



May 24, 1991

Mr. Martin Clark
Martin W. Clark Construction Co.
P.O. Box 295
Hayward, Ca.

Re: Clark's Woodworking Tank Pull

Dear Mr. Clark,

Enclosed please find the final report of methods and findings for the tank removal project at 2620 Norbridge Ave., Castro Valley. ASE's receipt of the disposal certificate had delayed this submittal to some degree.

If you have questions or concerns, please call.

Respectfully,
Aqua Science Engineers

Greg Gouvea
Geologist

cc. Mr. Scott Seery, Alameda County Health
Mr. Bob Bowman, Castro Valley Fire

91 MAY 31 11:19



April 15, 1991

PROJECT REPORT

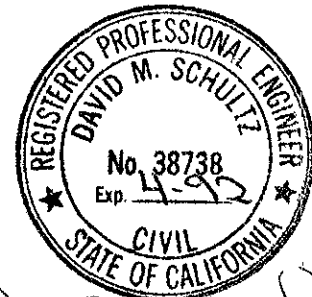
UNDERGROUND STORAGE TANK REMOVAL ASSESSMENT

at

CLARK'S WOODWORKING
2620 NORBRIDGE AVE.
CASTRO VALLEY, CA

Prepared for:

Martin W. Clark Construction Co.
Hayward, Ca.



David M. Schultz

Submitted by:

Aqua Science Engineers
2500 Old Crow Canyon Road, #121
San Ramon, CA 94583
(415) 820-9391

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1.0 INTRODUCTION

Aqua Science Engineers was contracted by the general contractor to supervise and document underground storage tank excavation, removal, and soil sampling activities at Clark's Woodworking, 2620 Norbridge Ave., Castro Valley, Ca. (Figure 1). The subject tank was a 4 foot diameter by 6 foot long, 550 gallon bare steel tank which was reportedly installed in 1973. The tank had contained only gasoline during it's service life, and had passed an integrity test in December, 1990.

The following activities were performed on or before March 28, 1991, and are documented in the following report.

- o Obtain all necessary permits;
- o Excavate, remove, and dispose of underground storage tank;
- o Sample soils;
- o Overexcavate pit, resample soils;
- o Prepare a report of methods and findings.

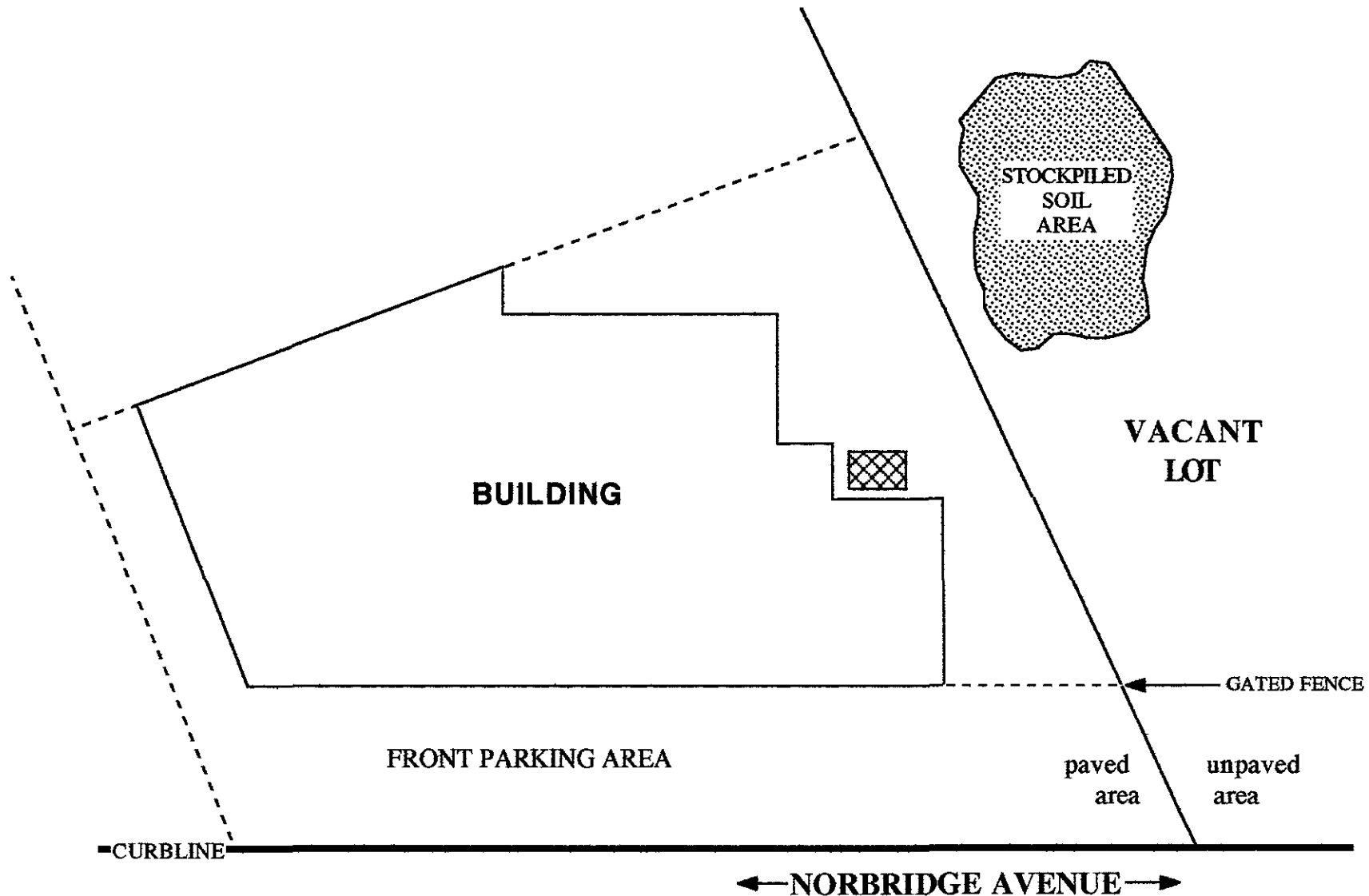
2.0 PERMITS

A permit to remove the underground storage tank was obtained from the Alameda County Health Care Services Agency, Dept. of Environmental Health, Hazardous Materials Division. The Bay Area Air Quality Management District was notified of tank removal as per Regulation 8, Rule 40. Copies of the permit and notification documents are contained in Appendix A.

3.0 EXCAVATION

Prior to excavation, Mr. Martin Clark inspected the tank area and removed all remaining product from the vessel into a vehicle gas tank.

The concrete surface cover was saw cut and removed on March 27, 1991. The dispenser was located directly over the tank, and was disconnected and removed. No overspill prevention device was in place. The connection between the tank riser (one foot of pipe) and the dispenser was significantly stained and may have leaked. Vent piping was removed.




AQUA SCIENCE ENGINEERS
 Facility & Site Layout Diagram
CLARK'S WOODWORKING
 2620 Norbridge Ave.
 Castro Valley, CA

FIGURE ONE

APPROX.
 SCALE : 1"=20'



 - TANK and DISPENSER LOCATION

The original tankpit backfill, comprised of imported medium to coarse grained sand with little or no silt and clay, was excavated, exposing the tank top and three sides. The original tankpit backfill was observed to exude gasoline odors. Organic Vapor Meter (OVM) readings were measured in shovel size mini excavations into the backfill stockpile at two locations. OVM readings were 28 and 380 ppm.

4.0 TANK REMOVAL PROCEDURES, FINDINGS

On the morning of March 28, 1991, approximately 170 lbs. of dry ice was inserted through the bungs into the tank. A 5/8" line was attached to the only uncapped tank opening, and vapors were exhausted about 50 feet away from the working area. Upon completion of tank removal procedures, excavation was continued to 11 feet depth below grade.

The tank removal operations were witnessed by the Castro Valley Fire Department official Mr. Bob Bowman, Mr. Scott Seery of the Alameda County Health Care Services, Hazardous Materials Division, and ASE representative Mr. Greg Gouvea.

After verifying a safe LEL of the tank atmosphere (9% LEL, 1% O₂), the vessel was removed from the excavation with a backhoe/loader. The tank was brushed and scraped to remove adhering soil. Tank construction consisted of 1/4" plate steel with welded seams. No protective coatings were evident on the tank exterior. Minor corrosion of the tank exterior bottom was noted, along with easily noticed pitting of the bottom and lower sides. No visible holes were seen by witnessing personnel. The tank bottom had rested at 5 feet 2 inches depth below grade, with the original tankpit excavation limit at 5 feet 4 inches depth.

The pit walls down to about 5 feet depth were found to consist of dark gray silty clay. Below this depth the native materials consisted of olive gray, silty claystone with rusty fracture and bedding planes. Some slickensides were noted on one to three inch diameter chunks which exhibited patterned weathering. The weathered claystone was placed in two separate piles, one representing approximately 5-10 feet depth and the other representing about 10-11 feet depth. OVM measurements were obtained from each of the two piles, by methods previously described. The 5-10' pile yielded 5 OVM readings between 432 and 4,232 ppm. OVM readings of 1,395 and 1,228 were measured from the 10-11' pile.

The tank was removed from the excavation, inspected, and loaded onto a flatbed truck in one continuous operation. Transportation under hazardous waste manifest was by and to the Erickson Tank Disposal Facility in Richmond, Ca. Copies of all Hazardous Waste Manifest and Tank Disposal Certificates are contained in Appendix B.

5.0 SAMPLING AND ANALYSIS

Two soil samples were obtained from the backhoe bucket. Soil sample SS-1 represents soils from beneath the middle of the tank at about 6 feet depth. SS-2 was procured from 11 feet depth below grade, under the middle of the tank. Soil from the desired sampling depth was brought to the surface with the backhoe bucket. Both samples were collected into 2 inch by 6 inch brass tubes which had been precleaned with brushes and a TSP solution, then rinsed with tap water. The sample tubes were driven into the soils until no free air space remained, then sealed with plastic caps and tape. The secured samples were labeled and placed into a cooler with ice for transport to a State Certified Hazardous Waste Analytical Laboratory (#238) for analysis of total petroleum hydrocarbons (TPH) as gasoline (EPA methods 5030/8015) with benzene, toluene, ethylbenzene, and total xylenes (BTEX) distinction (EPA method 8020). QA/QC data is summarized on the laboratory reports contained in Appendix C.

Soil sample #1 (SS-1,6') was found to contain 1,000 ppm TPH as gasoline with 16,000 ppb benzene, 24,000 ppb toluene, 13,000 ppb ethylbenzene and 25,000 total xylenes. SS-2,11' yeilded 1.2 ppm TPH as gas, and 440, 21, 17, and 9.3 ppb BTEX, respectively (Table 1). Analyses for organic lead indicated levels below the method detection limit of 0.5 ppm for both soil samples.

TABLE ONE:
RESULTS OF
SOIL SAMPLE ANALYSES

Soil Sample #	TPH gasoline mg/kg	benzene ug/kg	toluene ug/kg	ethyl benzene ug/kg	total xylenes ug/kg
SS-1, 6'	1000	16000	24000	13000	25000
SS-2, 11'	1.2	440	21	17	9.3

mg/kg = parts per million
ug/kg = parts per billion

6.0 CONCLUSIONS, RECOMMENDATIONS

ASE was contracted to supervise and document the removal of one 550 gallon underground gasoline storage tank from Clark's Woodworking at 2620 Norbridge Ave., Castro Valley, Ca. The tank was installed in 1973, with the dispenser directly over the tank. Fittings between the tank riser and the dispenser appeared to be a potential source for an unauthorized release of gasoline. Upon removal, the uncoated steel tank was noted to be visibly pitted though no holes were seen. The tank had recently passed an integrity test.

A soil sample obtained from 6 feet depth below grade (10 inches below tank bottom) yielded 1,000 ppm TPH as gasoline with BTEX concentrations in the ppm range. The tankpit bottom was further excavated to 11 feet depth and a soil sample was obtained from the backhoe bucket. This soil sample indicated 1.2 ppm TPH as gas with detectable amounts of each BTEX constituent. Organic lead concentrations were measured in both samples and was not detected. No groundwater was encountered during the excavation.

An unauthorized release form must be completed and distributed by the owner. ASE recommends that further excavation of soils and verification sampling be conducted to assure complete removal of gasoline contaminated soil from the area of the removed tank.

Groundwater will likely be encountered during subsequent excavation, and installation and sampling of a groundwater monitoring well will likely be required due to the presence of petroleum hydrocarbons at the levels of up to 1,000 ppm with BTEX in the ppm range.

APPENDIX A
PERMITS

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
HAZARDOUS MATERIALS DIVISION
80 SWAN WAY, ROOM 200
OAKLAND, CA 94621
PHONE NO. 415/271-4320

2-21-81
15-10-81

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

1. **Business Name** Clark's Woodworking
Business Owner Lawrence O. Clark
2. **Site Address** 2620 Norbride Ave
City Castro Valley, CA. **Zip** 94546 **Phone** 538-9511
3. **Mailing Address** 2620 Norbride Ave.
City Castro Valley, **Zip** 94546 **Phone** 538-9511
4. **Land Owner** Lawrence O. Clark
Address 2620 Norbride Ave. **City, State** Castro Valley, CA, **Zip** 94546
5. **EPA I.D. No.** CAC 000 137 005
6. **Contractor** Martin W. Clark Const. Co.
Address P.O. Box 295
City Hayward, CA. **Phone** 886-5232
License Type A-Gen **ID#** 382937
7. **Consultant** AQUA SCIENCE ENGINEERS INC.
Address P.O. Box 535
City San Ramon **Phone** 820-9391

8. Contact Person for Investigation

Name Larry Clark Title Owner

Phone 538-9511

9. Total No. of Tanks at facility 1

10. Have permit applications for all tanks been submitted to this office?
Yes [X] No []

11. State Registered Hazardous Waste Transporters/Facilities

a) Product/Waste Tranporter

Name Erickson Inc. EPA I.D. No. CAD 009466392

Address 255 Parr Blvd.

City Richmond State CA. Zip

b) Rinsate Transporter

Name Erickson Inc. EPA I.D. No. CAD 009466392

Address 255 Parr Blvd.

City Richmond, State CA. Zip

c) Tank Transporter

Name Erickson Inc. EPA I.D. No. CAD 009466392

Address 255 Parr Blvd.

City Richmond, State CA. Zip

d) Tank Disposal Site

Name Erickson Inc. EPA I.D. No. CAD 009466392

Address 255 Parr Blvd.

City Richmond, State CA. Zip

e) Contaminated Soil Transporter

Name Erickson Inc. EPA I.D. No. CAD 009466392

Address 255 Parr Blvd.

City Richmond, State CA. Zip

Name AQUA SCIENCE ENGINEERS INC.

Company AQUA SCIENCE ENGINEER INC.

Address P.O. Box 535

City San Ramon State CA. Zip _____ Phone 820-9391

13. Sampling Information for each tank or area

Tank or Area		Material sampled	Location & Depth
Capacity	Historic Contents (past 5 years)		
<u>SS 16</u>	<u>GASOLINE</u>	<u>SOIL (ADD WATER IF ENCOUNTERED)</u>	<u>W/IN 2' OF NATIVE SOIL - BACK-FILL INTERFACE</u>

14. Have tanks or pipes leaked in the past? Yes [] No [x]

If yes, describe. _____

15. NFPA methods used for rendering tank inert? Yes [x] No []

If yes, describe. purging with dry ice at rate of 30 lbs. per 1,000 gal of tank capacity until vapor contents is below 15% lower explosive limits.

OR PER LOCAL FIRE DEPT REQUIREMENTS

An explosion proof combustible gas meter shall be used to verify tank inertness.

16. Laboratories

Name PAGE LABORATORIES INC.

Address 11 DIGITAL DRIVE

City NOVATO State CA. Zip 94949

State Certification No. 148

17. Chemical Methods to be used for Analyzing Samples

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Number
TPH - G BTEX POTENTIAL ANALYSIS TEL EDB	5030	DHS-LUFT METHOD (GC FID) EPA METHOD 8020 OR 8240 [OR BTEX/TPH BY METHOD 8260] DHS LUFT DHS-AB1803

18. Submit Site Safety Plan

19. Workman's Compensation: Yes [X] No []

Copy of Certificate enclosed? Yes [X] No []

Name of Insurer State Farm Ins.

20. Plot Plan submitted? Yes [X] No []

21. Deposit enclosed? Yes [X] No []

22. Please forward to this office the following information within 60 days after receipt of sample results.

- a) Chain of Custody Sheets
- b) Original Signed Laboratory Reports
- c) TSD to Generator copies of wastes shipped and received
- d) Attachment A summarizing laboratory results

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true. I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel and safety.

I will notify the Department of Environmental Health at least two (2) working days (48 hours) after approval of this closure plan in advance to schedule any required inspections. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Signature of Contractor

Name (please type) Martin W. Clark Const. Co.

Signature *Martin W. Clark*

Date Jan. 23, 1991

Signature of Site Owner or Operator

Name (please type) _____

Signature _____

Date Jan. 17, 1991

NOTES:

1. Any changes in this document must be approved by this Department.
2. Any leaks discovered must be submitted to this office on an underground storage tank unauthorized leak/contamination site report form within 5 days of its discovery.
3. Three (3) copies of this plan must be submitted to this Department. One copy must be at the construction site at all times.
4. After approval of plan, notification of at least two (2) working days (48 hours) must be given to this Department prior to removal of tank(s).
5. A copy of your approved plan must be sent to the landowner.
6. Triple rinse means that:
 - a) Final rinse must contain less than 100 ppm of Gasoline (EPA method 8020 for soil, or EPA method 602 for water) or Diesel (EPA method 418.1). Other methods for halogenated volatile organics (EPA method 8010 for soil, EPA method 601 for water) may be required. The composition of the final rinse must be demonstrated by an original or facsimile report from a laboratory certified for the above analyses.
 - b) Tank interior is shown to be free from deposits or residues upon a visual examination of tank interior.
 - c) Tank should be labelled as "tripled rinsed; laboratory certified analysis available upon request" with the name and address of the contractor.

If all the above requirements cannot be met, the tank must be transported as a hazardous waste.

7. Any cutting into tanks requires local fire department approval.

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

ATTACHMENT A
SAMPLING RESULTS

Tank or Area	Contaminant	Location & Depth	Results (specify units)
SS-1, 6'	TPH as gasoline benzene toluene ethylbenzene total xylenes	beneath tank bottom, 6' depth -----	1,000 ppm 16,000 ppb 24,000 ppb 13,000 ppb 25,000 ppb
SS-2, 11'	TPH as gasoline benzene toluene ethylbenzene total xylenes	beneath tank bottom, 11' depth	1.2 ppm 440 ppb 21 ppb 17 ppb 9.3 ppb
SS-1, SS-2	organic lead ▲	as described	both less than 0.5 ppm

INSTRUCTIONS

2. SITE ADDRESS

Address at which closure or modification is taking place.

5. EPA I.D. NO.

This number may be obtained from the State Department of Health Services, 916/324-1781.

6. CONTRACTOR

Prime contractor for the project.

7. OTHER

List professional consultants here.

12. SAMPLE COLLECTOR

Persons who are collecting samples.

13. SAMPLING INFORMATION

Historic contents - the principal product(s) used in the last 5 years.

Material sampled - i.e., water, oil, sludge, soil, etc.

16. LABORATORIES

Laboratories used for chemical and geotechnical analyses.

17. CHEMICAL METHODS:

All sample collection methods and analyses should conform to EPA or DHS methods.

Contaminant - Specify the chemical to be analyzed.

Sample Preparation Method Number - The means used to prepare the sample prior to analyses - i.e., digestion techniques, solvent extraction, etc. Specify number of method and reference if not an EPA or DHS method.

Analysis Method Number - The means used to analyze the sample - i.e., GC, GC-MS, AA, etc. Specify number of method and reference if not a DHS or EPA method.

NOTE:

Method Numbers are available from certified laboratories.

18. SITE SAFETY PLAN

A plan outlining protective equipment and additional specialized personnel in the event that significant amount of hazardous materials are found. The plan should consider the availability of respirators, respirator cartridges, self-contained breathing apparatus (SCBA) and industrial hygienists.

19. ATTACH COPY OF WORKMAN'S COMPENSATION

20. PLOT PLAN

The plan should consists of a scaled view of the facility at which the tank(s) are located and should include the following information:

- a) Scale
- b) North Arrow
- c) Property Line
- d) Location of all Structures
- e) Location of all relevant existing equipment including tanks and piping to be removed
- f) Streets
- g) Underground conduits, sewers, water lines, utilities
- h) Existing wells (drinking, monitoring, etc.)
- i) Depth to ground water
- j) All existing tanks in addition to the ones being pulled

rev. 9/88
mam

Removal of Underground Tank

A. Fire Department Inspection Requirements

1. The fire department is to be notified 48 hours prior to tank removal to set up inspection.
2. Notify the fire department the morning of tank removal to confirm time when purging of the tanks will begin, and estimated time when tanks will be adequately purged and ready for removal.
3. Prior to removal of the tank, inspection by the fire department is required.

B. General Procedures for Underground Tank Removal

1. Secure site from unauthorized entry and eliminate any potential ignition sources from the area. Post applicable warning signs as necessary. i.e, no smoking or open flame.
2. Maintain two 2A 20BC minimum fire extinguishers on site.
3. Drain and flush all piping into tank or appropriate container for disposal.
4. Prior to excavation, remove all flammable liquid and sludge from the tank. It may be necessary to utilize a hand pump to remove the bottom few inches.
5. Dig down to the top of the tank and remove fill tube and all piping to tank.
6. Prior to complete excavation of tank and its removal, the tanks must be purged of flammable and combustible vapor.

If dry ice is used, minimum of 30 pounds dry ice to every 1,000 gallons of tank capacity shall be used. Purging is considered adequate when vapor contents are below 15 percent of the lower explosive limits of the product and the O_2 percent is below 5 percent. This requires that the tank be tested using a meter that indicates the percentage reading of the lower explosive limits, and oxygen percentage. The contractor is required to supply the meter.

It is the intent to purge the tanks prior to a large excavation hole being created, and to purge vapors at a height which will prevent accumulation of vapors in low spots. This will require a vent pipe be connected to the tank to permit purging of vapors at least five feet above grade. Care must be taken to assure vapors are being vented into a safe location free of possible ignition sources.

7. Once the tank has been purged, plug and cap all holes. Use screwed (boiler) plugs to plug any corrosion leak holes. One cap should have a 1/8 inch vent hole to prevent the tank from being subjected to excessive pressure changes (locate at upper most point of tank).
8. Complete excavation and removal of tank. Once removed, check tank for any damage or holes and plug such. Recheck tank for adequate purging and re-purge if necessary.
9. The tank is required to be removed from the site upon removal from the ground, and tanks shall not be left unattended at any time.
10. If the hole is going to be left unfilled, fencing (minimum six feet high) shall be placed around the site to prevent unauthorized entry.

STATE FARM FIRE AND CASUALTY COMPANY, Bloomington, Illinois
 STATE FARM GENERAL INSURANCE COMPANY, Bloomington, Illinois

CLARK, MARTIN W. DBA MARTIN CLARK CONSTRUCTION

P.O. BOX 290

HAYWARD, CA 94543

VARIOUS

The following coverages for the periods and limits indicated below

POLICY NUMBER	TYPE OF INSURANCE	POLICY PERIOD (eff /exp)	LIMITS OF LIABILITY
7-1-5406-0F	<input checked="" type="checkbox"/> Comprehensive General Liability <input type="checkbox"/> Manufacturers' and Contractors' Liability <input type="checkbox"/> Owners', Landlords' and Tenants' Liability	8/1/90-8/1/91	<input type="checkbox"/> Dual Limits for BODILY INJURY Each Occurrence \$ _____ Aggregate \$ _____ PROPERTY DAMAGE Each Occurrence \$ _____ Aggregate* \$ _____ <input checked="" type="checkbox"/> Combined Single Limit for BODILY INJURY AND PROPERTY DAMAGE Each Occurrence \$ <u>500,000</u> Aggregate \$ <u>500,000</u>
The above insurance includes (applicable if indicated by <input checked="" type="checkbox"/>) <input checked="" type="checkbox"/> PRODUCTS-COMPLETED OPERATIONS <input checked="" type="checkbox"/> OWNERS' OR CONTRACTORS' PROTECTIVE LIABILITY <input checked="" type="checkbox"/> CONTRACTUAL LIABILITY <input checked="" type="checkbox"/> BROAD FORM PROPERTY DAMAGE <input checked="" type="checkbox"/> BROAD FORM COMPREHENSIVE GENERAL LIABILITY			<input checked="" type="checkbox"/> Combined Single Limit for BODILY INJURY AND PROPERTY DAMAGE Each Occurrence \$ <u>500,000</u> Aggregate \$ <u>500,000</u>
POLICY NUMBER	TYPE OF INSURANCE	POLICY PERIOD (eff /exp.)	LIMITS OF LIABILITY
	<input type="checkbox"/>		CONTRACTUAL LIABILITY LIMITS (If different than above) BODILY INJURY Each Occurrence \$ _____ PROPERTY DAMAGE Each Occurrence \$ _____ Aggregate \$ _____
	EXCESS LIABILITY <input type="checkbox"/> Umbrella <input type="checkbox"/> Other		<input type="checkbox"/> Combined Single Limit for BODILY INJURY AND PROPERTY DAMAGE Each Occurrence \$ _____ Aggregate \$ _____
7-99-4288-1F	<input checked="" type="checkbox"/> Workers Compensation and Employers Liability	8/1/90-8/1/91	Part 1 STATUTORY Part 2 BODILY INJURY Each Accident \$ <u>100,000</u> Disease Each Employee \$ <u>500,000</u> Disease Policy Limit \$ _____

*Aggregate not applicable if Owners' Landlords and Tenants Liability Insurance excludes structural alterations new construction or demolition

THE CERTIFICATE OF INSURANCE IS NOT A CONTRACT OF INSURANCE AND NEITHER AFFIRMATIVELY NOR NEGATIVELY AMENDS, EXTENDS OR ALTERS THE COVERAGE APPROVED BY ANY POLICY DESCRIBED HEREIN.

IS AGREED THAT IT IS THE INTENTION OF THE COMPANY TO PROVIDE TEN (10) DAYS IN WRITING TEN NOTICE PRIOR TO THE CANCELLATION OF, OR REDUCTION OF COVERAGE IN THE POLICY DESIGNATED IN THIS CERTIFICATE.

NAME AND ADDRESS OF PARTY TO WHOM CERTIFICATE IS ISSUED

CLARKS WOODWORKING
 2620 NORBRIDGE AVE.
 CASTRO VALLEY, CA 94546

JANUARY 22, 1991

Date

Signature of Authorized Representative

AGENT-2526

Title



MANAGEMENT DISTRICT

9.19 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

Aeration of Contaminated Soil and
Removal of Underground Storage Tanks

NOTIFICATION FORM

Removal or Replacement of Tanks
Excavation of Contaminated Soil

March 22, 1991

ATTENTION: Rosanne

SITE INFORMATION

TE ADDRESS	2620 Norbridge Ave.
CITY, STATE, ZIP	Hayward, Ca. 94546
OWNER NAME	Clark's Woodworking
SPECIFIC LOCATION OF PROJECT	

TANK REMOVAL

CONTAMINATED SOIL EXCAVATION

SCHEDULED STARTUP DATE	SCHEDULED STARTUP DATE 3-28-91
VAPORS REMOVED BY:	STOCKPILES WILL BE COVERED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
<input type="checkbox"/> WATER WASH	ALTERNATIVE METHOD OF AERATION (DESCRIBE BELOW):
<input checked="" type="checkbox"/> VAPOR FREEING (CU ²)	
<input type="checkbox"/> VENTILATION	(MAY REQUIRE PERMIT)

CONTRACTOR INFORMATION

NAME Martin W. Clark Const. Co.	CONTACT Marty Clark
ADDRESS P.O. Box 295	PHONE (415) 886-5232
CITY, STATE, ZIP Hayward, Ca. 94543	

**CONSULTANT INFORMATION
(IF APPLICABLE)**

NAME AQUA SCIENCE ENGINEERS INC.	CONTACT Michael Dirk
ADDRESS P.O. 535	PHONE (415) 820-9391
CITY, STATE, ZIP San Ramon, Ca.	

FOR OFFICE USE ONLY

DATE RECEIVED	BY	(INIT.)
CC: INSPECTOR NO.	DATE	BY
TELEPHONE UPDATE: CALLER	CHANGE MADE	(INIT.)
SAAGMD N #		

**APPENDIX B
HAZARDOUS WASTE MANIFEST,
TANK DISPOSAL CERTIFICATE**

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CACD0001370051010011		Manifest Document No. 0100011		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.			
		3. Generator's Name and Mailing Address Clarks Woodworking 2620 Norbridge Ave Castro Valley, CA 94546		6. US EPA ID Number		A. State Manifest Document Number 90649387		B. State Generator's ID			
4. Generator's Phone 415) 538-7511		5. Transporter 1 Company Name Erickson Trucking Inc.		6. US EPA ID Number CA1001094661172		C. State Transporter's ID 108292		D. Transporter's Phone 415) 235-1393			
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		F. Transporter's Phone		G. State Facility's ID			
9. Designated Facility Name and Site Address Erickson, Inc. 255 Parr Blvd. Richmond, Ca. 94801		10. US EPA ID Number CAD009466392		H. Facility's Phone (415) 235-1393							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) a. Waste Empty Storage Tank NON-RCRA Hazardous Waste Solid.				12. Containers No. Type 001 TP		13. Total Quantity 1500 P		14. Unit Wt/Vol		I. Waste No.	
										State 512	
b.								State		EPA/Other	
c.								State		EPA/Other	
d.								State		EPA/Other	
J. Additional Descriptions for Materials Listed Above Qty. 1 Empty Storage Tank (s) # 5918. Tank (s) have been inerted with 15 lbs. Dry Ice per 1000 Gal. Capacity.						K. Handling Codes for Wastes Listed Above a. b. c. d.					
15. Special Handling Instructions and Additional Information Keep away from sources of ignition. Always wear hardhats when working around U.S.T.'s 24 Hr. Contact Name <u>Martin W Clark</u> & Phone <u>415) 886-5232</u>											
18. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.											
Printed/Typed Name				Signature				Month Day Year			
17. Transporter 1 Acknowledgement of Receipt of Materials											
Printed/Typed Name Steve Fleming				Signature <i>Steve Fleming</i>				Month Day Year 032891			
18. Transporter 2 Acknowledgement of Receipt of Materials											
Printed/Typed Name				Signature				Month Day Year			
19. Discrepancy Indication Space											
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.											
Printed/Typed Name				Signature				Month Day Year			

Do Not Write Below This Line

APPENDIX C
SAMPLE ANALYSIS DOCUMENTATION

CHROMALAB, INC.

5 DAYS TURNAROUND

Analytical Laboratory (E694)

April 11, 1991

ChromaLab File No.: 0391147

AQUA SCIENCE ENGINEERS

Attn: Greg Gouvea

RE: Two soil samples for Gasoline/BTEX analysis

Project Name: CLARK WOODWORKING

Date Sampled: March 28, 1991

Date Submitted: March 28, 1991

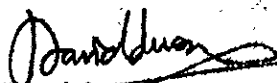
Date Extracted: April 10, 1991

Date Analyzed: April 10, 1991

RESULTS:

Sample No.	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
SS-1, 6'	1000	16000	24000	13000	25000
SS-2, 11'	1.2	440	21	17	9.3
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	110.6%	110.8%	81.7%	89.7%	87.1%
DUP SPIKE RECOVERY	98.9%	95.6%	95.2%	94.9%	80.7%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOF OF ANALYSIS	5030/ 8015	8020	8020	8020	8020

ChromaLab, Inc.


 David Duong
 Chief Chemist


 Eric Tam
 Laboratory Director



MOBILE CHEM LABS INC.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

0391147/011730

Chromalab, Inc.
2239 Omega Road, #1
San Ramon, CA 94583
ATTN: Eric Tam
Project Manager

Date Sampled: 04-01-91
Date Received: 04-01-91
Date Reported: 04-08-91

ORGANIC LEAD

Sample Number	Sample Description	Detection Limit ppm	SOIL RESULTS ppm
Project No.: 0391147			
B041001	SS-1, 6'	0.5	<0.5
B041002	SS-2, 11'	0.5	<0.5

QA/QC: Sample blank is none detected

Note: California LUFT 12/87
(ppm) = (mg/kg)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

PROJ. Clark Woodworking
 COMPANY Aqua Science Engs.
 ADDRESS San Ramon

SAMPLERS (SIGNATURE) [Signature] (PHONE NO.) 415 820 9391

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.
<u>SS-1, 6'</u>	<u>3/28/91</u>	<u>10:45</u>	<u>soil</u>	
<u>SS-2, 11'</u>	<u>" " "</u>	<u>15:30</u>	<u>soil</u>	

ANALYSIS REQUEST																				
TPH - Gasoline (EPA 5030)	TPH - Gasoline (5030) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510, 3550)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240)	BASE/NEUTRALS, ACIDS (EPA 624/627, 8270)	TOTAL OIL & GREASE (EPA 5030AE)	PESTICIDES/PCB (EPA 606, 8060)	PHENOLS (EPA 604, 8040)	tetraethyl lead	METALS: Cd, Cr, Pb, Zn	CAN METALS (18) w/CP VI	PRIORITY POLLUTANT METALS (13)							
	X									X										
	X									X										

CHROMALAB FILE # 391147

PROJECT INFORMATION	SAMPLE RECEIPT	
PROJECT <u>Clark Woodworking</u>	TOTAL NO. OF CONTAINERS <u>2</u>	CHAIN OF CUSTODY SEALS <u>[initials]</u>
PQ NO	REC'D GOOD CONDITION/COLD <u>[initials]</u>	CONFORMS TO RECORD <u>[initials]</u>
SHIPPING ID NO	LAB NO.	
VIA		

RELINQUISHED BY	1.	RELINQUISHED BY	2.	RELINQUISHED BY
(Signature)	<u>[Signature]</u> 17:10	(Signature)		(Signature)
(Date)	<u>3-28-91</u>	(Date)		(Date)
(Printed Name)	<u>Greg Coupa</u>	(Printed Name)		(Printed Name)
(Company)	<u>Aqua Science</u>	(Company)		(Company)
RECEIVED BY	1.	RECEIVED BY	2.	RECEIVED BY (LABORATORY)
(Signature)		(Signature)		<u>[Signature]</u>
(Date)		(Date)		<u>3-28-91</u>
(Printed Name)		(Printed Name)		<u>17:10</u>
(Company)		(Company)		(LAB)

SPECIAL INSTRUCTIONS/COMMENTS:
10 day turnaround