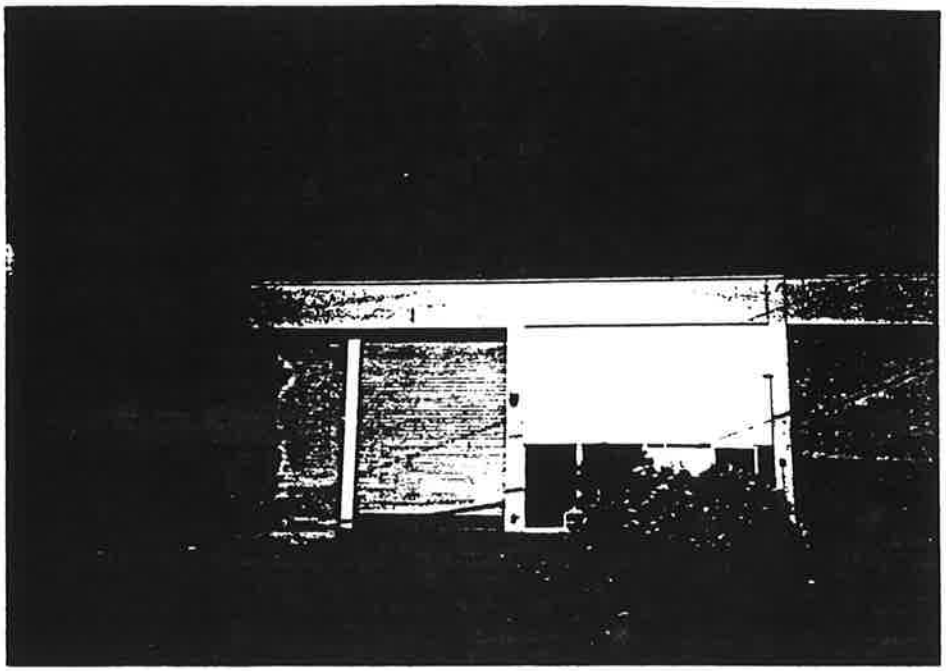

Photo 1: View of the former Mike Roberts Color Productions warehouse from Bay Street (facing north).

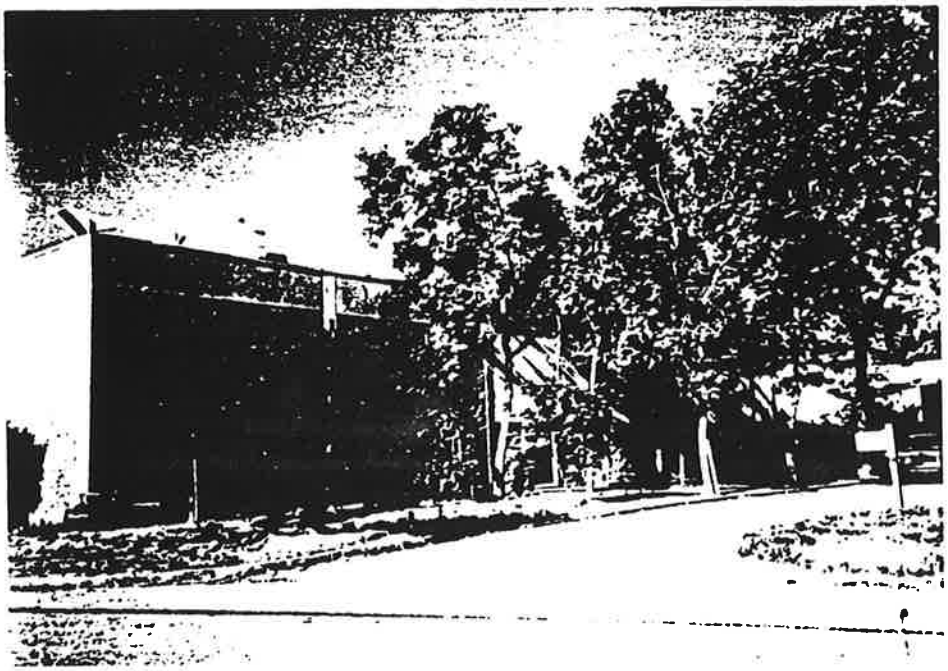

Photo 2: View of the former Mike Roberts Color Productions facility from east side sharing groundwater extraction and soil vapor removal wells.

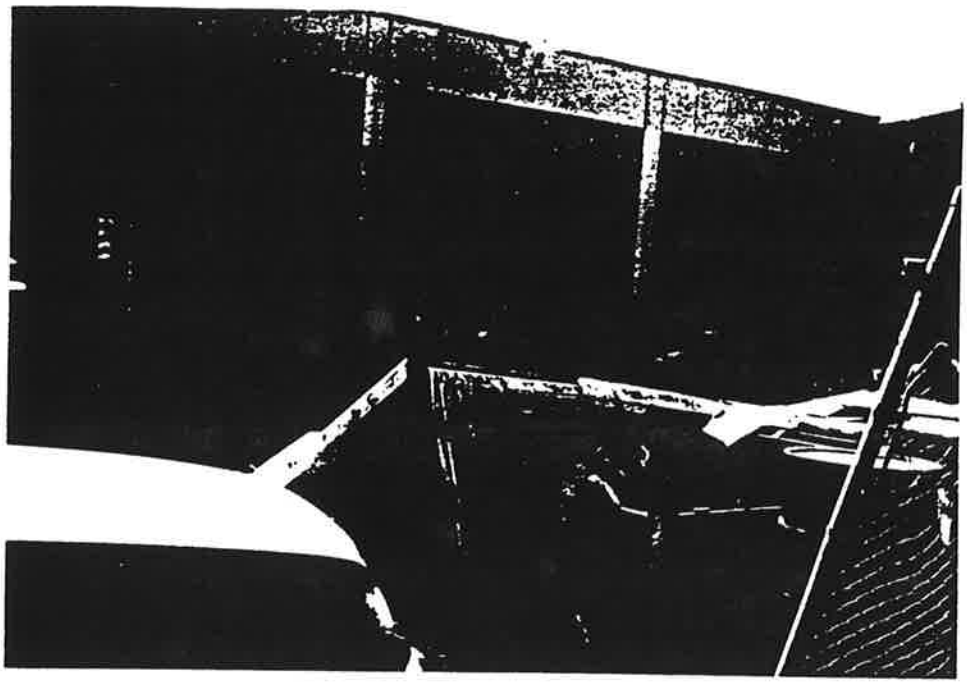

Photo 3: Former hazardous waste drum storage area at the former Mike Roberts Color Productions facility in the process of closure (facing east).

APPENDIX C

Chemicals used at Mike Roberts Color Productions
and their suppliers.

	CHEMICALS USED AT MIKE ROBERTS COLOR PRODUCTIONS AND THEIR SUPPLIERS									
NO.	HURST GRAPHICS	KODAK	3M	ANCHOR/LITH-KEMKO	ROBERTS & PORTER	DUPONT	RYCOLINE	QUALITY C.L. PRODUCTS	VALSPAR	PIERCE & STEVENS
1.	Vacuum Pump Lube SAE 10	Kodak SH Deactivator	Negative Color Key-Trans., Key Mach., Dev.	100% Pure Gum Arabic 14 BE	Redi-Mist A100	Com - Pos Dev.	Aliphatic Solvent	Aliphatic & Oxygenated Solvent Blend	U.V. Curable Coating	U.V. Curable Coating
2.		Ultratec Tray Developer & Replenisher			Kleer Glass Cleaner	Com - Pos Fixer	Silicone Concentrate			
3.		Kodalith MPII Blender Concentrate #1				Comm-Blend Replenisher R 1	Anti-Foam			
4.		Kodalith MPII Blender Concentrate #2				Comm-Blend Replenisher R-2	Anti-Static Concentrate			
5.		Polymatic LP Deletion Fluid				Comm-Blend Replenisher R-3	Two-step Wash			
6.		Polymatic Neg. Deletion Fluid Kit Part A				Cromalin Metallic-Yelo Toners	Ultra Plus Fountain Solution			
7.		Polymatic Negative Deletion Fluid Kit Part B				Cromalin Metallic-Silver Toner				
8.		Polymatic Desensitizer (machine)				Cromalin Hi-Visibility Toners				

	CHEMICALS USED AT MIKE ROBERTS COLOR PRODUCTIONS AND THEIR SUPPLIERS									
9.		Polymatic Neg. Dev. (machine)				Cromalin Process and Hi-Strength Toners				
10.		Polymatic Hot Spot Remover								
11.		Polymatic Tushe								
12.		Ultratec Fixer and Replenisher								
13.		Polymatic Plate Finisher								
14.		Polymatic Plate Preservor								
NO.	SUN CHEMICAL CORP.	CORAC INK / CHEMICAL CO.	THOMAS PRINTING INKS, INC.	SIRION PRINTING INK CO.	GANS INKS SUPPLY CO., INC.	GOLD STAR CHEMICAL (GANS)	VARN PRODUCTS CO., INC.	UNOCAL CHEMICAL	WILLARD PRODUCTS	SINCLAIR AND VALENTINE
1.	U.V. Curable Coating	Heatset Inks	P.M.S. Inks 871-877	Sirion Varnishes	Marlite	T.S.W. #1	Wash V-263	Isopropyl 99	Isopropyl 99	O/S Ink Sinvalith I Karma Matte Tan
2.		White Oil	Overprint Varnish	Sirion Combo Drier	Oxidizing O/S Inks	T.S.W. #2	Varn Type Wash			
3.			Low Tack Reducer	Sheet-fed Inks	Fountain Drier Stimulator	Combo Fountain Solution				

	CHEMICALS USED AT MIKE ROLERTS COLOR PRODUCTIONS AND THEIR SUPPLIERS									
NO.	SUN CHEMICAL CORP.	CORAC INK/ CHEMICAL CO.	THOMAS PRINTING INKS, INC.	SIRION PRINTING INK CO.	GANS INKS SUPPLY CO., INC.	GOLD STAR CHEMICAL (GANS)	VARN PRODUCTS CO., INC.	UNOCAL CHEMICAL	WILLARD PRODUCTS	SINCLAIR AND VALENTINE
4.				Turbo Etch	Coronet Etch Concentrate	Isogen IV				
5.				O/S Printing Inks U.V. Curing	Anti-Skin Spray	T Sol				
6.				Roller Cleaning Jelly						
7.				Quick Print Adhesive						
	ZEP MANUFACT URING									
1.	Parafinic Solvent Blend									

Source: Mike Roberts Color Productions, Interoffice Memorandum: List of Suppliers and Products Requiring Material Safety Data Sheets. Undated.