

SOIL VAPOR EXTRACTION SYSTEM

FINAL CLOSURE REPORT

**5800 CHRISTIE AVENUE
Emeryville, California**

August 29, 1992

**Submitted To: MR. BRIAN OLIVA
ALAMEDA COUNTY HEALTH CARE SERVICES
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CALIFORNIA 94621**

**Prepared For: MR. DICK HERRING
CROLEY & HERRING INVESTMENT COMPANY
448 THARP DRIVE
MORAGA, CALIFORNIA 94556**

**Prepared By: Environment & Technology Services
2081 15TH STREET, SAN FRANCISCO, CA 94114
Telephone: 415-861-0810
Facimile: 415-861-3269**

ETS
ENVIRONMENT & TECHNOLOGY SERVICES

2081 15TH STREET, SAN FRANCISCO, CA 94114
PHONE 415-861-0810 FAX 415-861-3269

August 29, 1992

Mr. Dick Herring
President
Croley & Herring Investment Company
448 Tharp Avenue,
Moraga, California 94556

Subject: **SOIL VAPOR EXTRACTION SYSTEM**
FINAL CLOSURE REPORT
5800 Christie Street, Emeryville, California

Dear Mr. Herring:

Enclosed please find a copy of the subject report for your review and comment.

Please contact me if you have any question about this report.

Sincerely,

Walter W. Loo, President

CERTIFIED ENGINEERING GEOLOGIST NO. 1207

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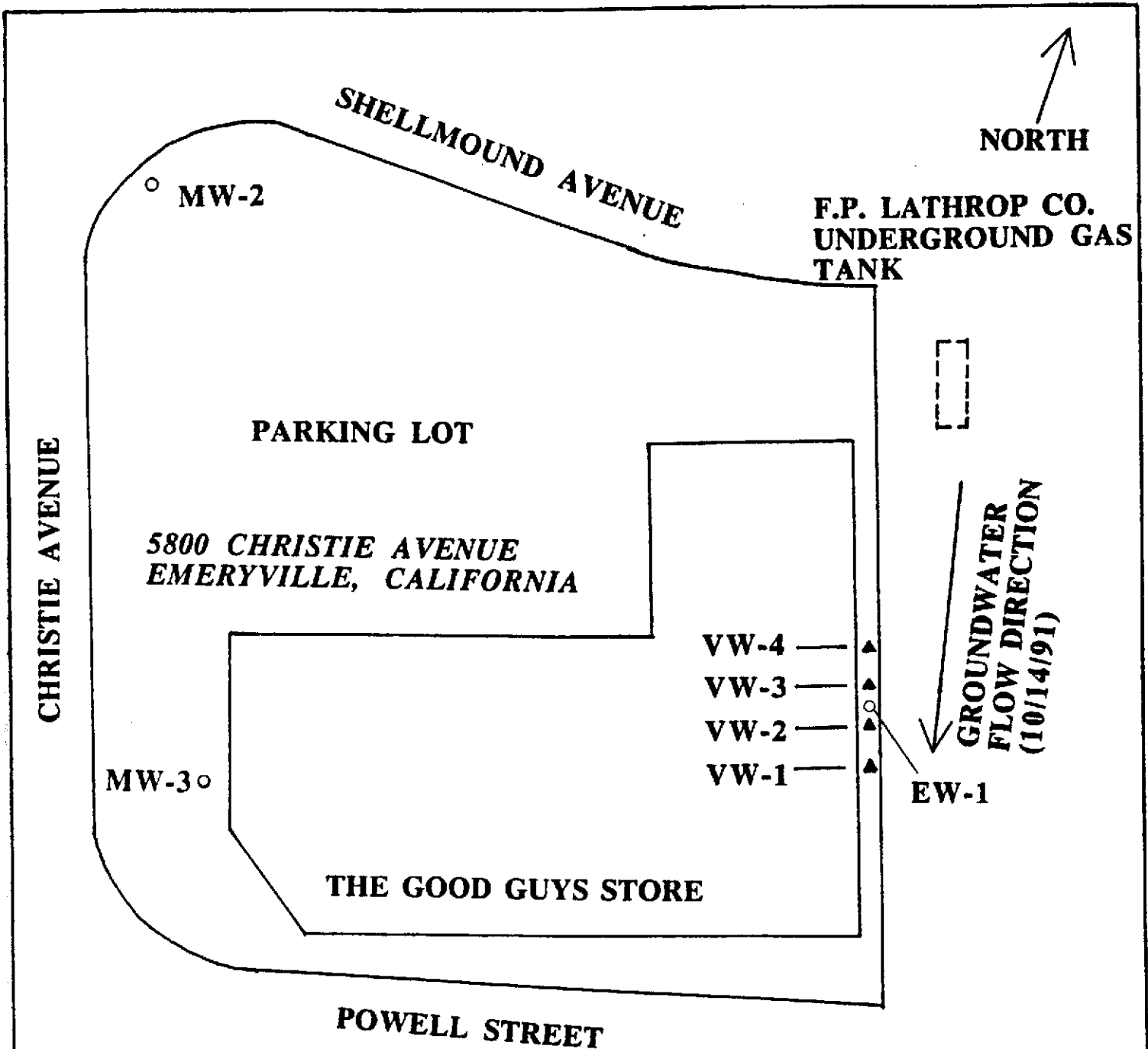
1.0 Introduction

The site is a 0.82 acre property located on the southeast corner of Christie Avenue and Shellmound Street in Emeryville, California (Figure 1). The site is currently leased to The Good Guys Store from Croley and Herring Investment Company, who is the property owner.

Prior to The Good Guys Store occupancy, soil contamination was detected in several soil borings located in the narrow alley way on the east side of the property adjacent to the F.P. Lathrop Company property. The area of concern is about four (4) feet wide and eighty (80) feet long. The contaminated soil was excavated to a depth of about 5 feet (groundwater table) and treated on site by a combination of ex-situ bioremediation and soil vapor extraction. A total of about 1600 cubic feet of soil was treated and disposed to the West Contra Costa Landfill. A soil and remediation and closure report was prepared on July 21, 1989 and accepted by the Alameda County Health Care Services on July 28, 1989 (see Appendix A).

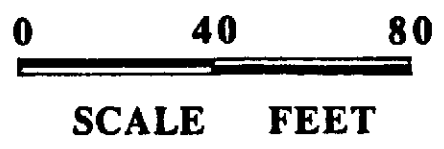
A soil vapor extraction system (VES) was proposed to remediate residual volatile organic chemicals in soil along the eastern property boundary. [REDACTED] a summary of the [REDACTED]

There is a groundwater monitoring program in effect with a quarterly groundwater report requirement since 1989.



LEGEND

- MONITORING WELLS
- ▲ VAPOR EXTRACTION WELLS



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 ENVIRONMENT & TECHNOLOGY SERVICES

FIGURE 1
LOCATION MAP

TABLE 1

SUMMARY OF EXCAVATION PIT WALL SOIL SAMPLE ANALYSIS

<u>Sample Number</u>	<u>Sample Depth</u>	<u>Volatile Organic Compounds (VOC's) Detected</u>	<u>Concentration (PPM)</u>	<u>Total VOC's (PPM)</u>
A-1	5'	Methylene Chloride	0.18	0.21
		Freon 113	0.011	
		TCE	0.019	
A-2	5'	1,2 DCE	0.12	0.33
		TCE	0.1	
		Toluene	0.11	
B	5'	TCA	130	491.8
		TCE	150	
		Toluene	180	
		Ethyl Benzene	3.8	
		Xylenes	28	
C	5'	TCA	23	442.3
		TCE	42	
		Toluene	320	
		Ethyl Benzene	9.3	
		Xylenes	48	
D	5'	TCA	1.0	20.8
		TCE	18	
		Toluene	1.8	
E-1	5'	TCA	0.5	4.4
		TCE	0.8	
		Benzene	0.7	
		Toluene	0.7	
		Ethyl Benzene	0.6	
		Xylenes	1.1	
E-2	5'	ND	-	ND
F	5'	TCA	280	4347
		TCE	1300	
		Toluene		
		Chlorobenzene	18	
		Ethyl Benzene	14	
		Xylenes	35	

2.0 Soil Vapor Extraction System Operation

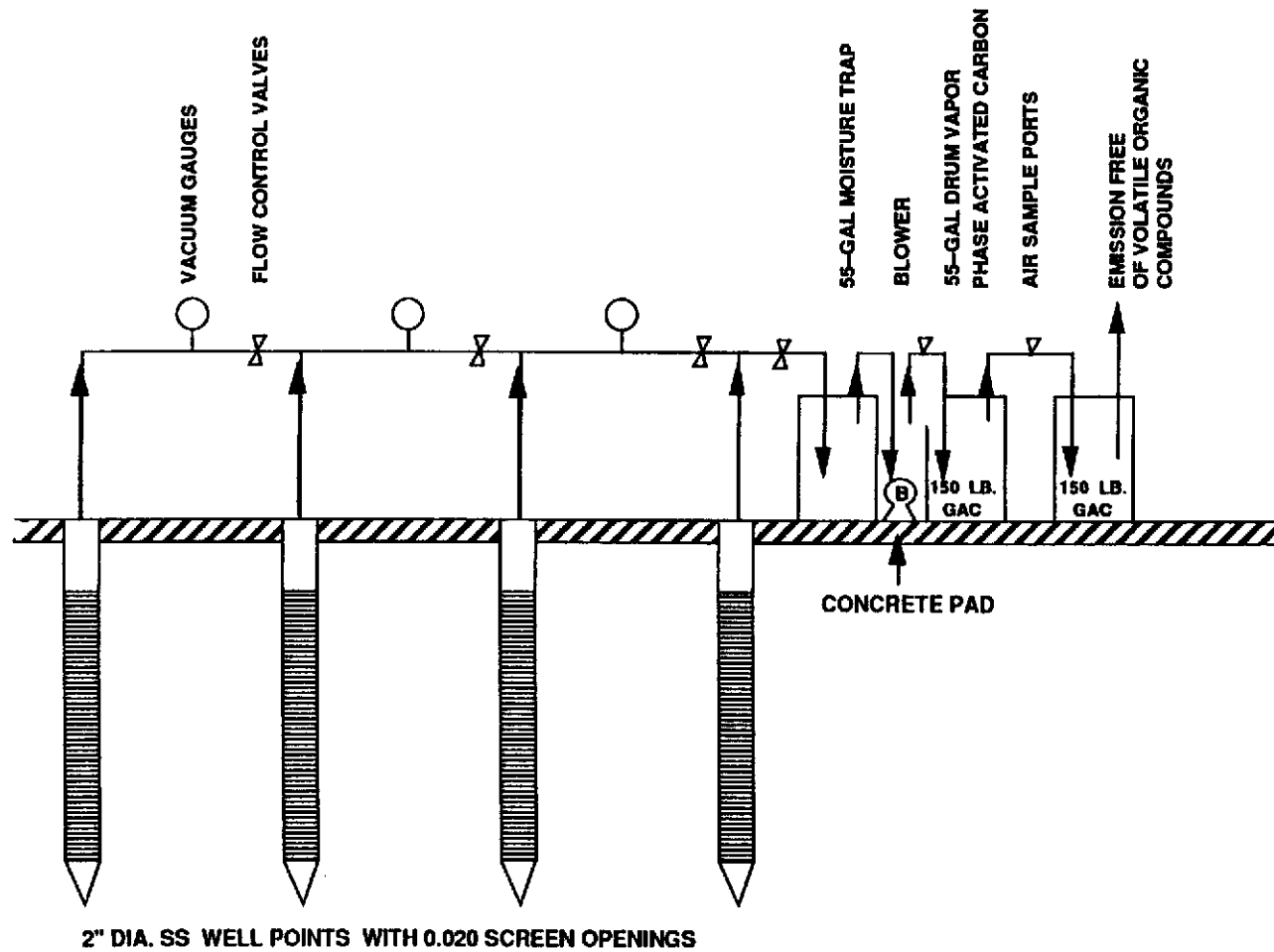
An application of the soil vapor extraction system was filed with the Bay Area Air Quality Management District (BAAQMD) on August 2, 1989. The application was accepted and approved on September 22, 1989 by BAAQMD. (Appendix B)

Figure 2 is a schematic diagram of the VES which consists of four (4) vapor extraction wells to a depth of five (5) feet. The VES was constructed in late 1989 and has been in operation since. BAAQMD representative, Mr. Alex Saschin inspected the system on April 26, 1991. The BAAQMD permit to operate was granted on May 7, 1991. Subsequently, a reduction in monitoring frequency was granted by BAAQMD on September 17, 1991. After the approval of the VES closure work plan by ACHCS(11/27/91) and the VES decommission letter to ACHCS(12/11/92), a letter of notification of the VES decommission was addressed to BAAQMD on December 16, 1991. Appendix A includes ACHCS correspondences. Appendix B includes BAAQMD correspondences.

The initial organic vapor concentration was in hundreds of parts per million, and decreased to less than 10 parts per million. Appendix C is the VES monitoring record. The VES system was operating between 60 to 100 cubic feet per minute (CFM) throughout the period with the exception of testing and maintenance down time.

It is noted that the initial VOC level in the soil was [REDACTED]
[REDACTED] on.

proof



ETS

ENVIRONMENT & TECHNOLOGY SERVICES

FIGURE 2

SOIL VAPOR EXTRACTION SYSTEM

3.0 System Closure Approach

Figure 3 depicts the steps of VES closure.

A VES closure plan was prepared and approved by ACHCS. Confirmatory soil sample and analysis was collected. If the total VOC in soil is less than five (5) ppm, the VES will be shut down and begin decommissioning procedure. The decommissioning items will include all of the following:

- * Surface piping, valve, gauges
- * Ves well abandonment
- * Spent granular activated carbon disposal

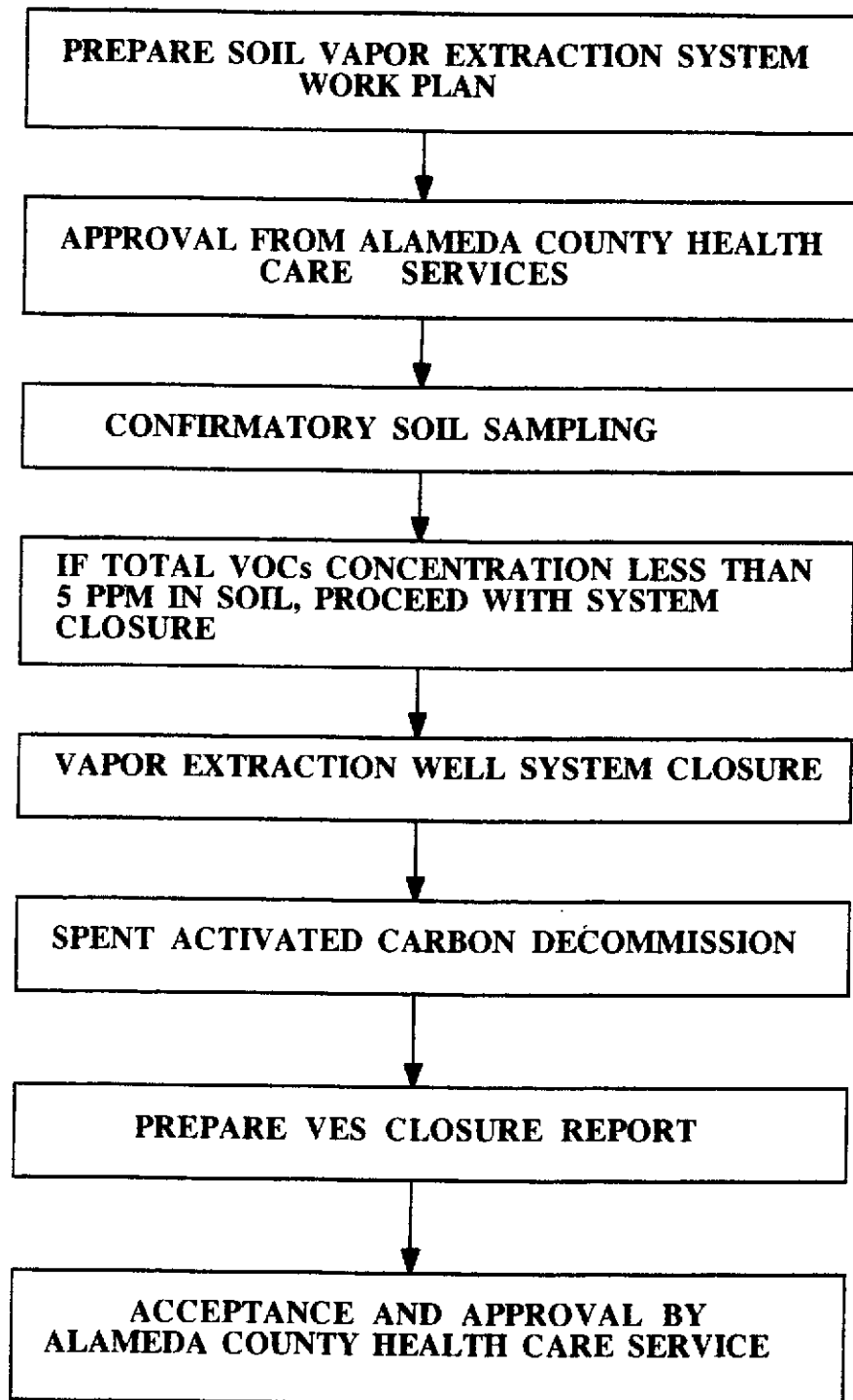


FIGURE 3 SOIL VAPOR EXTRACTION SYSTEM CLOSURE METHOD OF APPROACH

4.0 Confirmatory Soil Sampling and Analysis

Figure 4 depicts the proposed soil sampling locations along the eastern boundary of the site. The soil samples were taken between three (3) to five (5) feet depth. A tube sampler was used to obtain the side wall soil samples. A total of three (3) soil samples were collected. The soil samples were analysed for EPA 8240 (or EPA 8010 and 8020) volatile organic chemicals.

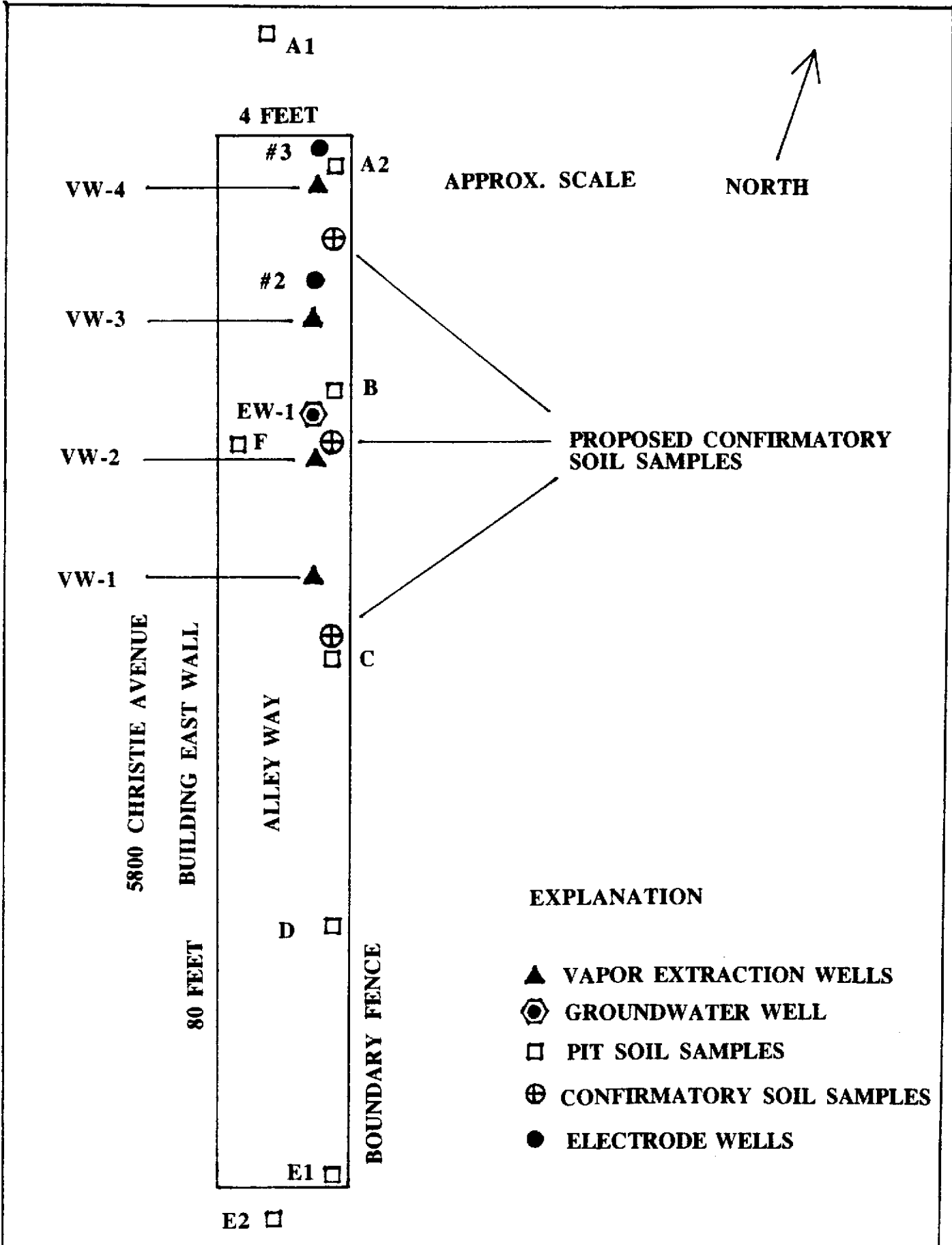
The soil analysis results are summarized below:

	SOIL SAMPLE LOCATIONS			AVERAGE CONCENTRATION
	G	H	I	
8010 COMPOUNDS(TOX)	ND	0.073	1.017	0.363
GASOLINE(TPH)	ND	1.500	ND	0.500
TOTAL VOCs	ND	1.573	1.017	0.863

Concentrations expressed in mg/kg(parts per million)

The total VOCs concentrations on all soil samples were below 5 ppm and the average concentration of total VOCs is below 1 ppm.

Appendix D include the soil confirmation analysis results.



EXPLANATION

- ▲ VAPOR EXTRACTION WELLS
- ⊕ GROUNDWATER WELL
- PIT SOIL SAMPLES
- ⊕ CONFIRMATORY SOIL SAMPLES
- ELECTRODE WELLS

5.0 Vapor Extraction Well System Decommission

The four (4) VES wells were pulled and backfilled. The surface piping, valve and gauges were scrapped. The moisture condensation drum was disposed with the packing material to the West Contra Costa Sanitary Landfill.

*Provide
manifests of
Cheradrye*

6.0 Spent Activated Carbon Drum Decommission

There are a total of ten (10) drums of spent activated carbon ready for decommission. These spent activated carbon were detoxified by

electrolysis treatment. [REDACTED]

Eight(8) of the GAC drum are loaded with VOCs in excess of 50,000 ppm.

A composite sample of the activated carbon was analysed for EPA 8240 volatile organic chemicals after the electrolysis treatment and prior to the enhanced cometabolic biotreatment. It contained TPH(gasoline) of 1.3 ppm and total halocarbons(TOX) of 174.75 ppm. After the enhanced cometabolic biotreatment, the TPH(gasoline) and BTEX compounds were ND(below detection limits) and the TOX concentration was [REDACTED]. Results of this analysis is included in Appendix E.

For the proper disposal of the GAC drums, a LC50 Bio-Assay test was also conducted for the acceptance by the West Contra Costa Sanitary Landfill. The results of the LC50 test was also included in Appendix E.

The application of the disposal of the GAC and the final acceptance documentation by the West Contra Costa Sanitary Landfill is included in Appendix F.

APPENDIX A

**ALAMEDA COUNTY HEALTH CARE
SERVICES CORRESPONDENCES**

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



July 2 1989

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415) 271-4320

28 July 1989

S.G. Crowley and R.D. Herring
Crowley and Herring Investment Company
1311 63rd Street
Emeryville, CA 94608

Subject: Proposed Remedial Project at 5800 Christie Avenue,
Emeryville.

Dear Sirs:

This office has received and reviewed a soil remediation proposal and closure report prepared by Walter Loo of AWD Technologies, in regards to the address listed above. This proposal is acceptable to the Alameda County Department of Environmental Health, Hazardous Materials Division, and approval is granted for it's implementation upon the acquisition of the pertinent discharge permit from the East Bay Municipal Utility District.

If you have any questions concerning this matter, please contact, Dennis Byrne, Hazardous Materials Specialist, at (415) 271-4320.

Sincerely,

Rafat A. Shahid

Rafat A. Shahid, Chief,
Hazardous Materials Division

RAS:DB

cc: Scott Huegenberger, SFBRWQCB
Walter Loo, AWD Technologies, Inc.
10 West Orange Ave.
South San Francisco, CA 94080

ENVIRONMENT & TECHNOLOGY SERVICES

638 BLAIR AVENUE, PIEDMONT, CA. 94611 USA

PHONE: 1-510-601-1263

FAX: 1-510-601-1793

December 11, 1991

Mr. Dennis Byrne
Senior Hazardous Materials Specialist
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Subject: Decommissioning of Vapor Extraction System
5800 Christie Avenue,
Emeryville, California

Dear Mr. Byrne:

As per your approval letter dated November 27, 1991 on the work plan of the closure of the subject system, we have collected the verification soil samples(3) on November 27, 1991 as outlined in the closure work plan prepared by Environment & Technology Services(ETS). The attached figure depicts the sample locations. The soil samples were collected at a depth of about five(5) feet below grade. The ground water table in the area is at about six(6) feet below grade. These soil samples were analysed by a certified laboratory for EPA 8010 and 8020 compounds and total petroleum hydrocarbons as gasoline. The analysis results are attached and summarized below:

	SOIL SAMPLE LOCATIONS			AVERAGE CONCENTRATION
	G	H	I	
8010 COMPOUNDS(TOX)	ND	0.073	1.017	0.363
GASOLINE(TPH)	ND	1.500	ND	0.500
TOTAL VOCs	ND	1.573	1.017	0.863

Concentrations expressed in mg/kg(parts per million)

The total VOCs concentrations on all soil samples were below [REDACTED] the average concentration of total VOCs is below 1 ppm. We hereby, seek your approval to proceed on the decommissioning of the vapor extraction system as specified in the November 15, 1991 closure work plan. Upon your approval, we will notify the Bay Area Air Quality Management District(BAAQMD) on the discontinuation of the vapor extraction system. We sincerely appreciate your co-operations and prompt responsiveness on this matter. Thanks !

Sincerely,

Walter W. Loo R.G. C.E.G.

cc: Mr. Dick Herring, Croley and Herring Investment Company
ATTACHMENTS

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
80 Swan Way, Rm. 210
Oakland, CA 94621
(415) 271-4300

21 January 1992

Richard Herring
Crowley and Herring Investment Company
448 Tharp Drive
Moraga, CA 94556

Subject: Termination of the Vapor Extraction System at 5800
Christie Avenue, Emeryville.

Dear Mr. Herring:

This agency concurs with the recommendation of Walter Loo, of Environment & Technology Services, that the vapor extraction system at the above referenced site should be terminated. Please be aware that the need for ground water monitoring continues.

If you have any questions concerning this matter, please feel free to contact me at (510) 271-4320.

Sincerely,

Dennis J. Byrne
Senior Hazardous Materials Specialist

cc: Rich Hyatt, SFBRWQCB
Walter Loo, Environment & Technology Services

APPENDIX B

**Bay Area Air Quality Management Board
Permits and Correspondence**



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

ALAMEDA COUNTY
Edward R. Campbell
Shirley J. Campbell
(Vice-Chairperson)
Chuck Corica
Frank H. Ogawa

September 22, 1989

CONTRA COSTA COUNTY
Paul L. Cooper
Sunne Wright McPeak

Walter Loo
Croley and Herring Investment Company
1311 63rd Street
Emeryville, CA 94608

MARIN COUNTY
Al Aramburu

NAPA COUNTY
Bob White

Application Number:3548
Equipment Location:
5800 Christie Avenue
Emeryville, CA

SAN FRANCISCO COUNTY
Harry G. Britt
Jim Gonzalez

SAN MATEO COUNTY
Gus J. Nicolopoulos
Anna Eshoo

Gentlemen:

SANTA CLARA COUNTY
Martha Clevenger
Rod Dindon
Robert H. Hughan
Susanne Wilson
(Chairperson)

This is your Authority to Construct the following:

SOLANO COUNTY
Osby Davis
(Secretary)

- S-1 Soil venting system Rotron EG&G 112 CFM blower; abated by A-1 and A-2 Activated Carbon, "Contamination Control" 150 lbs. granular activated carbon per vessel (minimum of two vessels arranged in series), carbon recharged by Cameron Yakima.

SONOMA COUNTY
Jim Harberson

Operation of this equipment will be subject to the following specific conditions:

1. This source shall be vented at all times to both A-1, Activated carbon vessel abatement, 150 lb of carbon and A-2, Activated carbon vessel abatement 150 lb of carbon. The carbon vessels shall be operated in series.
2. The last carbon vessel in series (A-2) shall be kept at a non-detectable reading of organics as measured with an FID-OVA monitor.
3. The primary carbon vessel A-1 (first in series) shall be changed out with unspent carbon upon the detection of 10 ppmv organics as measured with an FID-OVA. The monitoring of the primary carbon vessel exhaust shall be taken at the midpoint between the connection of the two carbon vessels (A-1 AND A-2 placed in series).
4. The operator of this source shall monitor with a FID-OVA at at the following locations:
 1. At the exhaust of S-1; the inlet to carbon bed, A-1
 2. At the midpoint between the connection of the two carbon vessels A-1 and A-2 (connected in series); at the inlet to carbon vessel A-2.
 3. At the outlet of carbon vessel A-2; the carbon vessel that is second in series prior to venting to the atmosphere.

These monitor readings shall be recorded in a monitoring log at the time they are taken. The monitoring results shall be used to:

- a. Calculate the time of predicted breakthrough of organics as carbon on a dry basis after carbon adsorption to maintain compliance with condition number 3.
 - b. Determine the frequency of carbon change out necessary to maintain compliance with condition number 2.
 - c. To maintain compliance with conditions number 2 and 3 the monitoring shall be conducted on a daily basis. The operator of this source may propose for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed based on a decline in organic emissions and /or the demonstrated breakthrough rates of the carbon vessels. Written approval by the District must be received by the applicant prior to a change to the monitoring schedule.
5. The operator of this source shall maintain the following information in a District approved log for each month of operation of the source.
 - a. The hours and time of operation.
 - b. Each monitor reading or analysis result logged in for the day of operation they are taken.
 - c. The calculation of organic breakthrough from the carbon beds.
 6. The log shall be submitted to the District Permit Services Division on a monthly basis. Any violation of condition numbers 2 and/or 3 shall be reported under separate cover letter with the logs as well as the corrective action taken. In addition, any violation of condition number 2 and /or 3 shall be submitted to the District Enforcement Section at the time it occurs. This submittal shall detail corrective action taken and shall include the data showing the violation as well as the time of occurrence.
 7. The operator shall maintain a file containing all measurements, records and other data that are required to be collected pursuant to the various provisions of this conditional Authority to Construct/Permit to Operate. All measurements, records and data required to be maintained by the applicant shall be retained for at least two years following the date the data is recorded.

Application # 3546
September 22, 1989
Page 3

Notification

Please notify the District by letter at least three days before the initial operation of the equipment is to take place so that we may observe the equipment in operation and verify conformance with the Authority to Construct. Operation includes any start-up of the source for testing or other purposes. Operation of equipment without prior written notification to the District or beyond the start-up period without a Permit to Operate may result in enforcement action.

Start-Up Period

After receipt of the start-up letter required above, this Authority to Construct authorizes operation during the start-up period from the date of initial operation noted in your start-up letter until the Permit to Operate is issued, up to a maximum of 60 days. All conditions (specific or implied) of the Authority to Construct are in effect during the start-up period.

Fees

District Regulation 3 requires a fee for each new Permit to Operate. You will be invoiced upon receipt of your start-up letter. No permits will be issued until all outstanding fees are paid.

Implied Conditions

In the absence of specific permit conditions to the contrary, the throughputs, fuel and material consumptions, capacities, and hours of operation described in your permit application will be considered maximum allowable limits. A new permit will be required before any increase in these parameters, or change in raw material handled, may be made.

Expiration

In accordance with Regulation 2-1-407, this Authority to Construct expires two years from the date of issuance unless substantial use of the authority has begun.

Application # 3546
September 22, 1989
Page 4

Correspondence

Please include your application number with any correspondence with the District regarding this matter. If you have any questions on this matter, please call Alexander V. Saschin - Air Quality Engineer II at (415) 771-6000, extension 190.

Very truly yours,

Milton Feldstein
Air Pollution Control Officer

by 
Permit Services Division

JAS:AVS:sw



A Subsidiary of
The Dow Chemical Company

April 3, 1991
2010-003

Mr. Alexander V. Saschin
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Subject: **Start-Up of the Soil Venting System at
Croley and Herring Investment Company Facility
5800 Christie Avenue
Emeryville, California
APPLICATION NO. 3546**

Dear Mr. Saschin:

A soil venting system has been constructed at the above-referenced site. The system was constructed in accordance with the specification (Item S-1) provided in Authority to Construct issued by the District. The system is tested and ready to operate upon your approval. This letter is to notify the District that the start-up of the venting system will commence on April 12, 1991.

If you have any questions or need any further information regarding the subject matter, please contact me or Mr. I-Sen Wang.

Sincerely,


Walter Loo
Director of Remediation

WL:hlw

cc: Mr. Steve Croley - CHIC
Mr. Dick Herring - CHIC



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

ALAMEDA COUNTY
Edward R. Campbell
Shirley J. Campbell
Loni Hancock
Frank H. Ogawa

May 7, 1991

CONTRA COSTA COUNTY
Paul L. Cooper
(Vice Chairperson)
Sunne Wright McPhee
Tom Powers

Croley and Herring Investment Company
1311-63rd Street
Emeryville, CA 94608

MARIN COUNTY
Al Aramburu

Attention: Walter Loo

Application Number: 3546
Equipment Location:
5800 Christie Avenue
Emeryville, CA 94608

NAPA COUNTY
Bob White

SAN FRANCISCO COUNTY
Harry G. Britt
Jim Gonzalez

Gentlemen:

SAN MATEO COUNTY
Gus J. Nicolopoulos
Anna Eshoo
(Secretary)

Attached is your Permit to Operate the following:

SANTA CLARA COUNTY
Martha Clevenger
Rod Diridon
Roberta H. Hughes
Susanne Wilson

- S-1 Soil venting system Rotron EG&G 112 CFM blower; abated by A-1 and A-2 Activated Carbon, "Contamination Control", 150 lbs. granular activated carbon per vessel (minimum of two vessels arranged in series), carbon recharged by Cameron Yakima.**

SOLANO COUNTY
Osby Davis
(Chairperson)

All Permits should be posted in a clearly visible and accessible place on or near the equipment to be operated, or kept available for inspection at any time.

SONOMA COUNTY
Jim Harberson
Patricia Hilligoss

Operation of this equipment in violation of District Regulations or any permit conditions is subject to penalty action.

In the absence of specific permit conditions to the contrary, the throughputs, fuel and material consumptions, capacities and hours of operation described in your permit application will be considered maximum allowable limits. A new permit will be required before any increase in these parameters, or change in raw material handled may be made.

Please include your permit number with any correspondence with the District. If you have any questions on this matter, please call **Alex Saschin, Air Quality Engineer II** at (415) 771-6000, extension 190.

Very truly yours,

Milton Feldstein
Air Pollution Control Officer

by 
Permit Services Division

JAS:AVS:me
Attachments

Croley and Herring Investment Company
5800 Christie Avenue
Emeryville, CA 94608
Application #3546
May 7, 1991

Conditions:

1. This source shall be vented at all times to both A-1, Activated carbon vessel abatement, 150 lb of carbon and A-2, Activated carbon vessel abatement 150 lb of carbon. The carbon vessels shall be operated in series.
2. The last carbon vessel in series (A-2) shall be kept at a non-detectable reading of organics as measured with an FID-OVA monitor.
3. The primary carbon vessel A-1 (first in series) shall be changed out with unspent carbon upon the detection of 10 ppmv organics as measured with an FID-OVA. The monitoring of the primary carbon vessel exhaust shall be taken at the midpoint between the connection of the two carbon vessels (A-1 and A-2 placed in series).
4. The operator of this source shall monitor with a FID-OVA at the following locations:
 1. At the exhaust of S-1; the inlet to carbon bed, A-1.
 2. At the midpoint between the connection of the two carbon vessels A-1 and A-2 (connected in series); at the inlet to carbon vessel A-2.
 3. At the outlet of carbon vessel A-2; the carbon vessel that is second in series prior to venting to the atmosphere.

These monitor readings shall be recorded in a monitoring log at the time they are taken. The monitoring results shall be used to:

- a. Calculate the time of predicted breakthrough of organics as carbon on a dry basis after carbon adsorption to maintain compliance with condition number 3.
- b. Determine the frequency of carbon change out necessary to maintain compliance with condition number 2.
- c. To maintain compliance with conditions number 2 and 3 the monitoring shall be conducted on a daily basis. The operator of this source may propose for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed based on a decline in organic emissions and/or the demonstrated breakthrough rates of the carbon vessels. Written approval by the District must be received by the applicant prior to a change to the monitoring schedule.

The operator of this source shall maintain the following information in a District approved log for each month of operation of the source:

- a. The hours and time of operation.
 - b. Each monitor reading or analysis result logged in for the day or operation they are taken.
 - c. The calculation of organic breakthrough from the carbon beds.
 - d. The number of carbon beds removed from service.
5. The log shall be submitted to the District Permit Services Division on a monthly basis. Any exceedance of condition numbers 2 and /or 3 shall be reported under separate cover letter with the log as well as the corrective action taken. In addition, an exceedance of condition number 2 and/or 3 shall be submitted to the District Enforcement Section at the time it occurs. This submittal shall detail corrective action taken and shall include the data showing the exceedance as well as the time of occurrence.
 6. The operator shall maintain a file containing all measurements, records and other data that are required to be collected pursuant to the various provisions of this conditional Authority to Construct/Permit to Operate. All measurements, records and data required to be maintained by the applicant shall be retained for at least two years following the date the data is recorded.



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

PERMIT TO OPERATE NO. 3546

PLANT NO. 4805

Croley and Herring Investment Company

IS HEREBY GRANTED A PERMIT TO OPERATE THE FOLLOWING EQUIPMENT: SOURCE NO. 1

Soil venting system Rotron EG&G blower; abated by A-1 and A-2 Activated Carbon, "Contamination Control", 150 lbs. granular activated carbon per vessel (minimum of two vessels arranged in series), carbon recharged by Cameron Yakima.

LOCATED AT: 5800 Christie Avenue
Emeryville, CA 94608

CONDITIONS: YES NO

CONDITIONS SEE ATTACHED

MILTON FELDSTEIN
AIR POLLUTION CONTROL OFFICER

DATE May 7, 1991

BY John A. Swanson
PERMIT SERVICES DIVISION

EXPIRATION DATE: May 7, 1992

THIS PERMIT DOES NOT AUTHORIZE ANY VIOLATION OF THE RULES AND REGULATIONS OF THE BAAQMD OR THE HEALTH & SAFETY CODE OF THE STATE OF CALIFORNIA.

PERMIT SERVICES DIVISION
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET
SAN FRANCISCO, CA 94109
(415) 771-6000

REFUND REQUEST FORM

YOU ARE POSSIBLY ENTITLED TO A REFUND FOR PERMIT FEES YOU RECENTLY PAID.
IF YOU BELIEVE YOU ARE ENTITLED TO A REFUND, THIS COMPLETED FORM WILL BE
CONSIDERED A REQUEST FOR A REFUND WHEN YOU SIGN AND RETURN IT.

- o WAS PERMIT FOR NEW/MODIFIED EQUIPMENT
 ANNUAL RENEWAL (RETROACTIVE)
- o PERMIT NUMBER 3546
- o PLANT IDENTIFICATION NUMBER 4805
- o COMPANY NAME Croley & Herring Investment
- o MAILING ADDRESS 1311 63rd St. Emeryville, CA 94608
- o PLANT ADDRESS 5800 Christie Ave. Emeryville, CA 94608
- o AMOUNT PAID \$ 360
- o DATE PAID 8/3/89
- o AMOUNT OF REFUND YOU ARE CLAIMING \$ 730
- o WHY DO YOU THINK THAT YOU ARE DUE A REFUND? Overpayment of fees.

I HEREBY REQUEST A REFUND OF ANY OVERPAYMENT OF FEES FOR
THE PERMIT APPLICATION IDENTIFIED ABOVE.
PLEASE MAKE ANY REFUND CHECK PAYABLE TO:

Croley and Herring Investment Co.

1311 63rd Street

Emeryville, California 94608

SIGNATURE

R. D. Herring

NAME PRINTED

R. D. HERRING

TITLE

Partner

PHONE

415-652-1276

DATE

5/20/91

THIS PORTION FOR DISTRICT USE ONLY:

REFUND DUE

\$

REVIEWED BY

APPROVED BY

Handled 5/20/91
Hand 9/7/91
RSB



1-800-792-0836

Croley and Herring Investment Company

September 14, 1991
Mr. Alex Saschin
Air Quality Engineer II
Bay Area Air Quality Management District
939 Ellis Street,
San Francisco, CA 94109

Subject: Application Number 3546
5800 Christie Avenue
Emeryville, CA 94608

Dear Mr. Saschin,

As per your site inspection on April 26, 1991, we have been operating and monitoring daily the vapor extraction system located at the subject property. Table 1 present the monitoring records to date. As you can see, we have not seen any significant changes in the daily readings for this period of time. We hereby, request for a reduction of monitoring frequency from daily to biweekly. We will contact you for your verbal approval if you have no objection.

Thank you for your co-operation on this matter.

Sincerely,

Dick Herring
President



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

ALAMEDA COUNTY

Edward R. Campbell
Loni Hancock
Greg Harper
Frank H. Ogawa

CONTRA COSTA COUNTY

Paul L. Cooper
(Chairperson)
Sunne Wright McPeak
Tom Powers

MARIN COUNTY

Al Aramburu

NAPA COUNTY

Paul Battisti

SAN FRANCISCO COUNTY

Roberta Achtenberg
Harry G. Britt

SAN MATEO COUNTY

Gus J. Nicolopoulos
Anna Eshoo
(Vice Chairperson)

SANTA CLARA COUNTY

Martha Clevenger
Rod Diridon
Roberta H. Hughan
Dianne McKenna

SOLANO COUNTY

Osby Davis

SONOMA COUNTY

Jim Harberson
Patricia Hilligoss
(Secretary)

September 17, 1991

Dick Herring
Croley and Herring Investment Co.
448 Tharp Dr.
Moraga, CA 94556

Dear Mr. Herring:

The District has reviewed and granted your request, dated September 14, 1991, to change the monitoring frequency from daily to biweekly.

Please keep a copy of this letter as verification that a biweekly monitoring schedule has been approved for the 5800 Christie Ave, Emeryville, CA site by the District.

If you have any questions regarding this matter, please call me at (415) 749-4713.

Very truly yours,

Alex V. Saschin
Air Quality Engineer II
Permit Services Division

AVS:all



Croley and Herring Investment Company

December 16, 1991

Mr. Alex Saschin
Air Quality Engineer II
Bay Area Air Quality Management District
939 Ellis Street,
San Francisco, CA 94109

Subject: Application Number 3546
5800 Christie Avenue
Emeryville, CA 94608

Dear Mr. Saschin,

Attached please find the following documents relating to the subject vapor extraction system:

- * Vapor Extraction System Closure Work Plan(11/15/91)
- * Work Plan Approval Letter from Alameda County Health Care Services(11/27/91)
- * Vapor Extraction System Decommissioning Letter to ACHCS(12/11/91)

We have received approval from ACHCS to proceed with the vapor extraction system decommissioning. We hereby, notify you that the vapor extraction system has been shut down and is being decommissioned.

We appreciate your support and assistance throughout the permitting and monitoring of the vapor extraction system. Thank you for your co-operation on this matter.

Sincerely,

R. D. Herring
President

cc: Mr. Dennis Byrne, Alameda County Health Care Services, without attachments
ATTACHMENTS(3)

APPENDIX C
System Monitoring Record

**VAPOR EXTRACTION SYSTEM MONITORING RECORD
ORGANIC VAPOR CONCENTRATION IN PPMV**

<u>DATE</u>	<u>GAC INFLUENT</u>	<u>GAC EFFLUENT</u>	<u>COMMENTS</u>
4/2/90	300	120	
4/3/90	240	100	
4/4/90	160	20	
4/5/90	160	20	
4/6/90	160	20	
4/9/90	150	10	
4/10/90	180	80	
4/11/90	140	60	
4/12/90	180	60	
4/13/90	180	20	
4/16/90	160	20	
4/17/90	150	10	
4/18/90	110	10	
4/19/90	90	10	
4/20/90	80	10	END OF TESTS. GAC CHANGED 4 TIMES
SYSTEM DOWN FOR ADJUSTMENT IN DESIGN AND MAINTENANCE			
2/5/91	13	15	SUSPECTED METHANE BREAK THROUGH
2/8/91	13	15	
2/12/91	9	10	
2/15/91	8.6	8	
2/21/91	6.6	6.6	
3/4/91	3.2	4.5	
3/6/91	7.6	6.4	
4/22/91	5.6	6.0	
4/23/91	6.9	5.6	
4/24/91	8.5	6.6	
4/25/91	22	23	
4/26/91	28	16	BAAQMD INSPECTION
4/29/91	4.4	5.6	
4/30/91	14	5	
5/1/91	12	8	
5/2/91	11	10	
5/3/91	10	9	
5/6/91	2.5	3	
5/7/91	1.2	2	
5/8/91	4.3	6.2	
5/9/91	7.4	7.8	
5/10/91	5.2	6	
5/13/91	9.6	9.7	
5/14/91	12	11	
5/15/91	10	10	
5/17/91	10	8	
5/20/91	11	12	
5/21/91	5	8	
5/22/91	7	12	
5/23/91	3.6	5	

**VAPOR EXTRACTION SYSTEM MONITORING RECORD
ORGANIC VAPOR CONCENTRATION IN PPMV**

<u>DATE</u>	<u>GAC INFLUENT</u>	<u>GAC EFFLUENT</u>	<u>COMMENTS</u>
5/24/91	5.8	9.6	
5/28/91	4.8	6.1	
5/29/91	6.4	8.2	
5/30/91	5.4	6.0	
5/31/91	8.9	7	
6/3/91	10	10	
6/4/91	6.2	7	
6/5/91	12	12	
6/6/91	4	4.6	
6/7/91	11	19	
6/10/91	8	8	
6/11/91	6	6	
6/12/91	4	5.5	
6/13/91	0.3	2	CONFIRM PRESENCE OF METHANE. READINGS REDUCED BY ACTIVATED CARBON FILTER TUBE
6/14/91	2.1	3.6	
6/17/91	0.9	3.8	AMBIENT AIR READINGS
6/18/91	1	2	4
6/20/91	0	0	
6/21/91	2	2	
6/24/91	2	3	3
6/25/91	2	2	3
6/26/91	4	3	3
7/4/91	2	2	2 TO 5
7/5/91	1	1	4
7/8/91	2	2	3
7/9/91	3	3	3
7/10/91	3	2	3
7/11/91	1	0	3
7/12/91	1	1	3
7/15/91	0	2	3
7/16/91	2	2	3
7/17/91	2	1	4
7/18/91	0	1	4
7/19/91	1	2	4
7/22/91	1	5	3
7/23/91	0	2	3
7/24/91	1	3	3
7/25/91	0	2	4
7/26/91	2	2	2
7/29/91	1	0	2
7/30/91	0	0	4
7/31/91	0	1	2
8/1/91	1	2	3
8/2/91	1	0	2

VAPOR EXTRACTION SYSTEM MONITORING RECORD
ORGANIC VAPOR CONCENTRATION IN PPMV

<u>DATE</u>	<u>GAC INFLUENT</u>	<u>GAC EFFLUENT</u>	<u>COMMENTS</u> AMBIENT AIR READINGS
8/5/91	0	0	3
8/6/91	1	0	1
8/7/91	1	1	3
8/8/91	1	1	2
8/9/91	1	0	3
8/12/91	1	1	2
8/13/91	1	1	2
8/14/91	1	1	2
8/15/91	1	0	3
8/16/91	1	2	3
8/19/91	1	0	3
8/20/91	0.6	0.8	5
8/21/91	1.1	1.1	1.5
8/22/91	1.2	1	3.8
8/23/91	0.8	0.8	4
8/26/91	1	0.9	3.8
8/27/91	0.5	0.8	3.8
8/28/91	0.6	0.6	3.8
8/29/91	0.7	1.3	3.5
8/30/91	0.3	0.7	4
9/2/91	1.6	1	4.4
9/3/91	0.7	0.9	3.5
9/4/91	0.8	0.6	3.7
9/5/91	0.5	0.5	3.6
9/6/91	0	0.7	3.9
9/9/91	0.6	0.5	3.6
9/10/91	0.9	0.5	3.8
9/11/91	0.6	1	3.7
9/12/91	0.6	0.8	3.6
9/13/91	0.6	0.8	3.3
9/16/91	0.6	0.7	3.8
9/18/91	3.1	2.2	3.7
9/19/91	2	1	3.3
9/20/91	0.7	0.7	1.7
9/23/91	0.3	0.3	3.6
9/25/91	0.9	1.2	3.7
10/1/91	0.4	0.3	3.1
10/10/91	0.6	0.6	3.9
10/17/91	1.1	1.1	3.4
10/22/91	1.3	0.9	3.3
10/28/91	3	2	4
11/11/91	0	3	3.3

ALL READINGS TAKEN BY OWNERS OF PROPERTY USING A FOXBORO OVA MODEL 128.

APPENDIX D Confirmation Soil Analysis Report



CKY incorporated Analytical Laboratories

Date: 12/11/91
911207

CHIC
449 Tharp Drive
Moraga CA 94556

Attn: Mr. Walter Loo

Subject: Laboratory Report
Project: N/A

Enclosed is the laboratory report for samples received on 12/03/91. The samples were received in coolers with ice and intact; The chain-of-custody forms were properly filled out. The data reported includes:

<u>Method</u>	<u>No. of Analysis</u>
EPA 5030/M8015	3 Soils
EPA 8010/8020	3 Soils

The results are summarized on six pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang
Laboratory Director

EPA METHOD 5030/Mod. 8015

HYDROCARBONS BY PURGE & TRAP

=====

CLIENT:	CHIC	DATE REC'D:	12/03/91
PROJECT:	N/A	DATE ANALYZED:	12/09/91
CONTROL NO:	911207	MATRIX:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DETECTION LIMIT</u> <u>(mg/kg)</u>	<u>Surrogate</u> <u>Rec. (%)</u>
G	911207-1	ND	1.0	91
H	911207-2	1.5	1.0	119
I	911207-3	ND	1.0	100
Method Blank	911207	ND	1.0	106

=====

EPA METHODS - 8010/8020

```

=====
CLIENT:      CHIC                      DATE REC'D:   12/03/91
PROJECT:     N/A                      DATE ANALYZED: 12/09/91
SAMPLE ID:   G                        MATRIX TYPE:   Soil
CONTROL NO:  911207-1
=====
  
```

<u>PARAMETERS (8010)</u>	<u>RESULTS (ug/kg)</u>	<u>DETECTION LIMIT (ug/kg)</u>
Dichlorodifluoromethane	ND	20
Chloromethane	ND	20
Vinyl Chloride	ND	20
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	5
Trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Bromodichloromethane	ND	5
2-Chloroethylvinylether	ND	5
Trans-1,3-Dichloropropene	ND	5
Cis-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Dibromochloromethane	ND	5
Ethylene Dibromide	ND	5
Chlorobenzene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Chlorotoluene	ND	5
M-Dichlorobenzene	ND	5
P-Dichlorobenzene	ND	5
Benzylchloride	ND	5
O-Dichlorobenzene	ND	5
<u>% Surrogate Recovery</u>	25	
PARAMETERS (8020)		
Benzene	ND	5
Toluene	ND	5
Ethylbenzene	ND	5
Xylenes	ND	5
<u>% Surrogate Recovery</u>	91	

EPA METHODS - 8010/8020

```

=====
CLIENT:      CHIC                      DATE REC'D:   12/03/91
PROJECT:     N/A                       DATE ANALYZED: 12/09/91
SAMPLE ID:   H                         MATRIX TYPE:  Soil
CONTROL NO:  911207-2
=====
    
```

<u>PARAMETERS (8010)</u>	<u>RESULTS</u> <u>(ug/kg)</u>	<u>DETECTION LIMIT</u> <u>(ug/kg)</u>
Dichlorodifluoromethane	ND	20
Chloromethane	ND	20
Vinyl Chloride	ND	20
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	33	5
Trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	40	5
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Bromodichloromethane	ND	5
2-Chloroethylvinylether	ND	5
Trans-1,3-Dichloropropene	ND	5
Cis-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Dibromochloromethane	ND	5
Ethylene Dibromide	ND	5
Chlorobenzene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Chlorotoluene	ND	5
M-Dichlorobenzene	ND	5
P-Dichlorobenzene	ND	5
Benzylchloride	ND	5
O-Dichlorobenzene	ND	5
% Surrogate Recovery	125	
PARAMETERS (8020)		
Benzene	ND	5
Toluene	76	5
Ethylbenzene	6.2	5
Xylenes	100	5
% Surrogate Recovery	86	

CKY

EPA METHODS - 8010/8020

```

=====
CLIENT:      CHIC                      DATE REC'D:   12/03/91
PROJECT:     N/A                      DATE ANALYZED: 12/09/91
SAMPLE ID:   I                       MATRIX TYPE:   Soil
CONTROL NO:  911207-3
=====
    
```

<u>PARAMETERS (8010)</u>	<u>RESULTS (ug/kg)</u>	<u>DETECTION LIMIT (ug/kg)</u>
Dichlorodifluoromethane	ND	20
Chloromethane	ND	20
Vinyl Chloride	ND	20
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	17	5
Trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	420	5
Carbon Tetrachloride	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	580	5
1,2-Dichloropropane	ND	5
Bromodichloromethane	ND	5
2-Chloroethylvinylether	ND	5
Trans-1,3-Dichloropropene	ND	5
Cis-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Dibromochloromethane	ND	5
Ethylene Dibromide	ND	5
Chlorobenzene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Chlorotoluene	ND	5
M-Dichlorobenzene	ND	5
P-Dichlorobenzene	ND	5
Benzylchloride	ND	5
O-Dichlorobenzene	ND	5
<u>% Surrogate Recovery</u>	70	
 PARAMETERS (8020)		
Benzene	ND	5
Toluene	ND	5
Ethylbenzene	ND	5
Xylenes	ND	5
<u>% Surrogate Recovery</u>	94	

EPA METHODS - 8010/8020

```

=====
CLIENT:      CHIC                      DATE REC'D:   12/03/91
PROJECT:     N/A                       DATE ANALYZED: 12/09/91
SAMPLE ID:   Method Blank             MATRIX TYPE:   Soil
CONTROL NO:  911207
=====
    
```

<u>PARAMETERS (8010)</u>	<u>RESULTS (ug/kg)</u>	<u>DETECTION LIMIT (ug/kg)</u>
Dichlorodifluoromethane	ND	20
Chloromethane	ND	20
Vinyl Chloride	ND	20
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	5
Trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Bromodichloromethane	ND	5
2-Chloroethylvinylether	ND	5
Trans-1,3-Dichloropropene	ND	5
Cis-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Dibromochloromethane	ND	5
Ethylene Dibromide	ND	5
Chlorobenzene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Chlorotoluene	ND	5
M-Dichlorobenzene	ND	5
P-Dichlorobenzene	ND	5
Benzylchloride	ND	5
O-Dichlorobenzene	ND	5
% Surrogate Recovery	55	
PARAMETERS (8020)		
Benzene	ND	5
Toluene	ND	5
Ethylbenzene	ND	5
Xylenes	ND	5
% Surrogate Recovery	98	

QUALITY CONTROL DATA

CLIENT: CHIC
 PROJECT: N/A
 CONTROL NO: 911207

METHOD EPA 8010/8020
 MATRIX: Soil

SAMPLE ID: 911207-1

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (ug/kg)	<u>AMOUNT SPIKED</u> (ug/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Benzene	ND	20	100	109	9
Toluene	ND	20	97	104	7
1,1 DCE	ND	20	75	68	10
TCE	ND	20	83	98	16

METHOD EPA 5030/M8015
 MATRIX: Soil

SAMPLE ID: 911207-1

<u>COMPOUND</u>	<u>SAMPLE RESULTS</u> (mg/kg)	<u>AMOUNT SPIKED</u> (mg/kg)	<u>% REC.</u>	<u>DUP. % REC.</u>	<u>RPD</u>
Gasoline	ND	2	75	75	0

E2 911207

CLIENT NAME: CHIC
ADDRESS: 449 THARP DRNE
 MORAGA, CA. 94556
PHONE NO. 376-3473 **FAX NO.** _____

**CHAIN OF CUSTODY RECORD
 REQUEST FOR ANALYSIS**

DATE: 11/27/91
PAGE 1 **OF** 1

CKY
**CKY Incorporated
 Environmental Services
 3942 Valley Avenue, Suite F
 Pleasanton, CA 94566
 Tel: 415-846-3188
 Fax: 415-846-3188**

PROJECT NAME: _____
SEND REPORT TO: WALTER LOO 638 BLAIR AVE 601-1263 FAX 601-1793
 PIEDMONT, CA. 94611

SAMPLER NAME/SIGNATURE WALTER LOO <i>[Signature]</i>				TURN AROUND TIME			ANALYSES REQUIRED									
				NORMAL	RUSH		418.1	M8015	8010/601	8020/602	8080/608	8240/624	8270/625	CAM Metals		
SAMPLE NUMBER	SAMPLING DATE/TIME	PRESERVATIVE	CONTAINER SIZE/TYPE	SAMPLE DESCRIPTION												
				WATER	SOIL	OTHER										
G	11/27/91	10:00A	COPPER TUBE		✓		✓	✓	✓							
H	11/27/91	10:00A	" "		✓		✓	✓	✓							
I	11/27/91	10:00A	" "		✓		✓	✓	✓							

COMMENTS: USE SILTY AND CLAYEY SAMPLE FOR LAB ANALYSIS

Relinquished by: (Signature) <i>[Signature]</i>	Date: 12/1/91	Received by: (Signature) <i>[Signature]</i>	Date: 12/2/91	Relinquished by: (Signature) <i>[Signature]</i>	Date: 12/3	Received by: (Signature) <i>[Signature]</i>	Date: 12/3
Company: 75	Time: 10:04	Company: CKY	Time: 10-	Company: LPS	Time: 9:10	Company: CKY	Time: 9:10

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.

APPENDIX E Granular Activated Carbon Analysis Reports



CKY incorporated Analytical Laboratories

Date: 01/21/92
920149

CHIC
449 Tharp Drive
Moraga CA 94556

Attn: Mr. Walter Loo

Subject: Laboratory Report

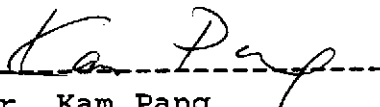
Enclosed is the laboratory report for samples received on 01/16/92. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

<u>Method</u>	<u>No. of Analysis</u>
EPA 8010/8020	1 Soil
EPA 5030/M8015	1 Soil
LC 50 Bioassay	1 Soil

The results are summarized on seven pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,



Dr. Kam Pang
Laboratory Director

EPA METHODS - 8010/8020

```

=====
CLIENT:      CHIC                      DATE REC'D:   01/15/92
PROJECT:     N/A                       DATE ANALYZED: 01/17/92
SAMPLE ID:   GAL                       MATRIX TYPE:   Soil
CONTROL NO:  920149-1
=====
    
```

<u>PARAMETERS (8010)</u>	<u>RESULTS (ug/kg)</u>	<u>DETECTION LIMIT (ug/kg)</u>
Dichlorodifluoromethane	ND	20
Chloromethane	ND	20
Vinyl Chloride	ND	20
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	670*	5
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	14000*	5
Trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	3800*	5
Chloroform	1200*	5
1,1,1-Trichloroethane	89000**	5
Carbon Tetrachloride	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	64000**	5
1,2-Dichloropropane	ND	5
Bromodichloromethane	1800*	5
2-Chloroethylvinylether	ND	5
Trans-1,3-Dichloropropene	ND	5
Cis-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	280*	5
1,1,1,2-Tetrachloroethane	ND	5
Dibromochloromethane	ND	5
Ethylene Dibromide	ND	5
Chlorobenzene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Chlorotoluene	ND	5
M-Dichlorobenzene	ND	5
P-Dichlorobenzene	ND	5
Benzylchloride	ND	5
O-Dichlorobenzene	ND	5

% Surrogate Recovery 93

PARAMETERS (8020)

Benzene	ND	5
Toluene	ND	5
Ethylbenzene	ND	5
Xylenes	ND	5

% Surrogate Recovery 66

EPA METHODS - 8010/8020

CLIENT:	CHIC	DATE REC'D:	01/15/92
PROJECT:	N/A	DATE ANALYZED:	01/17/92
SAMPLE ID:	Method Blank	MATRIX TYPE:	Soil
CONTROL NO:	920149		

<u>PARAMETERS (8010)</u>	<u>RESULTS (ug/kg)</u>	<u>DETECTION LIMIT (ug/kg)</u>
Dichlorodifluoromethane	ND	20
Chloromethane	ND	20
Vinyl Chloride	ND	20
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	5
1,1-Dichloroethene	ND	5
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	5
Trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	ND	5
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	ND	5
Bromodichloromethane	ND	5
2-Chloroethylvinylether	ND	5
Trans-1,3-Dichloropropene	ND	5
Cis-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Dibromochloromethane	ND	5
Ethylene Dibromide	ND	5
Chlorobenzene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Chlorotoluene	ND	5
M-Dichlorobenzene	ND	5
P-Dichlorobenzene	ND	5
Benzylchloride	ND	5
O-Dichlorobenzene	ND	5
% Surrogate Recovery	108	
<u>PARAMETERS (8020)</u>		
Benzene	ND	5
Toluene	ND	5
Ethylbenzene	ND	5
Xylenes	ND	5
% Surrogate Recovery	96	

EPA METHOD 5030/Mod. 8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

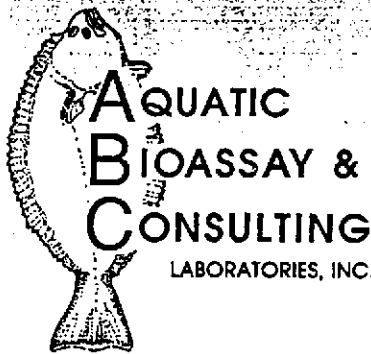
=====

CLIENT:	CHIC	DATE REC'D:	01/15/92
PROJECT:	N/A	DATE ANALYZED:	01/18/92
CONTROL NO:	920149	MATRIX:	Soil

=====

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DET. LIMIT</u> <u>(mg/kg)</u>	<u>Surr. %</u> <u>Rec.</u>
Method Blank	920149	ND	1.0	93
GAL	920149-1	1.3	1.0	70

=====



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

January 28, 1992

Ms. Edelyn Brennan
CKY, Inc.
3551 Voyager St., Ste. 102
Torrance, CA 90503

Dear Ms. Brennan:

In accordance with Chain of Custody dated January 16, 1992, we are pleased to present the enclosed bioassay report, Lab No. CKY0120.121 for the sample labeled 9204-49-2 and received in this laboratory on January 17, 1992, at 1300. The test was conducted in freshwater, utilizing fathead minnows (Pimephales promelas). Results were as follows:

Sample I.D.	9204-49-2
Date Received	January 17, 1992
96 hr LC50 =	>750 mg/L
95% Conf. Int. =	N/A

Respectfully submitted,

Thomas (Tim) Mikel
Laboratory Director

SAMPLE AND BIOASSAY INFORMATION
 ABC Laboratories
 29 North Olive Street
 Ventura, Ca. 93001
 (805) 648-2735

CLIENT NAME: CKY

DATE: 01/17/92
 1300

SAMPLE ID: 9201-49-2

LAB. NO: CKY0120.121

TEST TYPE: Screening FLOW: Static TANK VOLUME: 10 Liters

DILUTION WATER: Reconstituted Fresh HARDNESS: 52 mg/l ALKALINITY: 38 mg/l
 END: 58 END: 36
 AERATION: Single bubble aeration in all tanks ACCL. TEMP: 20.0 deg.C

ORGANISM: Fathead Minnow SPECIES: Pimephales promelas SOURCE: Thomas Fish Co.

CARRIER: Greyhound Bus Co. DATE REC'D: 01/07/92 AVG. LENGTH: 39 mm AVG. WT.: .7 g

NUMBER ORGANISMS PER TANK: 10

	Initial	24 Hour	48 Hour	72 Hour	96 Hour
Date:	01/21/92	01/22/92	01/23/92	01/24/92	01/25/92
Time:	1300	1030	1045	0900	1000

Conc. mg/l	Initial			24 Hour			48 Hour			72 Hour			96 Hour			Tot. #M				
	DO	Dg.C	pH	DO	Dg.C	pH	#M	DO	Dg.C	pH	#M	DO	Dg.C	pH	#M					
(Con.)	7.6	20.4	7.3	8.2	20.0	7.4	0	8.2	20.2	7.5	0	8.2	18.7	7.6	0	8.1	18.6	7.6	0	0

750(A)	8.2	21.2	7.5	8.6	20.0	7.6	0	8.6	19.7	7.6	0	8.6	18.7	7.6	0	8.0	18.8	7.6	0	0
750(B)	8.2	21.0	7.5	8.4	19.9	7.6	0	8.6	19.7	7.6	0	8.6	18.6	7.5	0	8.2	18.7	7.6	0	0
400(A)	8.3	21.0	7.5	8.2	19.8	7.5	0	8.0	19.8	7.5	0	8.4	18.7	7.5	0	8.3	18.7	7.5	0	0
400(B)	8.2	21.0	7.5	8.2	20.0	7.4	0	8.0	20.0	7.4	0	8.4	18.7	7.5	0	8.2	18.8	7.5	0	0

6 HOUR LC50 = >750 mg/L 95% CONFIDENCE INTERVAL = N/A

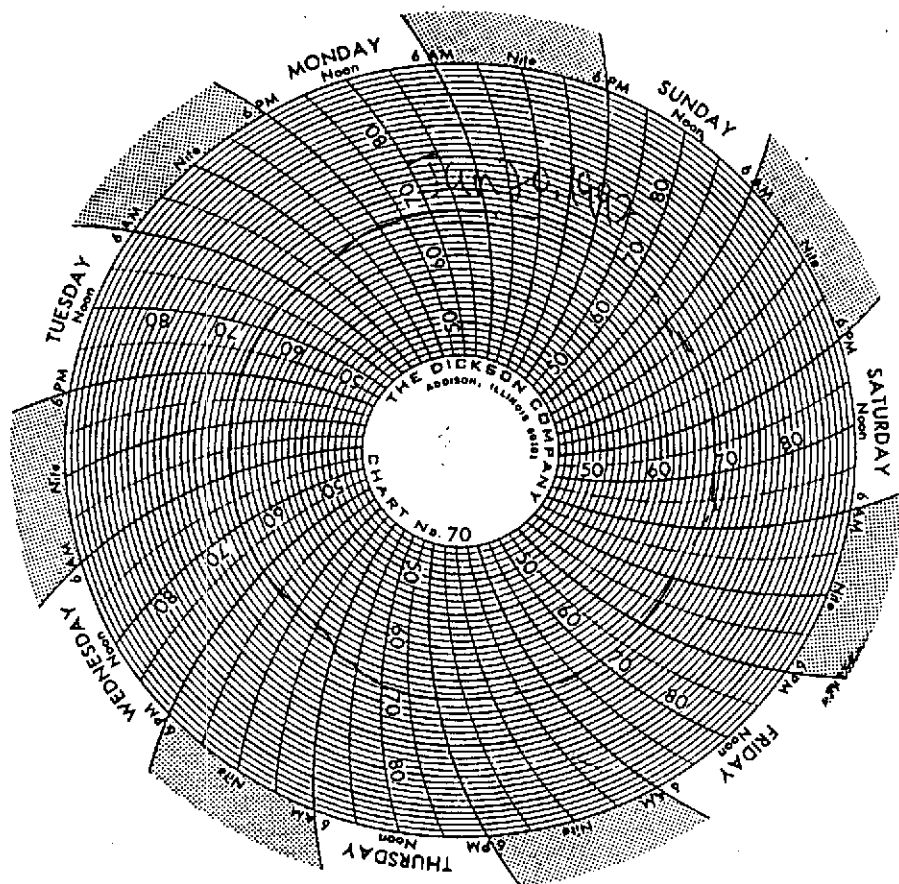
CALCULATION METHOD: Binomial Test

ANALYST: *Martha Meyer*
 Martha Meyer, Chief Biologist

DATE: 01/27/92

REMARKS: Beginning Sample Hardness: 45 mg/L (CaCO3) Alkalinity: 35 mg/L
 Ending Sample Hardness: 45 mg/L (CaCO3) Alkalinity: 35 mg/L

CKY



CKY



CKY incorporated Environmental Services

Date: 05/14/92
N9205-03

CHIC
448 Tharp Drive
Moraga, CA 94556

Attn: Mr. Walter Loo

Subject: Laboratory Report
Project:

Enclosed is the laboratory report for samples received on 05/01/92. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

<u>Method</u>	<u>No. of Analysis</u>
M8015/Gas	1 Solid
EPA 8010	1 Solid
EPA 8020	1 Solid
Fish Bio Assay	1 Solid

The results are summarized on eight pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Danny Hoang
Laboratory Director

**EPA METHOD 8010
HALOGENATED VOLATILE ORGANICS**

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=====
CLIENT:      Chic
PROJECT:
SAMPLE ID:   GAC
CONTROL NO:  N9205-03-1

DATE REC'D:  05/01/92
DATE ANALYZED: 05/01/92
MATRIX TYPE:  Solid
=====

```

<u>PARAMETERS (8010)</u>	<u>RESULTS (ug/kg)</u>	<u>DETECTION LIMIT (ug/kg)</u>
Dichlorodifluoromethane	ND	20
Chloromethane	ND	20
Vinyl Chloride	ND	20
Bromomethane	ND	20
Chloroethane	ND	20
Trichlorofluoromethane	ND	20
1,1-Dichloroethene	ND	5
Methylene Chloride	ND	5
cis-1,2-Dichloroethene	ND	5
Trans-1,2-Dichloroethene	ND	5
1,1-Dichloroethane	ND	5
Chloroform	160	5
1,1,1-Trichloroethane	ND	5
Carbon Tetrachloride	ND	5
1,2-Dichloroethane	ND	5
Trichloroethene	ND	5
1,2-Dichloropropane	630	5
Bromodichloromethane	ND	5
2-Chloroethylvinylether	ND	5
Trans-1,3-Dichloropropene	ND	5
Cis-1,3-Dichloropropene	ND	5
1,1,2-Trichloroethane	ND	5
Tetrachloroethene	ND	5
1,1,1,2-Tetrachloroethane	ND	5
Dibromochloromethane	ND	5
Ethylene Dibromide	ND	5
Chlorobenzene	ND	5
Bromoform	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Chlorotoluene	ND	5
M-Dichlorobenzene	ND	5
P-Dichlorobenzene	ND	5
Benzylchloride	ND	5
O-Dichlorobenzene	ND	5

EPA METHOD 5030/Mod. 8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

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=====
CLIENT:      Chic
PROJECT:
CONTROL NO:  N9205-03
DATE REC'D:  05/01/92
DATE ANALYZED: 05/01/92
MATRIX:      Solid
=====

```

<u>SAMPLE ID:</u>	<u>CONTROL NO:</u>	<u>RESULTS</u> <u>(mg/kg)</u>	<u>DET. LIMIT</u> <u>(mg/kg)</u>	<u>% SURRO</u> <u>RECOVERY</u>
GAC	N9205-03-1	ND	1.0	NA

EPA METHOD - 8020
BTEX

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=====
CLIENT:      Chic                      DATE REC'D:   05/01/92
PROJECT:                                           DATE ANALYZED: 05/01/92
CONTROL NO:  N9205-03                       MATRIX TYPE:  Solid
=====

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=====
SAMPLE ID:   CONTROL NO:   RESULTS (ug/kg)   % SURRO
              Benz Tol Et Benz Xyls RECOVERY
GAC          N9205-03-1   ND    ND    ND    ND    NA
DETECTION LIMIT      5      5      5      5
=====

```



TOXICITY TESTING • OCEANOGRAPHIC RESEARCH

May 11, 1992

Dr. K. Pang
CKY, Inc.
630 Maple Avenue
Torrance, CA 90503-5001

Dear Dr. Pang:

In accordance with Chain of Custody dated May 04, 1992, we are pleased to present the enclosed bioassay report, Lab No. CKY0521.023 for the sample labeled N9205-03 and received in this laboratory on May 05, 1992, at 1530. The test was conducted in freshwater, utilizing fathead minnows (*Pimephales promelas*). Results were as follows:

Sample I.D.	N9205-03
Date Received	May 05, 1992
96 hr LC50 =	>750 mg/L
95% Conf. Int. =	N/A

Respectfully submitted,


Thomas (Tim) Mikel
Laboratory Director

ABC Laboratories
 29 North Olive Street
 Ventura, Ca. 93001
 (805) 643-5621

CLIENT NAME: CKY, INC.

DATE: 05/05/92
 1530

SAMPLE ID: N9205 - 03

LAB.NO: CKY0521.023

TEST TYPE: Screening FLOW: Static TANK VOLUME: 10 Liters

DILUTION WATER: Reconstituted Fresh HARDNESS: 50 mg/l ALKALINITY: 25 mg/l

END: 48 END: 26

AERATION: Single bubble aeration in all tanks ACCL.TEMP: 20.0 deg.C

ORGANISM: Fathead Minnow SPECIES: *Pimephales promelas* SOURCE: Thomas Fish Co.

CARRIER: Greyhound Bus Co. DATE REC'D: 04/28/91 AVG.LENGTH: 35 mm AVG.WT.: .49g

NUMBER ORGANISMS PER TANK: 10

	Initial	24 Hour	48 Hour	72 Hour	96 Hour
Date:	05/06/92	05/07/92	05/08/92	05/09/92	05/10/92
Time:	0930	0945	1015	1330	1000

Conc. mg/l	DO Dg.C pH			DO Dg.C pH #/M			DO Dg.C pH #/M			DO Dg.C pH #/M			DO Dg.C pH #/M			Tot. #/M
	DO	Dg.C	pH	DO	Dg.C	pH #/M	DO	Dg.C	pH #/M	DO	Dg.C	pH #/M	DO	Dg.C	pH #/M	
0 (Con.)	7.5	20.2	7.6	7.5	20.2	7.6 0	7.6	20.3	7.5 0	6.4	20.3	7.4 0	7.6	20.2	7.3 0	0

750 (A)	8.5	20.2	7.8	7.9	20.2	7.7 0	7.5	20.3	7.7 0	6.3	20.1	7.8 0	7.9	20.0	7.9 0	0
750 (B)	8.6	20.2	7.8	8.0	20.2	7.7 0	7.6	20.3	7.7 0	7.9	20.0	7.9 0	7.6	19.9	7.9 0	0
400 (A)	8.6	20.2	7.8	7.9	20.2	7.6 0	7.5	20.3	7.6 0	8.2	20.3	7.8 0	7.4	20.1	7.9 0	0
400 (B)	8.7	20.3	7.9	7.8	20.3	7.6 0	7.3	20.5	7.6 0	8.2	20.3	7.9 0	7.8	20.2	8.0 0	0

96 HOUR LC50 = >750 mg/l

95% CONFIDENCE INTERVAL = N/A

CALCULATION METHOD: Binomial Test

ANALYST:

Thomas Nelson

DATE: 05/11/91

FOR Martha Meyer, Chief Biologist

REMARKS: Beginning Sample Hardness: 62 mg/L (CaCO3) Alkalinity: 38 mg/L
 Ending Sample Hardness: 50 mg/L (CaCO3) Alkalinity: 35 mg/L

CLIENT NAME: CHIC
 ADDRESS: 449 THARP DRIVE
MORAGA, CA. 94556
 PHONE NO. _____ FAX NO. _____

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

DATE: 5/1/92
 PAGE 1 OF 1



CKY incorporated
 Environmental Services
 3942 Valley Avenue, Suite F
 Pleasanton, CA 94566
 Tel: 415-846-3188
 Fax: 415-846-3188

PROJECT NAME: _____
 SEND REPORT TO: WALTER LOO FAX 570-601-1793

SAMPLER NAME/SIGNATURE
WALTER LOO *[Signature]*

TURN AROUND TIME
 NORMAL 5 DAY
 RUSH

ANALYSES REQUIRED	
418.1	CAM Metals
MB015 AS GASOLINE TPA	
8010/601	<input checked="" type="checkbox"/>
8020/602	<input checked="" type="checkbox"/>
8080/608	<input checked="" type="checkbox"/>
8240/624	
8270/625	
<i>LC50 BIOMASS</i>	

SAMPLE NUMBER	SAMPLING DATE/TIME	PRESERVATIVE	CONTAINER SIZE/TYPE	SAMPLE DESCRIPTION		
				WATER	SOIL	OTHER
GAC	5/1/92 1:00P		40 ML (4)			ACTIVATED CARBON

COMMENTS:

Relinquished by: <i>[Signature]</i>	Date: <u>5/1/92</u>	Received by: (Signature)	Date:	Relinquished by: (Signature)	Date:	Received by: (Signature)	Date:
Company: <u>ETS</u>	Time: <u>2:00P</u>	Company:	Time:	Company:	Time:	Company:	Time:

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.

APPENDIX F Granular Activated Carbon Decommission Record

WEST CONTRA COSTA SANITARY LANDFILL

WASTE DISPOSAL REQUEST/INFORMATION FORM

- 1. GENERATING FACILITY NAME/ADDRESS: Croley AND HERRING Inv. Co
5800 Christie, Emeryville, CA. 94608
- 2. CONTACT PERSON OR CONSULTANT (if any) R. D. HERRING, PARTNER (510) 376-3473
Name: _____ Telephone: WALTER LEO, CONSULTANT (510) 601-1263
- 3. WASTE NAME: GRANULAR ACTIVATED CARBON
- 4. ANTICIPATED VOLUME: 10-55gal Drums DELIVERY PERIOD: ONE TIME ONLY
(Per day, week, one-time only)
- 5. TRANSPORTATION FIRM: Yet to be determined
- 6. TYPE OF TRANSPORT TRUCK: 10 CY Semi-end Double bottoms
Single bottom Drop box Individual Containers
- 7. METHOD OF PAYMENT: Check Cash Charge Purchase Order
(Charge & PO must have prior WCCSL Accounting Department approval)
Charge Account Name _____ Purchase Order No. _____

8. Description of Process and Circumstances Producing Waste:
Cleaning volatiles from contaminated soil by passing them
through activated carbon. Carbon has since been purged and
remediated.

For WCCSL Use Only

FORM: Partial Complete

Compatibility: Compatible Incompatible Potentially Incompatible

ND: Yes No

ACCEPT: REJECT:

Authorized By: Walter Leo
Date: 6-22-92

Notification: 6/29/92
Expiration: 9/29/92
Appointment:

NOTE:
WCCSL does not
accept 55 gal
drum containers

ATES AND FEES:
Disposal Rate: \$40.00 cubic yard
Code 84
County/State Fees: \$2.55/ton
Other Rates/Fees:

Reviewed by: B. Dvorsky
Date: 6-10-92

9. List all materials and chemicals used in the production process: Activated Carbon has been detoxified

using Hydrogen Peroxide, glucose liquid fertilizer 27-0-4
in an electro kinetic process over a five month period

10. Describe the process by which the waste is collected:
(A) VAPOR EXTRACTION USING HEAD ON EVACUATED SOIL AND EXHAUST BLOWER.
(B) VAPOR EXTRACTION ON UNDERGROUND SOIL AND WATER USING EXHAUST BLOWER.

11. Waste Characteristics: ADD SEVERAL WELLS IN TARGET AREA. ALL VAPORS WERE PASSED THROUGH THE ACTIVATED CARBON TO COLLECT TOXIC MATERIAL.

A. Physical Description: Solid Sludge Powder (Describe) Color: GRANULAR - Black
Odor: _____

B. Free Liquids: Yes No MAY BE RESIDUAL WATER IN BOTTOM OF DRUMS

C. Percent: 95 Solids 5 Water 0 Oil

D. pH: N/A How Measured: _____

E. Flash Point N/A °F (Closed Cup Test)

12. Waste Composition:

A. Is this waste produced in the manufacture of pesticide or herbicide products, or does it contain pesticide or herbicide compounds? Yes No IF YES, ATTACH CERTIFIED ANALYTICAL RESULTS.

B. Does this waste contain Toxic Metals? Yes No IF YES, ATTACH CERTIFIED ANALYTICAL RESULTS.

C. Reactive Constituents: Does this waste contain Cyanide, Sulfide? Yes No IF YES, ATTACH CERTIFIED ANALYTICAL RESULTS.

D. Does this waste contain halogenated organic compounds (such as PCB's, Trichloroethylene, Chlorobenzene, etc.)? Yes No IF YES, ATTACH CERTIFIED ANALYTICAL RESULTS. All halogenated organic compounds have been reduced to below state and federal tolerance levels.

E. Does the process generating this waste use halogenated organic compounds in any part of the process? Yes No IF YES, ATTACH CERTIFIED ANALYTICAL RESULTS.

F. Does this waste contain non-halogenated organic solvents (such as toluene, hexane, acetone) or similar such compounds (such as petroleum naphtha, gasoline)? Yes No IF YES, ATTACH CERTIFIED ANALYTICAL RESULTS.

G. Does the process generating this waste use non-halogenated organic solvents or similar compounds in any part of the process? Yes No IF YES, ATTACH CERTIFIED ANALYTICAL RESULTS.

13. Hazardous Characteristics:

Reactive Yes _____ No X
Ignitable Yes _____ No X
Corrosive Yes _____ No X
Radioactive Yes _____ No X
Etiological Yes _____ No X

14. List all known or suspected hazards not otherwise disclosed in this document:

NONE

15. EPA Hazardous Waste? Yes No EPA Codes: _____

Calif Hazardous Waste? Yes No Calif. Codes _____

16. Is the information provided based upon laboratory analysis of the waste? Yes No
IF YES, ATTACH CERTIFIED ANALYTICAL RESULTS. IF NO, SPECIFY SOURCE _____

17. Is the waste stream homogeneous? Yes No

Explain basis of answer: All ten drums ARE SAME MATERIAL AND HAVE BEEN TREATED (REMEDIATED) UNIFORMLY DETOXIFIED TO ACCEPTABLE lev

18. To generators having submitted a fully completed Waste Information Form on this waste within the last year:

N/A

Have any significant changes occurred in this waste material or the process producing this waste since the most recent Waste Information Form was prepared? Yes No If yes, fully describe: Changes would also include contamination of the waste by materials not normally present in the waste.

19. GENERATOR'S CERTIFICATION: I hereby declare that all information submitted in this and all attached documents is true, complete and accurate, and that the contents of this consignment are fully and accurately described above, and the contents of the consignment meet neither the U.S. Environmental Protection Agency Resource Conservation and Recovery Act criteria for a hazardous waste as specified in 40 CFR, Part 261, nor the California Department of Health Services criteria for a hazardous waste or extremely hazardous waste as specified in Title 22, California Administrative Code, Chapter 30.

Print Name: R. D. HERRING Title: PARTNER
Signature: [Handwritten Signature] Date: JUNE 4, 1992

ONE COPY OF THIS FORM, ADDITIONAL SHEETS CONTAINING SUPPLEMENTAL INFORMATION AND WASTE REVIEW FEE (\$200.00) SHOULD BE RETURNED TO:

West Contra Costa Sanitary Landfill
P. O. Box 4100
Richmond, CA 94804-0100

CONDITIONS FOR ACCEPTANCE

1. Completed and approved Waste Disposal Request Form.
2. Approved waste is accepted Monday through Friday between the hours of 8:00 AM and 2:00 PM ONLY.
3. An appointment for disposal must be made at least 24 hours in advance. Loads arriving without prior approval or appointment will be rejected.
4. Approval for disposal is valid for a period of 120 days. After that time it will be necessary to reapply for acceptance.
5. These conditions are subject to change without notice.

**CROLEY AND HERRING
INVESTMENT COMPANY**

1311 - 63RD STREET
EMERYVILLE, CA 94608

1951

11-171

June 5 19 92

PAY
TO THE
ORDER OF

West Contra Costa Sanitary Fund

\$200.00

Two hundred and

no/100 DOLLAR

THE BANK OF CALIFORNIA

Oakland Office
Franklin at 20th St
Oakland, California 94612

[Signature]

FOR Application Fee

⑈001952⑈ ⑆121000015⑆ 009⑈222753⑈

⑈0000020000⑈

ENDORSE HERE
X

PAY TO THE ORDER OF
SANWA BANK CALIFORNIA
SAN FRANCISCO, CALIFORNIA
⑆121000015⑆
FOR

WEST COAST
DO NOT WRITE, SIGN OR STAMP BELOW THIS LINE
RECEIVED c/o R.S.S. & M.T. CO.

0665⑈19630⑈

⑆121000400⑆
06/11/92
SAN FRANCISCO
1500-523-5498
11348329

⑆121000015⑆
SF CTR
1675000202 66129200