

PORT OF OAKLAND

September 13, 2000

Mr. Barney Chan
~~Senior~~ Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Re: Supplemental Information and Memorandum Regarding Suspected and Known Releases at 901 Embarcadero, Oakland, California

Dear Mr. Chan:

As requested, this letter transmits supplemental information and a memorandum prepared by Subsurface Consultants, Inc. ("SCI"), dated September 13, 2000 regarding the activities, uses and users at the 901 Embarcadero property (the "site"). This memorandum should be read concurrently with SCI's previous May 18, 2000 memorandum (attached for your convenience) to gain an appreciation of the potential magnitude of the environmental concerns at the site. Finally, I am also enclosing a copy of the Stipulation and Judgment entered into between the Alameda District Attorney's office and the current user of the property, Alliance Gas Products.

The Port of Oakland and our outside counsel, Jonathan Redding of Wendel, Rosen, Black & Dean, LLP, have been in contact with Praxair, the Port's tenant of record. Praxair has agreed that, pursuant to the transfer of jurisdiction from the Oakland Fire Department to Alameda Health Care Services Agency ("ACHCSA"), I should forward to you the scope of work prepared by AEI Consultants, Inc., which relates **solely** to the July 1999 spill. While our counsel is still in contact with Praxair concerning appropriate site investigations, all future correspondence from

your office should be addressed to myself at the Port, Mr. Redding, and counsel for Praxair at the addresses listed below:

PRAXAIR John J. Sibley, Esq. Senior Counsel Praxair 39 Old Ridgebury Road Danbury, CT 06810-5113 Tel: (203) 837-2285 Fax: (203) 837-2545	ALLIANCE GAS PRODUCTS, INC. Marvin Rodgers Alliance Gas Products, Inc. 901 Embarcadero Oakland, CA 94606-5120 Tel: (510) 663-9353 Fax: (510) (Unknown)
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Please note that I am also providing the contact name at Alliance Gas, which was the operator of the facility during the July 1999 release. As you may know, the Port's position is that Alliance Gas is an illegal subtenant of Praxair's.

With regard to your request for a map indicating areas of concern, I am submitting a map, which also shows the spatial relationship between the current boundaries of the Ninth Avenue Terminal investigations and the Praxair site. This map also illustrates the exhaustive investigations at the Ninth Avenue Terminal. Please note that despite numerous notices of violations and concerns documented in various ACHSCA inspections of the Praxair site, very limited intrusive investigations have actually taken place on the subject property.

With regard to your inquiry as to whether or not the 901 Embarcadero property should be considered part of the Ninth Avenue Terminal Site, which is the subject of ongoing investigations and preparation of risk assessment work plans, the Port has no objection to the designation of the Praxair site as part of the Ninth Avenue Terminal.

Finally, I am transmitting the requested check in the amount of \$2,000 to initially fund ACHCSA's oversight at Ninth Avenue Terminal

If you have any questions, please contact me at (510) 627-1184.

Sincerely,



Douglas P. Herman
Associate Port Environmental Scientist

Enclosure(s)

cc: Michele Heffes, Esq.
Jonathan W. Redding, Esq.
Jeriann Alexander, SCI
John J. Sibley, Esq.
Joyce Washington, Port of Oakland

1 THOMAS J. ORLOFF
District Attorney
2 County of Alameda
Consumer and Environmental Protection Division
3 7677 Oakport, Suite 400
Oakland, CA 94621-1934
4 (510) 569-9281

5 Micheal O'Connor
[State Bar # 124655]
6

ENDORSED
FILED
ALAMEDA COUNTY

JUN 1 2 2000

CLERK OF THE SUPERIOR COURT
By ANITA MOORE
Deputy

7 SUPERIOR COURT OF THE STATE OF CALIFORNIA
8 COUNTY OF ALAMEDA

9 THE PEOPLE OF THE STATE OF CALIFORNIA,)

10)
11 Plaintiff,)

12 v.)

13 INTERNATIONAL GAS & CRYOGENICS, INC.,)
a California Corporation, doing business as)
14 ALLIANCE GAS PRODUCTS,)

15 Defendant.)

No. 825107-9

FINAL JUDGMENT

16
17 It appearing to the Court that the Court has jurisdiction of the subject matter herein and the
18 parties hereto, that Plaintiff has filed a Complaint; that Defendant has been served with a copy of the
19 Complaint and has appeared; that Plaintiff, THE PEOPLE OF THE STATE OF CALIFORNIA,
20 appearing through its attorney Thomas J. Orloff, District Attorney, by Micheal O'Connor, Deputy
21 District Attorney, and Defendant, INTERNATIONAL GAS & CRYOGENICS, INC., a California
22 Corporation, appearing through its attorney, Laurel Headley, have stipulated to entry of this
23 Judgment without the taking of proof, without trial or adjudication of any facts or issues of law
24 herein, therefore:

25 IT IS ORDERED, ADJUDGED AND DECREED that the Defendant, its agents, officers,
26 employeecs and all persons acting in concert with Defendant, with actual or constructive notice of this

27 ///

Office of the
District
Attorney
Alameda County
California

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EXHIBIT A

1 Judgment, are restrained and enjoined as follows:

2 Within sixty (60) days of the date of judgment, defendant shall submit the following to the
3 Oakland Fire Department:

4 a. A written plan to bring its facility into compliance with National Fire
5 Protection Agency, National Fire Code Standard 51A, Standard for Acetylene Generating Plant,
6 California Uniform Fire Code, Article 80, Hazardous Materials Storage, Aboveground Storage
7 Tanks.

8 b. A written Spill Prevention Control and Countermeasures Plan as required by
9 the Regional Water Quality Control Board, said plan to include evidence of registration of all above
10 ground storage tanks on the premises.

11 c. A written plan to conduct a soil site assessment to determine the extent of
12 potential soil contamination in the area surrounding the above ground storage tanks. Defendant shall
13 implement the site assessment plan within ninety (90) days of approval by the Oakland Fire
14 Department.

15 Defendant shall make reasonable efforts to identify all storm drains at defendant's facility
16 at 901 Embarcadero. Defendant will clearly and permanently mark all identified storm drains with
17 a warning indicating that the storm drains lead to the San Francisco Bay. Defendant shall complete
18 the storm drain identification and marking within 30 days of the entry of judgment.

19 Defendant shall establish and implement an emergency response plan and procedure pursuant
20 to section 25504 of the Health and Safety Code which shall include a plan for notification of :

- 21 a. Local emergency response personnel;
- 22 b. Governor's Office of Emergency Services Warning Center;
- 23 c. Other agencies as may be required by state or federal law;

24 in the event of a reportable release of hazardous material. Defendant shall ensure that all applicable
25 employees receive training in and periodic review of emergency response and notification
26 procedures. Defendant shall submit this plan to the Oakland Fire Department within thirty (30) days
27 of the entry of judgment.

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1 Defendant and its agents, employees and representatives, and any of them, shall be restrained
2 and enjoined from violating section 25507 of the Health and Safety Code, and section 5650 of the
3 Fish and Game Code.

4 Defendant shall pay to Plaintiff, THE PEOPLE OF THE STATE OF CALIFORNIA, through
5 THOMAS J. ORLOFF, District Attorney of the County of Alameda, the sum of sixteen thousand
6 three hundred fifteen dollars and twenty-six cents (\$16,315.26). All payments shall be delivered to
7 the District Attorney of Alameda County, Consumer and Environmental Protection Division, 7677
8 Oakport Street Suite 400, to the attention of Micheal O'Connor, Deputy District Attorney. Said
9 payment shall be made as follows:

10 1. Defendant shall pay six thousand three hundred fifteen dollars and twenty-six cents
11 (\$6,315.26) in costs and restitution, payable as follows:

12 On or before July 1, 2000, defendant shall present one check in the amount of One thousand
13 seven hundred eighty-nine dollars and one cent (\$1789.01) payable to the Fish and Wildlife
14 Pollution Account.

15 On or before October 1, 2000 defendant shall present one check payable to the Oakland Fire
16 Department, in the amount of two thousand twenty-six dollars and twenty-five cents (\$2026.25).

17 On or before January 1, 2001, defendant shall present one check payable to the Alameda
18 County Environmental Resource and Training Account in the amount of two thousand five hundred
19 dollars (\$2,500.00).

20 2. Defendant shall pay ten thousand dollars (\$10,000.00) as penalties under Business
21 and Professions Code section 17200 for violations relating to the Health and Safety Code and the
22 Fish and Game Code. Said penalties shall be paid as follows:

23 On or before April 1, 2001, defendant shall present one check in the amount of one thousand
24 dollars (\$1,000.00) dollars payable to the Treasurer of Alameda County and one check in the amount
25 of one thousand dollars (\$1,000.00) payable to the Department of Fish and Game.

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Alameda County
California

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1 On or before July 1, 2001, defendant shall present one check in the amount of one thousand
2 dollars (\$1,000.00) payable to the Treasurer of Alameda County and one check in the amount of
3 \$1,000 payable to the Department of Fish and Game.

4 On or before October 1, 2001, defendant shall present one check in the amount of one
5 thousand dollars (\$1,000.00) dollars payable to the Treasurer of Alameda County and one check in
6 the amount of one thousand dollars (\$1,000.00) payable to the Department of Fish and Game.

7 On or before January 1, 2002, defendant shall present one check in the amount of one
8 thousand dollars (\$1,000.00) payable to the Treasurer of Alameda County and one check in the
9 amount of one thousand dollars (\$1,000.00) payable to the Department of Fish and Game.

10 On or before April 1, 2002, defendant shall present one check in the amount of one thousand
11 dollars (\$1,000.00) payable to the Treasurer of Alameda County and one check in the amount of one
12 thousand dollars (\$1,000.00) payable to the Department of Fish and Game.


13 Jurisdiction is retained for the purpose of enabling either party to this Judgment to apply to
14 the Court at any time for such further orders and directions as may be necessary and appropriate.

15
16 IT IS SO ORDERED.

17
18 Dated: 6-12-00

ROBERT B. FREEDMAN
Judge of the Superior Court

19
20
21 Approved as to form.



Laurel Headley
Attorney for Defendant

22
23
24
25
26 Office of the
District
Attorney
Alameda County
California
27
28



Subsurface Consultants, Inc.

To: Doug Herman
EHSC
Port of Oakland

Date: September 11, 2000

Project Number: 133.009

From: Jeriann Alexander

Subject: 901 Embarcadero, Oakland

At the request of the Port of Oakland, Subsurface Consultants, Inc. (SCI) has reviewed copies of available files from the City of Oakland Fire Department (OFD) for the 901 Embarcadero site, and copies of recent correspondence between Wendel, Rosen, Black & Dean (outside counsel for the Port) and Praxair. The OFD files do not appear to be complete, as they do not contain any correspondence from 2000. This notwithstanding, it is apparent that the 1999 release at the site is not unique. As discussed in May 2000 memorandum, which should be considered concurrently with this memorandum, the site has had a long history of onsite chemical usage and releases.

Based on our review of recent correspondence from the OFD (letter dated August 9, 2000) we understand that the OFD and Port concur that investigation of the site should be conducted to evaluate past areas of chemical releases. We further understand that the Alameda County Health Care Services Agency will be the lead regulatory agency overseeing the investigation, and cleanup and abatement of the site, as deemed necessary to bring the site into regulatory compliance.

Maps within the OFD files indicate that the main facility building was constructed in 1951, and since at least 1967 the site has been used as a gas manufacturing, mixing and bottling plant. As such various chemicals, in solid, gas and liquid forms were used in onsite operations. Liquid Carbonic Specialty Gas Corporation, which was/is owned by Houston Natural Gas Company, was onsite from at least 1967 to 1996. Facility records indicate that the name of the facility was changed to Praxair in April 1996. In June 1999, Praxair subleased the facility to Alliance Gas Products. Alliance Gas Products is a California corporation doing business for International Gas & Cryogenics, Inc.. I understand that Alliance Gas is an illegal subtenant, which occupied the site in June 1999 and is responsible for the July 1999 release.

The files reviewed to date suggest that there have been several documented incidents of surface and subsurface chemical releases at the site, and releases to the storm drain and/or sanitary sewer systems. Chemicals involved in the documented releases include gasoline and diesel products, oil, "monkey dust" (acetylene purifying material), sand blast dust, and wastewater and other products generated through the formation of acetylene gas. However, no confirmation sampling has been conducted to document any remedial efforts undertaken by any party following any of the documented releases, with the exception of the gasoline and diesel releases from the former underground storage tanks. Further, there have been no site characterization studies conducted to date.

MEMORANDUM

Page 2 – 901 Embarcadero OFD File Review

Documents and/or maps which indicate the occurrence of releases/spills, or which reference areas of chemical usage/storage, in addition to those referenced in our May 2000 Memorandum, are attached hereto and briefly described herein.

1980 DHS Industrial Waste Survey - Liquid Carbonic completed this survey and indicated that prior to 1972 more than 1000 gallons of Acetylene Sludge (lime sludge) was discharged to onsite ponds per year. After 1972, the sludge was transported to the Vallejo Sanitation District. The DHS conducted a site inspection on June 24, 1980 as a follow-up to the survey, and documented these additional issues which required further evaluation:

- **Multicolor staining of soil.**
- **Oil discharged to a pipe in the ground.**
- **Indications of overflow from the waste ponds.**
- **Waste paint disposal to the garbage.**
- **Waste solvent was diluted and discharged into the sewer.**

August 21, 1981 DHS Inspection - Inspector observed an area near the rail spur where unknown wastes had been discharged to the ground surface. The inspector further commented that wastewater from a filtration system may contain chemicals of concern and the waste water was being discharged to the storm drain. The inspection notes and map are attached.

September 7, 1982 Alameda-Santa Clara Counties Hazardous Waste Project Inspection - Edgar Howell conducted the inspection and did not observe any of the discolored or stained soils, the oil discharge pipe, nor lined ponds, but he did observe some lime on the ground surface and a concrete lined basin used to store waste lime. Mr. Howell requested that an abatement plan be prepared which would include the installation of a berm to prevent future discharges of the lime. Some subsequent maps suggested that the berm was installed, however no abatement plan was available for review on the OFD files.

1987 OFD Complaint - Filed by a Marine Terminal Gate watchman that pungent odors emanated from the Liquid Carbonic site and made him ill. No follow-up information was contained in the OFD files.

December 30, 1988 Hazardous Materials Division of Alameda County (ACHCSA) Inspection - Liquid Carbonic was cited for numerous violations of the Cal. Code of Regulations. In addition to housekeeping and record keeping violations, noteworthy violations included inadequate secondary containment systems for TCE and "monkey dust" (an acetylene purifying material). This notice of violation apparently caused Liquid Carbonic to attempt to improve management and record keeping practices. The District Attorney (DA) stepped in to collect civil penalties, and there is mention of a proposed settlement offer from the DA, however there is no indication as to whether the offer was accepted, or how the matter was resolved. A copy of the ACHCSA Notice of Violation letter and two maps circa 1989-1991 are attached.

1989-1990 Tank Removal Activities and 1993 Well Installation- Four underground storage tanks were removed from the site in 1989, and an Unauthorized Release Form was filed. The ACHCSA formally requested Liquid Carbonic to investigate groundwater quality issues, and in 1993 Clayton Environmental

MEMORANDUM

Page 3 – 901 Embarcadero OFD File Review

was retained to install three monitoring wells. Based on their review of the data, Clayton commented that because of elevated TDS readings additional sampling should not be required. A map showing the location of the wells is attached.

1993 Stormwater Pollution Prevention Plan - Plan was prepared by Clayton. Maps presented with the plan indicate that there were/are 6 drain inlets in the yard area, all of which drain to the bay. A plan attached to this memo shows the location of erosion noted around some of the storm drain inlets.

April 6, 1994 Port Stormwater Inspection - Lime residue was observed and Liquid Carbonic was notified to cleanup the lime discharge. The site manager subsequently indicated that the lime spill was cleaned up, yet no documentation was contained in the files to suggest that confirmation sampling was conducted. A copy of the Certificate of Correction and site map filed by Liquid Carbonic are attached.

March 1995 ACHCSA File Review - In response to a request by Liquid Carbonic, the ACHCSA reviewed the tank closure reports and determined that groundwater monitoring needed to be conducted.

August 31, 1995 OFD Inspection - Inspector noted that there was evidence of spillage/releases, and poor housekeeping practices being conducted by Liquid Carbonic. Poor housekeeping practices included the improper storage of numerous gas cylinders throughout the site. Some of the cylinders were not properly identified either. No follow-up information was contained in the OFD files regarding these issues. A copy of the inspector's notes is attached.

November 1995 Groundwater Monitoring Report - Clayton submitted the results of two groundwater monitoring event, and petitioned the ACHCSA for no further action based solely on the presence of elevated TDS measurements. The ACHCSA responded that additional monitoring needed to be conducted.

September 23, 1996 OFD Inspection - Report indicated that the name of the facility changed to Praxair in April 1996 and that the acetylene plant closed down operations in May 1996. Two maps of the facility circa 1996 are attached.

1996-1997 Petition to Close Tank Case File - Golden Gate Tank Removal conducted two quarters of groundwater monitoring in 1996, and re-petitioned the ACHCSA for site closure. The ACHCSA approved the request, which was based on data, which suggested a groundwater flow direction away from the estuary. No tidal influence study was conducted and one of the monitoring points (MW-3) may not have been an appropriate sampling point given its close proximity to inground sumps and basins. Nonetheless, no further action status was granted and the wells were decommissioned in early 1997.

July 1999 Release - As discussed in the May 2000 memorandum another release occurred at the site in July 1999, while Alliance Gas Products was onsite as a subtenant to Praxair. In addition to the citation for the release to the estuary, Alliance Gas was cited for improper storage of miscellaneous containers and cylinders. Photographs taken of the site suggest that hundreds of cylinders in various stages of deterioration were onsite. We are informed that more than 4,000 cylinders were found to be located onsite at the time of the photo, and most if not all of the cylinders used for storing specialty gases are lined with asbestos.

MEMORANDUM

Page 4 – 901 Embarcadero OFD File Review

1999 District Attorney Response to July 1999 Release - As indicated in our May 2000 Memorandum, the District Attorney (DA) filed a criminal complaint against Alliance Gas in January 2000, which was settled as a civil case. Alliance Gas as part of the settlement stipulated to various regulatory requirements. In general, we understand that Alliance Gas was required, at a minimum, to (1) repay various governmental agencies which conducted emergency response activities, (2) conduct proper retrofitting of the lime waste handling system to prevent future releases, (3) prepare and submit appropriate Spill Prevention/Control and Emergency Response Plans to various city agencies, (4) identify and clearly mark all storm drain inlets to indicate that they drain to the bay and (5) complete appropriate site characterization.

We have reviewed a copy of a scope of work, prepared by AEI in August 2000 on behalf of Alliance Gas, to conduct confirmation sampling of the lime release area. A copy of the scope of work is attached. The scope of work did not contain a sample location map.

January 2000 Port Stormwater Inspection – As reported in our May 1999 Memo, the Port conducted an inspection of the site in January and requested analysis of observed sand blast grit in one of the buildings, and documentation of remedial activities conducted as a result of the July 1999 release. Apparently, it is and has been a common practice since the facility has been in operation, to remove paint from the outside of the gas cylinders using sand blasting techniques. The sand blast debris is then disposed of into the garbage. Reportedly, the grit was found to contain elevated levels of lead rendering the material hazardous waste.

Conclusions

Based on the files reviewed to date and the documents summarized in this and our previous May 2000 memorandum we conclude that the 901 Embarcadero site has experienced several documented releases of chemicals and waste products, and the areas of release have not been characterized. Documents also suggest that 1) past practices at the site have involved at a minimum the onsite disposal of lime wastes, oil, and lead-laden sand blast grit, 2) a variety of other products including acetone, TCE and paints were used on site and some amounts of these materials appear to have been disposed of in the storm drain and/or sanitary sewer systems, and 3) groundwater flow direction and contaminant migration pathways are not well understood. As a result, the potential exists that releases may have impacted soil and groundwater, which are hydraulically connected to the estuary.

The AEI scope of work, in our opinion, will not address the potential risk that soil and groundwater at the site may have been impacted by chemical releases, and should not be construed to be a "Site Investigation or Site Characterization Study". In our opinion, the initial phase of a site investigation study should include at a minimum the following:

- ① A review of historic aerial photographs to locate the former onsite waste ponds.
- A chronological review of the historic use of chemicals at the site to determine areas of suspected or probable releases or onsite disposal.
- ① A soil and groundwater sampling and analysis program designed to preliminarily evaluate the areas of probable release and onsite disposal. The analysis program should screen materials for all

MEMORANDUM

Page 5 – 901 Embarcadero OFD File Review

potential chemicals of concern including but not limited to volatile and semi-volatile organic compounds, asbestos, petroleum hydrocarbons, metals, "monkey dust", and lime.

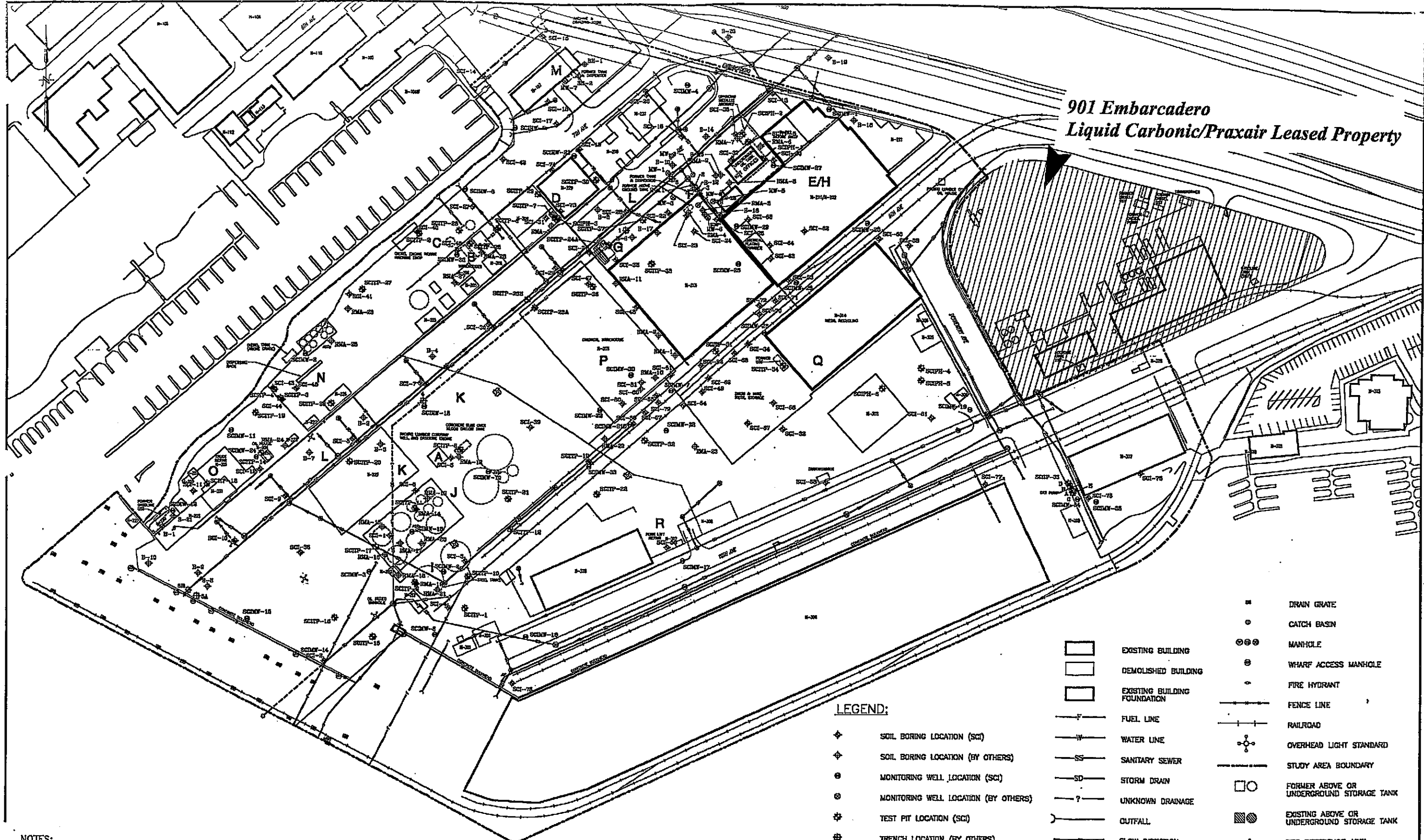
If you have any questions regarding our review and comments, please call.



Jeremiah Alexander, PE, REA
Registered Environmental Assessor No. 3130
Civil Engineer No. 40469

Attachments: August 21, 1981 DHS Inspection Notes and Map
1989 ACHCSA Notice of Violation Letter and Maps Circa 1989-1991
Various Circa 1993 and 1996 Maps
1994 Certificate of Correction and Site Map
August 31, 1995 OFD Inspection Notes
August 2000 AEI Scope of Work

901 Embarcadero
Liquid Carbonic/Praxair Leased Property

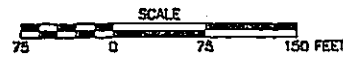


LEGEND:

- ◆ SOIL BORING LOCATION (SCI)
- ◇ SOIL BORING LOCATION (BY OTHERS)
- ⊙ MONITORING WELL LOCATION (SCI)
- ⊕ MONITORING WELL LOCATION (BY OTHERS)
- ⊛ TEST PIT LOCATION (SCI)
- ⊞ TRENCH LOCATION (BY OTHERS)
- ▭ EXISTING BUILDING
- ▭ DEMOLISHED BUILDING
- ▭ EXISTING BUILDING FOUNDATION
- F FUEL LINE
- W WATER LINE
- SS SANITARY SEWER
- SD STORM DRAIN
- ? UNKNOWN DRAINAGE
- OUTFALL
- FLOW DIRECTION
- DRAIN GRATE
- CATCH BASIN
- ⊙ MANHOLE
- ⊕ WHARF ACCESS MANHOLE
- ⊛ FIRE HYDRANT
- FENCE LINE
- RAILROAD
- ⊕ OVERHEAD LIGHT STANDARD
- STUDY AREA BOUNDARY
- ○ FORMER ABOVE OR UNDERGROUND STORAGE TANK
- ▨ EXISTING ABOVE OR UNDERGROUND STORAGE TANK
- A SITE REFERENCE AREA

NOTES:
1. UTILITY SURVEY WAS PREPARED BY AN WEST 5-22-98

REFERENCE DRAWINGS
BASE MAP BY PORT OF OAKLAND DATED 2-22-98



DESIGNED BY
DRAWN BY ROP/DJP
CHECKED BY JLR
APPROVED BY JLR
DATE 2-23-98



Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers
171 12th Street - Suite 200
Oakland, California 94607
(510) 268-7880
FAX (510) 268-7970

NINTH AVENUE TERMINAL
PORT OF OAKLAND

SITE PLAN

SCALE AS SHOWN
PROJECT NO. 133.009
SHEET NO. 2 OF

Liquid Carbonic
207 Embury
Raffard

UNDERGROUND INJECTION CONTROL (UIC) PROGRAM-

SITE INSPECTION FORM

ASP
inspection
no part A

Form B

(1) Is the company presently under regulations from the state, county or city?

(2) Is the company presently subject to:

- Waste Discharge Requirements? Yes No
- NPDES Permit? Yes No

(3) Briefly summarize any past local or State agency inspection or regulatory enforcement action(s) against the company that would relate to waste disposal (attach additional sheets, if necessary).

None, since 5/3, 1981 when Bob Powers
began working there. (PH. Mgr.)

(4) Is there information relating to waste disposal available through other local, State or Federal agencies/authorities? If yes, please identify.

- note: Waste hauler of sludge^{lime}
Pelle Transportation in Tracy
- City Health Department
 - City Public Works
 - Sewerage Agency
 - County Health Department
 - County Public Works Dept.
 - County Planning Dept.
 - State Dept. of Health Services, Hazardous Materials Section
 - manifests
 - State Facility Application
 - EPA RCRA Permit Application
 - generator treatment
 - disposer storage
 - transporter injection well
- None

(5) Briefly identify any possible water quality problems unrelated to waste disposal.

1) Blowdown H₂O from filter -> stormdrain

(6) Are spill plans adequate?

No

(7) Is further investigation necessary
If yes, please explain.

Yes



No

Liquid Carbonic has a filter mechanism for this gas production process, water Blowdown from this filter goes to the storm drain. It's unknown when the Blowdown water contains.

Dumping of unknown chem. or wastes has taken place behind Gas production Area.

(8) Inspection performed by MDW, date 8-12-81

(9) Information furnished by Bob Powers, title Plt. Mgr.
_____, phone _____

The sludge H_2O sump has no overflow device, therefore it's been known to overflow in the past \rightarrow soil.

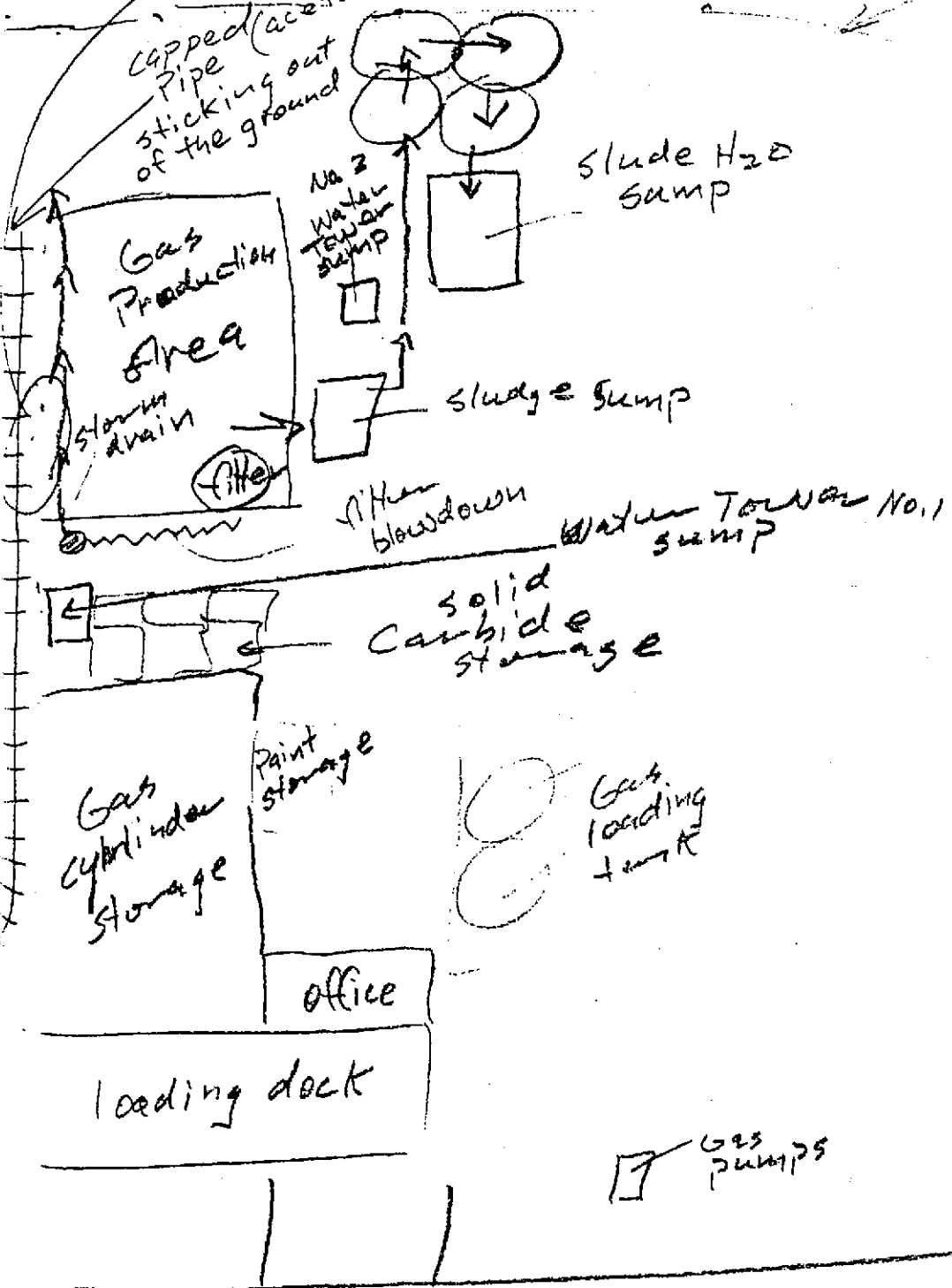
I've informed Bob Powers that a staff inspector will be by to recommend the proper correction for the latter problems.

~~Note: I saw a pipe sticking out of ground, which was capped, I was told it's an underground acetone tank, I asked for blueprints to verify that, but they weren't available
It's a tank MDW 8-17-81~~

dump of some waste

Capped (acetone tank)
Pipe sticking out of the ground

Fence
- borders property



901 Embarcadero
Liquid Carbonic

freeway 17

ALAMEDA COUNTY
HEALTH CARE SERVICES

DAVID J. KEARS, AGENCY
~~CAROL K. LESTER~~, Agency Director



Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

Certified Mailer # P 833 981 165

Telephone Number: (415) 271-4320

January 24, 1989

Mr. William Stuhlreyer
Plant Manager
Liquid Carbonic Corp.
901 Embarcadero
Oakland, CA 94606

NOTICE OF VIOLATION

Dear Mr. Stuhlreyer:

On December 30, 1988 the Hazardous Materials Division inspected the premises shown above. The following violations of the California Code of Regulations were noted at this facility.

Title 22:

1. Sec. 66471 - The nature of the hazardous wastes used at the facility are not identified.
2. Sec. 66508 - Hazardous wastes in the aboveground storage tanks have been kept on the facility for over 90 days, and no beginning accumulation date was identified.
3. Sec. 66508 - Nonstationary waste containers at the facility are not labeled for composition/physical state, type of hazards posed, and name/address of waste generator.
4. Sec. 66493 - Biennial reports for off-site hazardous waste shipment from the facility have not been submitted on March 1 of every even-numbered year. Reports should include EPA ID# and name/address of generator; EPA ID# and identification of all facilities to which waste was shipped; name and EPA ID# of each transporter used; a description of each waste shipped off-site (including quantity); and the signed certification by the generator.

Mr. William Stuhlreyer
January 24, 1989
Page 2 of 4

5. Sec. 66484 - The facility could not produce copies of any exception reports, which are required to be sent to the California Dept. of Health Services when there is no confirmation within 45 days of receipt of waste by the disposer.
6. Sec. 67121 - The facility does not have the proper communications, fire extinguishing, and water supply equipment to satisfy the requirements of this section.
7. Sec. 67124 - The facility has insufficient aisle space in monkey dust and TCE storage areas to allow unobstructed movement of personnel and equipment in the event of fire or spill.
8. Sec. 67126 - The facility has made no attempt to familiarize local authorities with the types, properties, and layout of wastes it generates.
9. Sec. 67120 - The facility is not maintained and operated to minimize the possibility of fire, explosion, or hazardous waste release.
10. Sec. 67105 - The facility has no records of employee training that is designed to ensure familiarity with proper handling and emergency procedures for waste materials.
11. Sec. 67140 - A contingency plan for the facility has not been prepared.
12. Sec. 67141 - There is no listing of persons qualified to act as emergency coordinators in the event of a waste material release.
13. Sec. 67142 - Copies of the contingency plan should be maintained at the facility and submitted to the police and fire department and to local hospitals and emergency response teams.
14. Sec. 67144 - The facility does not have an employee on the premises or on call who is responsible for coordinating all emergency response measures.
15. Sec. 67244 - The facility has failed to carry out weekly inspections of waste storage areas and containers.
16. Sec. 67245 - The waste storage areas for TCE and monkey dust do not have adequate secondary storage systems.

Mr. William Stuhlreyer
January 24, 1989
Page 3 of 4

17. Sec. 67261 - Calcium carbide storage at the facility is inadequate to prevent its accidental reaction with water.

Title 19:

18. Sec. 25504a - The facility business plan requires annual inventory information on all chemicals handled in quantities greater than or equal to 500 pounds, 55 gallons, or 200 cubic feet. This list has not been provided.

Title 23:

19. Sec. 25292 - Underground storage tanks on the facility have no provisions for monitoring to detect unauthorized releases of hazardous materials.
20. Sec. 2712 - The facility does not have records dating back three years regarding underground diesel tank monitoring and results, including inventory reconciliation.
21. Sec. 2670 - The abandoned underground tank must be closed in accordance with the provisions of this section, including tank removal, soil sampling, and remediation (if required).
22. Sec. 2643 - The diesel fuel underground tank has had no precision leak test capable of detecting the release of product at a rate of 0.05 gallons per hour.
23. Sec. 2644 - The diesel tank also has no records of a daily inventory reconciliation, which must be done according to the requirements of this section.

In accordance with Sec. 66238, a Plan of Correction must be submitted to this office within 30 days of receipt of this letter. The plan should specify the actions to be taken to address the above violations and the expected dates of completion. A closure plan (blank enclosed) must also be submitted within 30 days for the abandoned underground tank.

Your attention is directed to Sections 25184, 25189, and 25191 of the California Health and Safety Code, which provide for civil and criminal penalties of up to \$25,000 per day for each violation of these regulations.

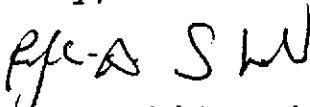
Mr. William Stuhldreger
January 24, 1989
Page 4 of 4

In addition, in accordance with Sec. 25294 of the Health and Safety Code, any owner or operator of an underground tank who operates or improperly closes the tank without Alameda County's approval is liable for fines of up to \$50,000 per day on each count.

Additionally, Alameda County Ordinance, Section 3-140.4 et. seq. requires a deposit to be submitted for checking underground tank closure plans and inspection activities. The deposit required is \$333. Costs are charged against the deposit at an hourly rate. If the deposit is exhausted before final approval or if the balance is not sufficient to cover anticipated remaining costs, an additional deposit is required.

If you have any questions concerning this matter, please contact Lowell Miller at 271-4320.

Sincerely,



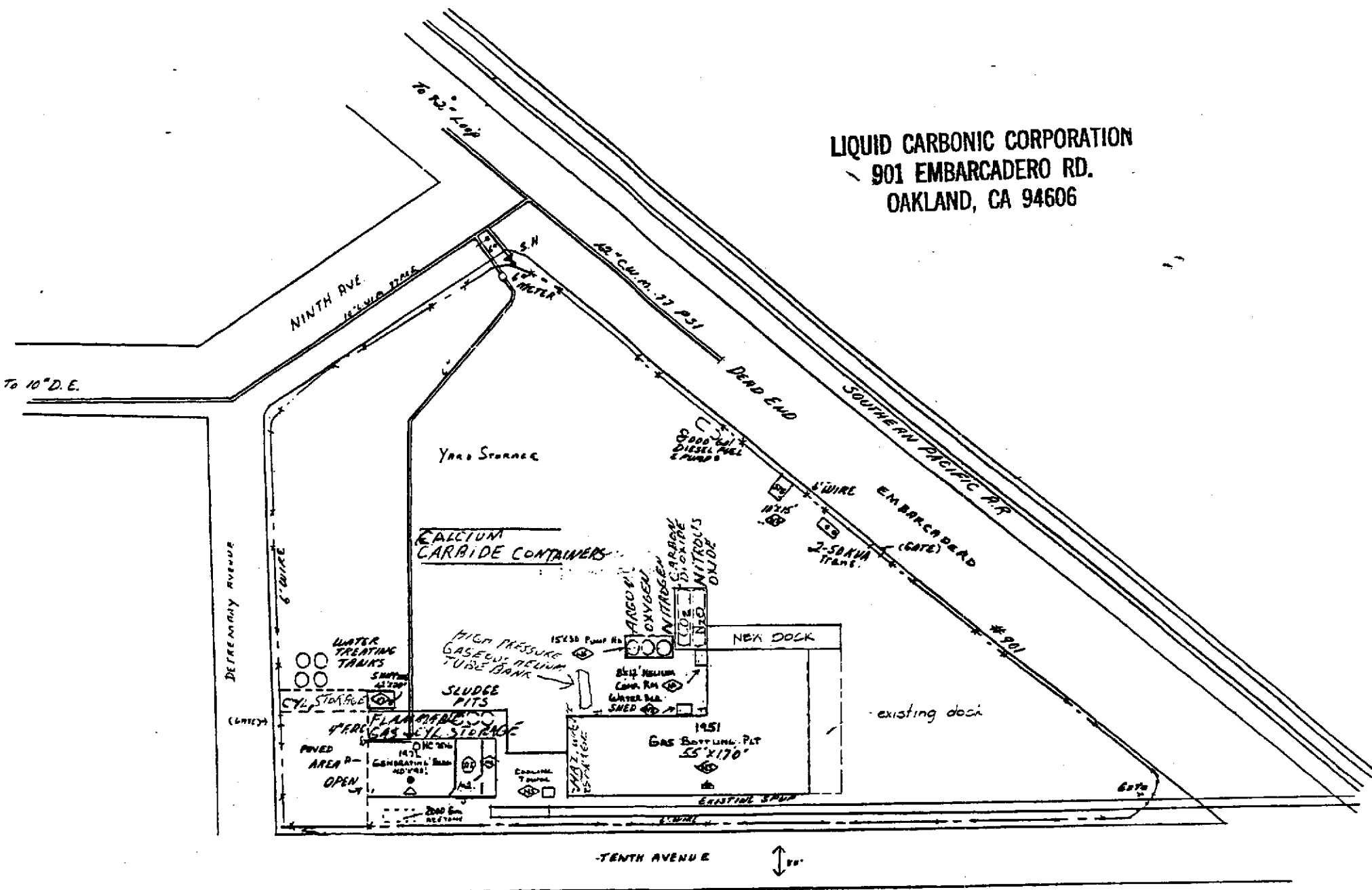
Rafat A. Shahid, Chief
Hazardous Materials Division

RAS:LM:gw

cc: Dwight Hoenig, DOHS
Gil Jensen, Alameda County District Attorney, Consumer and
Environmental Protection Division
Lisa McCann, RWQCB

Enclosure(s)

LIQUID CARBONIC CORPORATION
 901 EMBARCADERO RD.
 OAKLAND, CA 94606



YARD AREA

LIQUID CARBONIC CORP.
301 EMBARCADERO RD
OAKLAND, CA. 94606

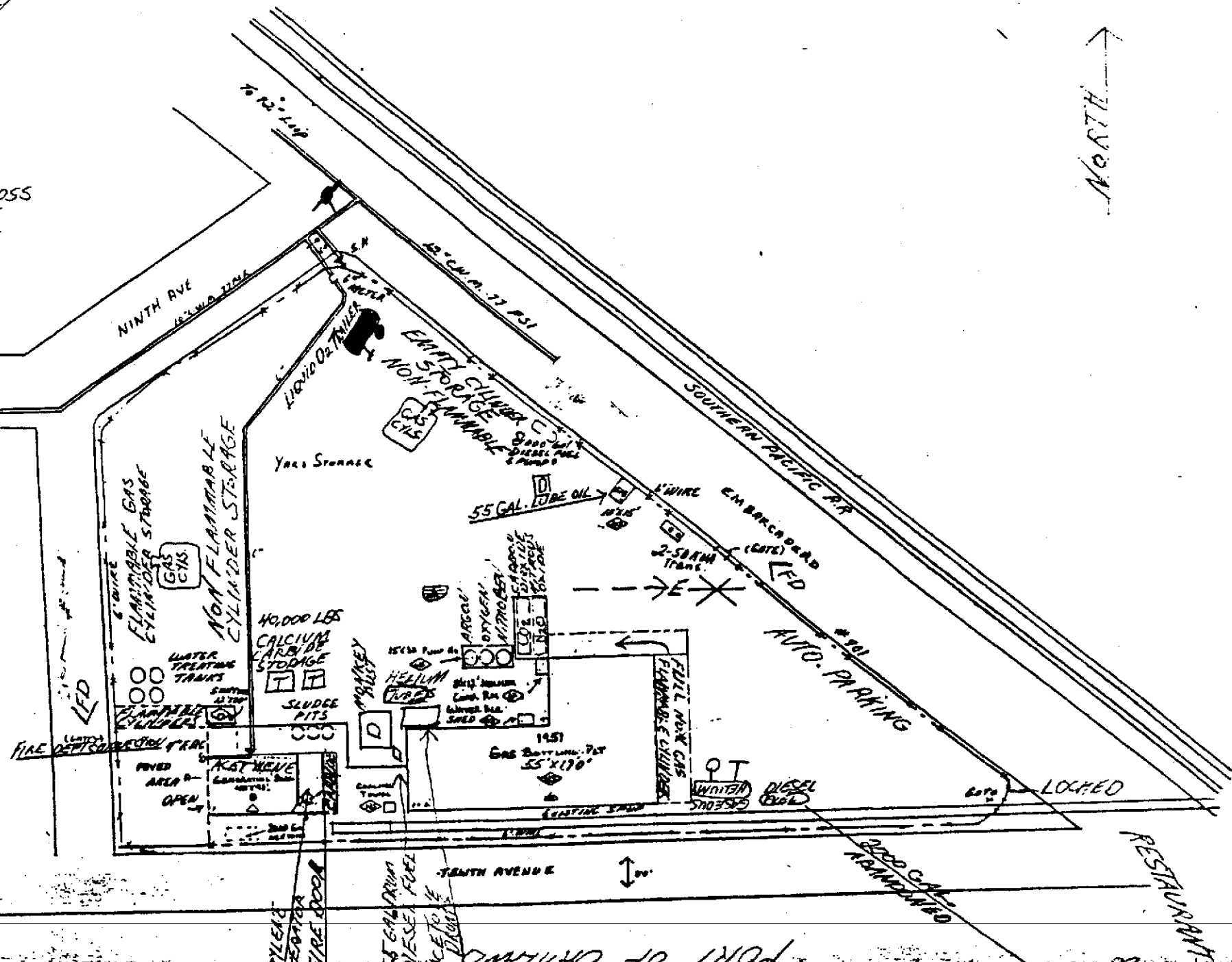
6-11-89

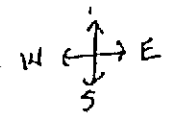
NORTH ↑

MIDLAND ROSS
SUPERSTRUT

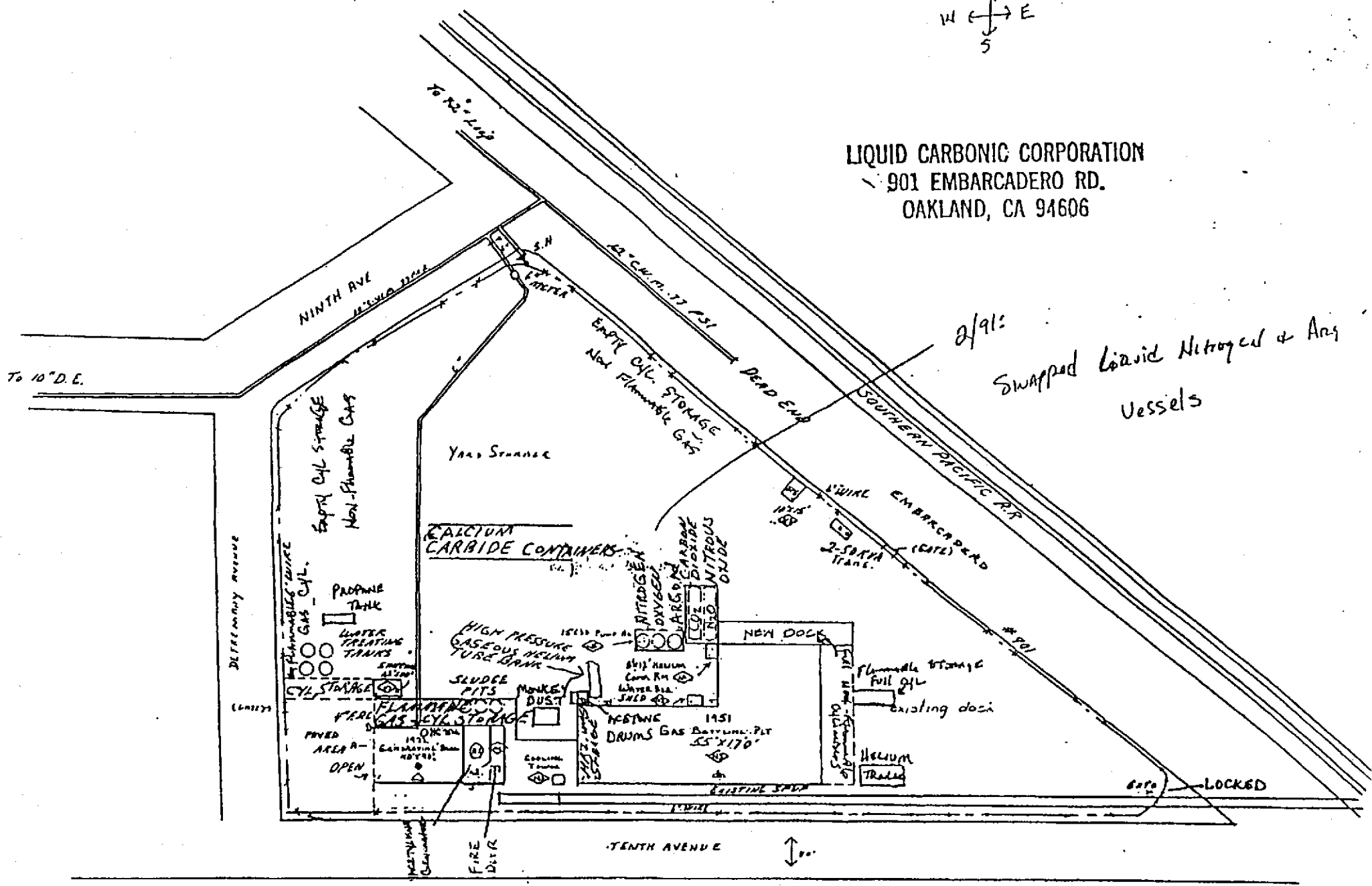
To N.D.E.

EDEN NATIONAL STEEL CORP.



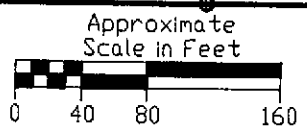
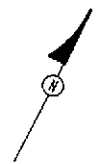
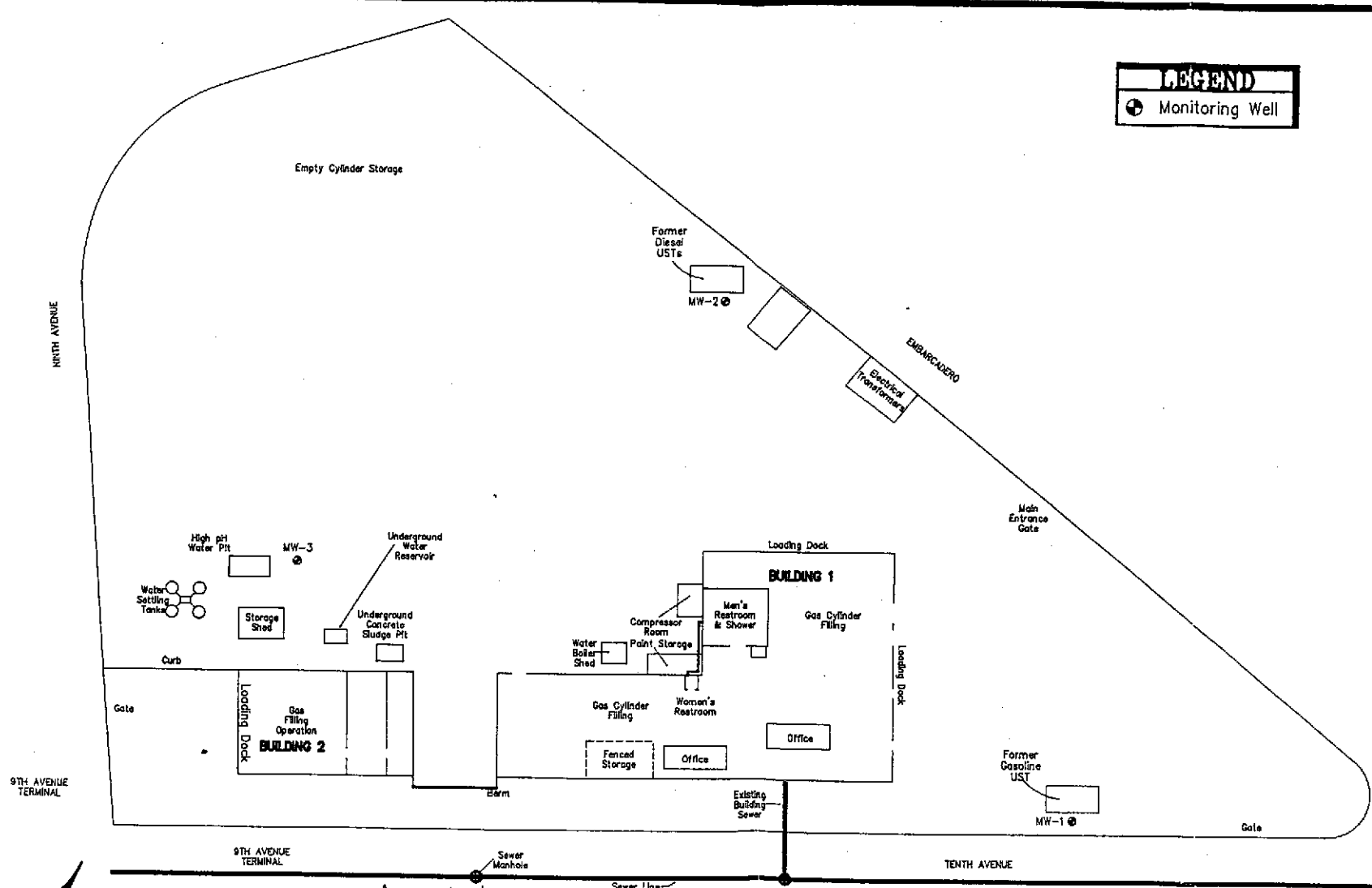


LIQUID CARBONIC CORPORATION
901 EMBARCADERO RD.
OAKLAND, CA 94606



FEB 15, 95

LEGEND
 ⊕ Monitoring Well

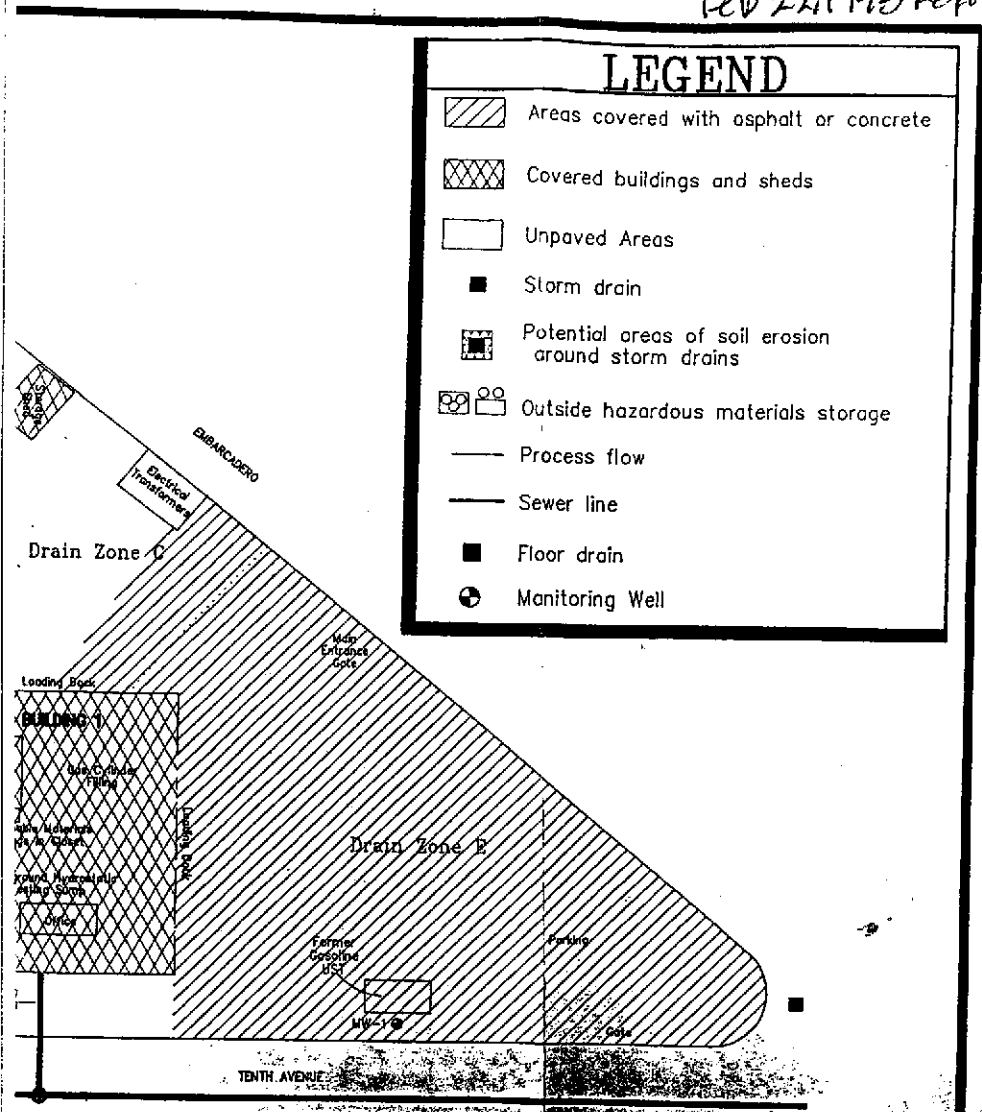
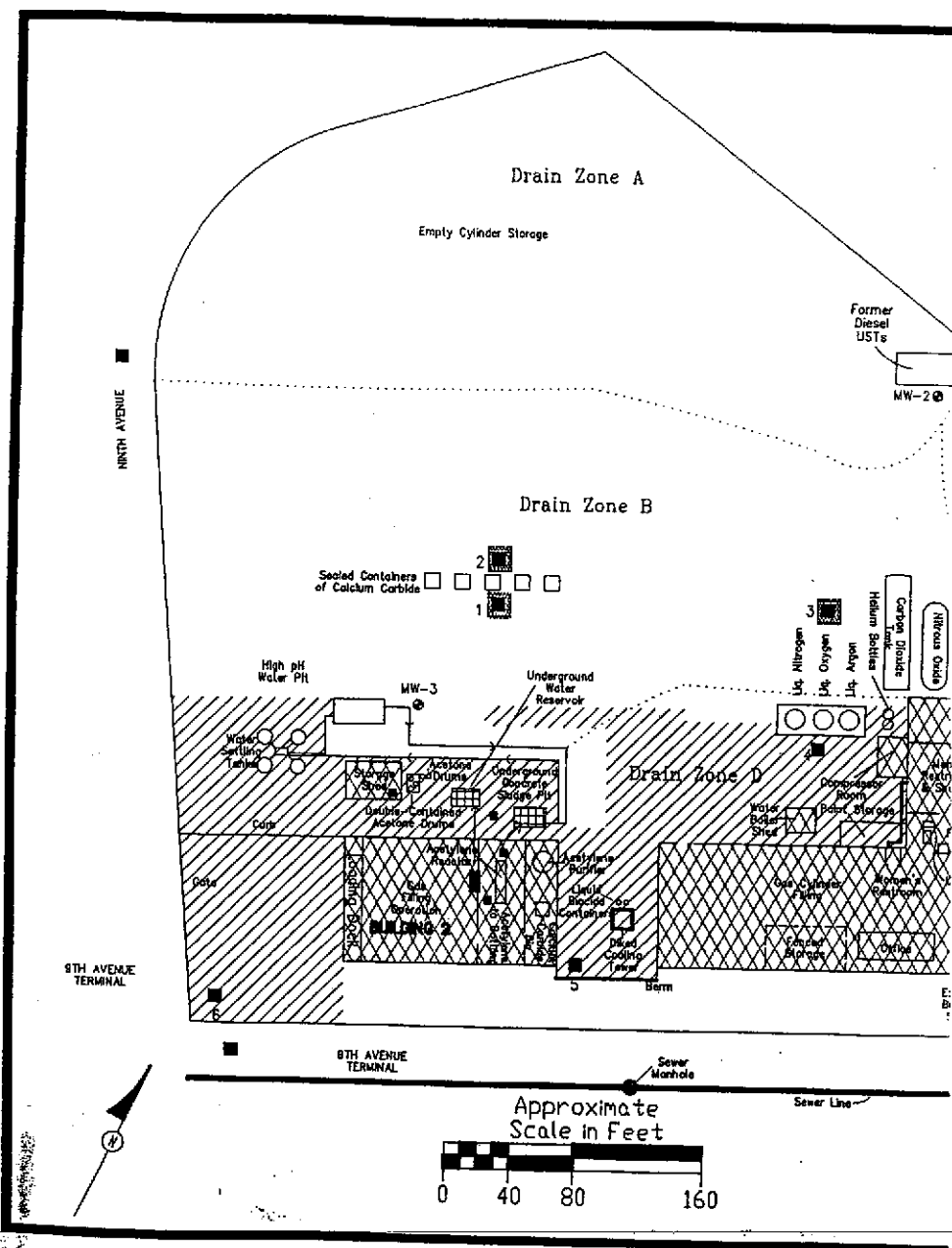


Site Schematic
 LIQUID CARBONIC
 901 Embarcadero
 Oakland, California
 Clayton Project No. 62676.00

Figure
 2
 62676-00-16

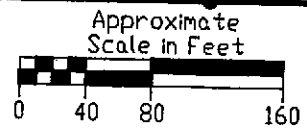
Clayton
 ENVIRONMENTAL
 CONSULTANTS

Soil/
From Clayton Gwm,
Feb 22, 1993 Report...



LEGEND

- Areas covered with asphalt or concrete
- Covered buildings and sheds
- Unpaved Areas
- Storm drain
- Potential areas of soil erosion around storm drains
- Outside hazardous materials storage
- Process flow
- Sewer line
- Floor drain
- Monitoring Well



Site Schematic LIQUID CARBONIC 901 Embarcadero Oakland, California	Figure <h1 style="font-size: 2em;">2</h1>	Clayton ENVIRONMENTAL CONSULTANTS
Clayton Project No. 41899.05		41899-05-16

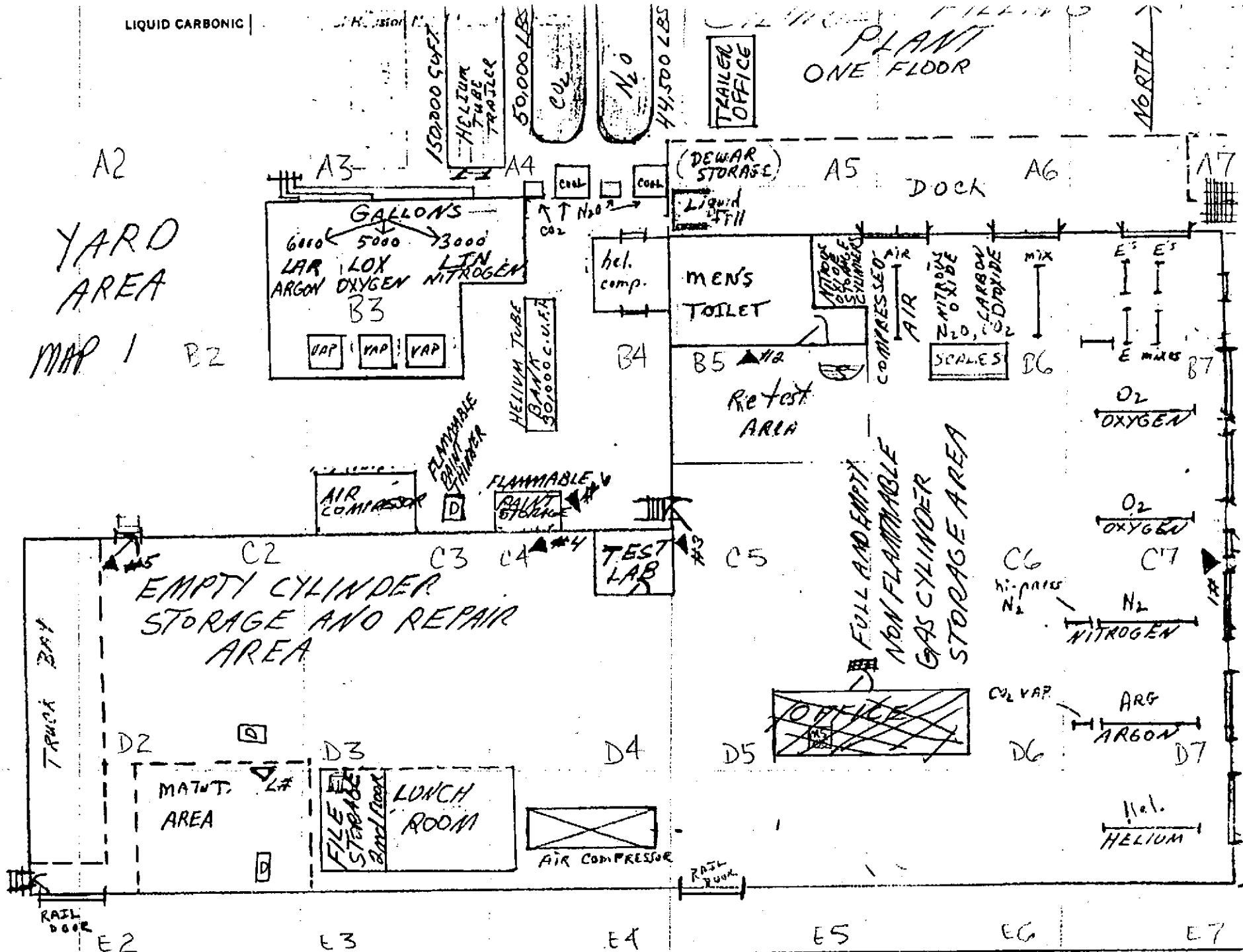
LIQUID CARBONIC

PLANT
ONE FLOOR

NORTH

YARD
AREA

MAP 1

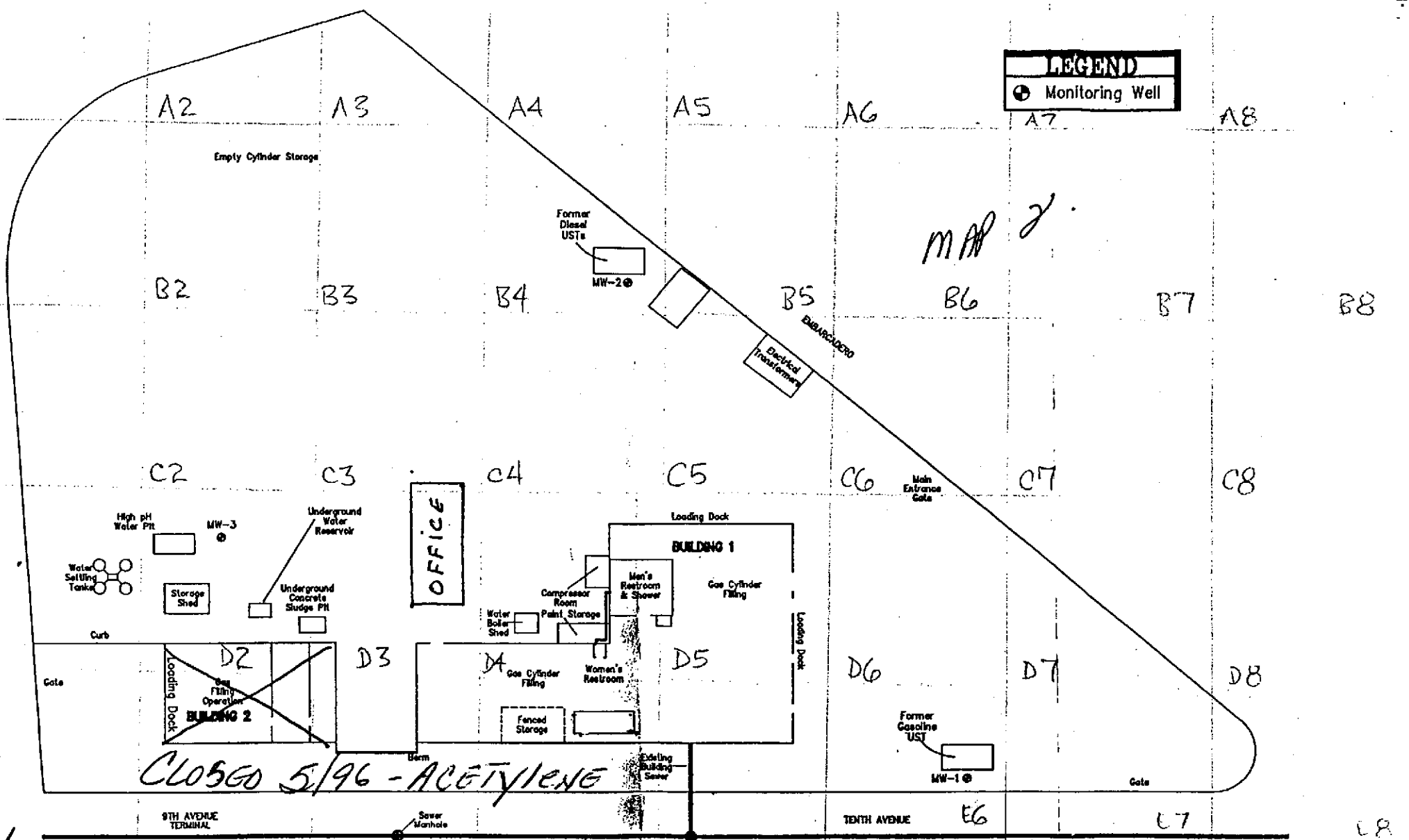


PART NAME: LIQUID CARBONIC CORP.
 901 EMBARCADERO RD
 PAKI ANDIA GUAL

EQUIPMENT NO#

SK NO.# / SQUARE: 5' 7 1/2

DATE



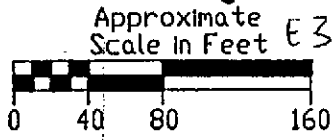
LEGEND
 ● Monitoring Well

CLOSED 5/96 - ACETYLENE

9TH AVENUE
TERMINAL

Sewer
Manhole

TENTH AVENUE



Site Schematic
 LIQUID CARBONIC
 901 Embarcadero
 Oakland, California

Clayton Project No. 62676.00

Figure

2

Clayton
 ENVIRONMENTAL
 CONSULTANTS

62676-00-16



City of Oakland
Urban Runoff
Clean Water Program

ALCO
HAZMAT

94 APR 11 PH 1:10

c/o Alameda County
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Rm. 200
Oakland CA 94621

ATTN BRITT JOHNSON
271-4323

Certificate of Correction

RE: Storm Water Inspection LIQUID CARBONIL
901 EMPALMADO RD OAKLAND CA 94606
(Business Address)

I certify that the problems outlined on the Standard Industrial and Commercial Business Inspection Report dated 4/6/94 for the business referenced above have been corrected and/or appropriate Best Management Practices BMPs implemented as follows (Describe how corrections were completed or implemented. Attach additional sheets as necessary.):

Reference # 10 - Some Residual outside Acetylene Building WAS cleaned up on 4-7-94!

Reference # 12 - I'm informed by our Technical people that there's no problem with scrap cylinders in yard.

- Requested photograph(s) depicting correction(s) are attached.
- Other requested supporting documents are attached (describe):

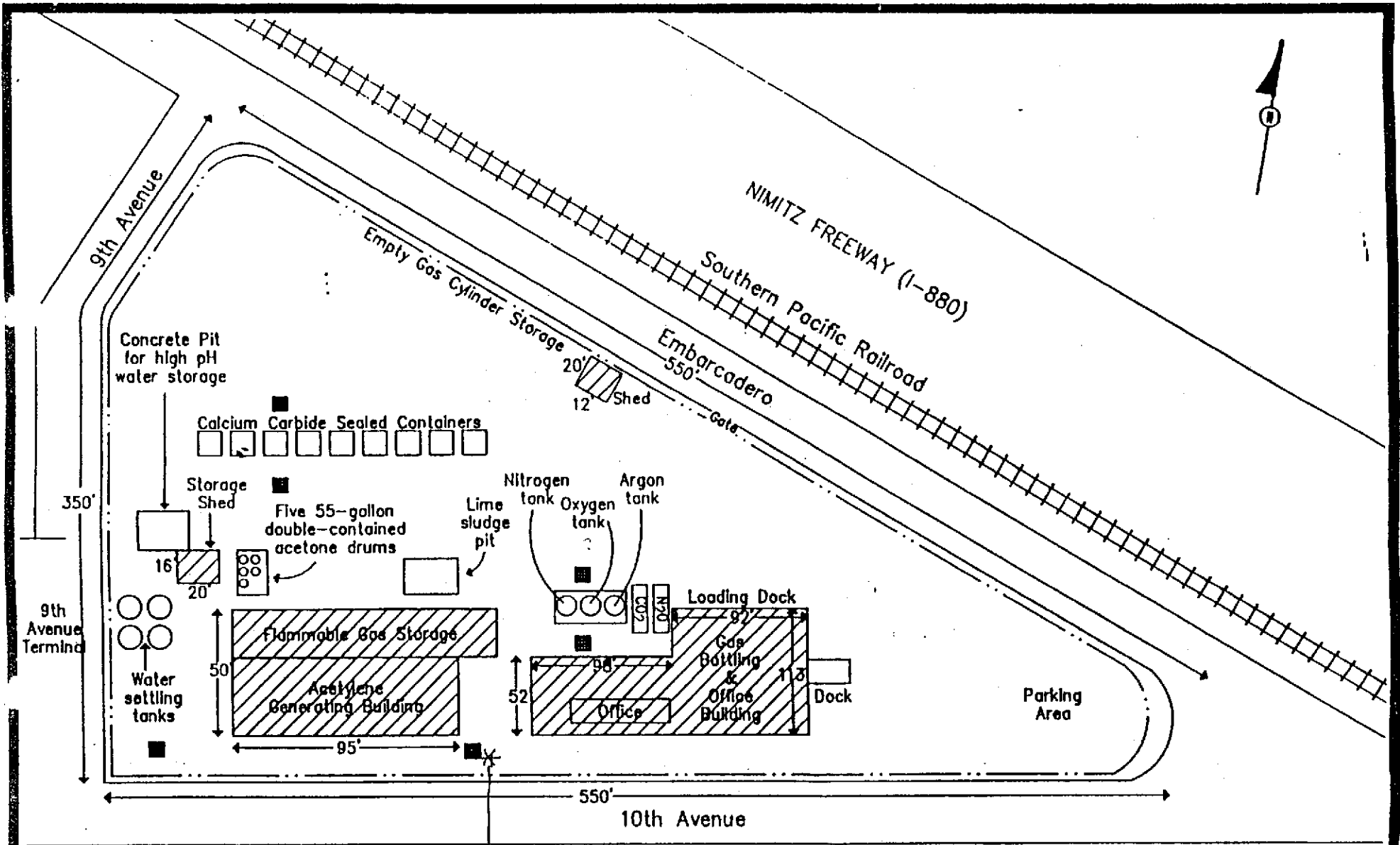
No supporting documents were requested.

I am aware that it is a violation of Chapter 20 of the Oakland Municipal Code, as well as a violation of federal and state regulations (Federal Clean Water Act, Porter-Cologne Act, etc.) to fail to correct or terminate any discharge or potential discharge to the storm water system and/or to knowingly conceal or submit false information regarding such violation. I am also aware that there are significant penalties for such violations including the possibilities of fines and criminal and civil penalties.

Business Operator's Signature: Don Cameron

Date: 4-7-94

Business Operator's Printed Name: Don Cameron



LIME DEPOSIT IN AREA OF STORM DRAIN

LEGEND

■ Storm Drains

BULLOMAS

Site Map
 LIQUID CARBONIC SPECIALTY GAS CORPORATION
 901 Embarcadero
 Oakland, California SITE# 220

Figure

2

Clayton
 ENVIRONMENTAL
 CONSULTANTS

OAKLAND HAZARDOUS MATERIALS INSPECTION REPORT

Facility Name: LIQUID CARBONIC
 Address: 901 EMBARCADERO
 Phone: (415) 451-4100
 Contact: _____
 ID No.: 220 SIC: 2813

Date: 31 AUG 95
 Inspector: LEON GRIFFIN
 Inspection Time: _____
 Administrative Time _____

Complaint/Investigation Request
 Complainant Name: N/A
 Location of Complaint: _____
 Complaint: _____

Phone: _____
 Findings: _____

Facility Status: Please check (x) the appropriate boxes relating to chemical storage.
 STORED (original containers () smaller () larger () safety cans () existing underground () other _____

MATERIALS () flammable/combustible liquid () chlorinated solvents () water soluble oil () non-soluble oil () waste oil
 oxy/nitrous compressed gas () flammable compressed gas () chlorinated solvents () toxic/poison () corrosive (oxidizer
 flammable cryogen liquid () non-flammable cryogen liquid () oxygen-cryogen liquid () other _____

SECONDARY CONTAINMENT () floor/shelf(surface tension) (raised/lipped(berm/tray) () lowered/dike(sump/grate)
 () double walled tank () liner underground () other _____

MONITORING (visual () mechanical () dip stock () vapor monitor () other _____

EMERGENCY EQUIPMENT (fire extinguisher(s) () absorbents (collection containers () response team () gloves
 () disposal suits () posted emergency procedures () other _____

DISPOSAL How are the spent materials and/or wastes handled and disposed of? () no waste () empty containers into trash
 () discharge to ground () discharge to sewer () discharge to pretreatment-sewer () vaporise/vent to air (ship to haz-mat facility
 () recycle () other _____

Health & Safety Code Chapter 6.95 Violations:

Notes	Corrected	Violation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Needs H.M.S. Permit
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Business Plan/HMMP Inadequacies, check inadequate areas
		<input type="checkbox"/> Facility Information <input type="checkbox"/> Emergency Response Plan <input type="checkbox"/> Record Keeping
		<input type="checkbox"/> Inventory <input type="checkbox"/> Employee Training Plan <input type="checkbox"/> MSDS
		<input type="checkbox"/> Maps/Diagrams <input type="checkbox"/> Emergency Plan <input type="checkbox"/> Other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Leaky/damaged containers
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Secondary containment needed
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Evidence of spillage/release
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Incompatible materials need to be separated
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Unlabeled containers
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Unlabeled storage area
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Unsecured area
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Container/vessel needs earthquake bracing/securing
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Storage too close to property line
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Storage too high
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Empty containers need to be labeled/segregated <u>N/A</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Excessive storage of hazardous materials A special room or enclosure will be required. Contact Fire Prevention at 510 238-3851 for permit requirements.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Inadequate aisle width
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Combustible materials stored too close to hazardous materials
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Inadequate ventilation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Inadequate/faulty secondary containment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Containers left open - should be closed
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Other <u>SPRINKLER SYSTEM (CORRECTED)</u>

HAZARDOUS MATERIALS INSPECTION REPORT

STID#: 220	FACILITY NAME: LIQUID CARBONIC	PG. 1	OF 2
ADDRESS: 901 EMBARCADERO RD			
1.) PERMISSION TO INSPECT GRANTED			
2.) FACILITY TYPE: HAZARDOUS GAS GENERATOR			
3.) HAZARDOUS WASTE GENERATED - LIME SLURRY SHIPPED TO HAZ-WASTE SITE			
4.) HMBP PART I + II ISSUED BOTH ARE DUE IN THIRTY (30) DAYS. -			
Violations:			
1.) SEVERAL GASES CYLINDERS NOT SECURED OR IMPROPERLY NESTED.			
2.) OUTSIDE EMPTY CYLINDER STORAGE AREA NOT IDENTIFIED.			
3.) SUPPLY PIPING FOR THE FILL STATIONS NOT PROPERLY MARKED			
FACILITY CONTACTS/ SIGNATURE: <i>Don Cameron</i>		INSPECTED BY: LEROY GRIFFIN	
PRINT NAME: Don Cameron		DATE: 6 SEPT 95	

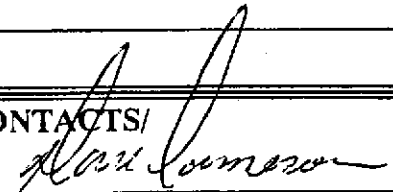
HAZARDOUS MATERIALS INSPECTION REPORT

STID#: 220	FACILITY NAME: LIQUID CARBONIC	PG. 1	OF 2
---------------	-----------------------------------	----------	---------

ADDRESS: 901 EMBARCADERO

Violations: cont.

- 4.) EMERGENCY SHUT-OFFS FOR THE MAIN GAS TANKS NOT IDENTIFIED.
- 5.) MATERIAL IN MAINTENANCE AREA IMPROPERLY STORED, AND POOR HOUSE KEEPING.
- 6.) CYLINDERS ON OUTSIDE LOADING DOCK STORED OR ~~NOT~~ NESTED TOO CLOSE TO THE EDGE OF THE LOADING DOCK.
- 7.) LIFE SAFETY SYSTEM (SPRINKLER) NOT IN SERVICE, NO RECORD OF INSPECTION: CORRECTED 6 SEPT 95, 26
- 8.) GAS CYLINDERS IN STORAGE AREAS WITHOUT CAPS.

FACILITY CONTACTS/ SIGNATURE: 	INSPECTED BY: LEROY GRIFFITH
PRINT NAME: DON CAMERON	DATE: 5 SEPT 95

June 2, 2000

**PHASE II SUBSURFACE INVESTIGATION
PROPOSAL**

At

901 Embarcadero
Oakland, California

PROPOSAL 2001-2517

Prepared for:

Mr. Russ Wortham
Alliance Gas Products
901 Embarcadero
Oakland, Ca. 94606

Prepared by:

**AEI CONSULTANTS
3210 OLD TUNNEL ROAD, SUITE B
LAFAYETTE, CA. 94549
(925) 283-6000**

1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this proposal on behalf of Mr. Russ Wortham and outlines the scope and cost for a subsurface investigation at 901 Embarcadero in Oakland, California. This work is being performed to investigate the pH of the soil in the location of a release of lime. This work has been requested by the City of Oakland.

2.0 SCOPE OF WORK AND COST ESTIMATE

AEI will prepare a workplan outline a scope of work to characterize the pH of the soil in the area of the lime release. This workplan will include sample locations and depths as well as the collection and analysis methods to be used. The workplan will be prepared under the direction of a registered professional as per the requirements of the City of Oakland.

Following approval of the workplan, AEI will collect soil samples for pH testing. Soil samples will be collected using a hand auger drilling system from five boring locations around the impacted area. Up to three soil samples will be collected from each boring up to five feet below ground surface. AEI will analyze ten soil samples for soil pH. Samples will be analyzed with a 5-day turn-around time. Additional samples will be placed on hold at the laboratory.

Following results of the analytical results, AEI will prepare a technical report describing the filed activities and results of the soil sample analysis. The report will include conclusions regarding the extent of the impacted soil, if any.

AEI Consultants will complete the stated scope of work for the total price of \$2075.00 based on the following assumptions:

- No Underground utilities encountered.
- Refusal is not encountered
- Drilling activity is on private property
- No disposal of contaminated soil cuttings
- AEI will have clear access to the site
- This contract is valid for ninety (90) days

3.0 ESTIMATED SCHEDULE

AEI Consultants will begin the project immediately upon written approval from the client. The field work will be scheduled following approval of the workplan by the City of Oakland. The final report will be issued within one week of receipt of the analytical results. The client will be notified immediately of any results



Subsurface Consultants, Inc.

PRIVILEGED AND CONFIDENTIAL MEMORANDUM

To: Doug Herman
EHSC
Port of Oakland

Date: May 18, 2000

Project Number: 133.009

From: Jeriann Alexander

Subject: 901 Embarcadero, Oakland

Subsurface Consultants, Inc. (SCI) has briefly reviewed documents and correspondence provided by the Port of Oakland related to the environmental condition of the 901 Embarcadero site. Our comments are as follows.

The subject site address encompasses a parcel, which forms the northeast corner of the Ninth Avenue Terminal property. The site is owned by the Port of Oakland and leased to industrial tenants who currently, and have for at least the last 30 years manufactured compressed gases. The tenants include Alliance Gas, Praxair and Liquid Carbonic.

The records reviewed suggest that numerous chemicals and petroleum fuels have been stored and used both inside and outside the existing building. The earliest records reviewed are from a site inspection conducted at the facility in 1990. Notes attached to the site inspection report suggest that acetylene wastes and oily waste products have been discharged on site as early as 1967. Copies of these documents are attached.

Emergency Response Plans filed with the Port by Liquid Carbonic in 1991 and 1992 indicated that several thousand gallons of liquid and gas chemicals were stored onsite. The site plan shows the location of hazardous materials storage, water treatment improvements, tanks and sludge pits. Excerpts from the plans are attached.

Four underground storage tanks were removed from areas outside the structure in 1989 and 1990, and soil and groundwater impacted by petroleum hydrocarbon constituents were reportedly remediated. In 1997 the ACHCSA and RWQCB issued a closure letter with regard to the underground storage tanks. The closure letter suggests that incorrect information such as the groundwater flow direction (shown by others to be toward the freeway and not the estuary) and the distance to the nearest surface water body (400 feet) was used to base the decision for closure.

In July 1999, there was a documented release to the estuary, of a lime-based waste stream from activities conducted by the current tenant Alliance Gas. Emergency response actions were conducted to cleanup the apparent impacts to the estuary and the spilled material onsite (copy of the Oakland Fire Haz. Mat report is attached). The Port conducted a site visit on January 26, 2000 (copy of report is attached), and still observed impacted material near a storm drain inlet, and requested the tenant to complete cleanup actions. SCI understands that also in January 2000, the District Attorney filed a criminal complaint against Alliance Gas. One of the eyewitnesses stated that this type of release from the compressed gas

MEMORANDUM

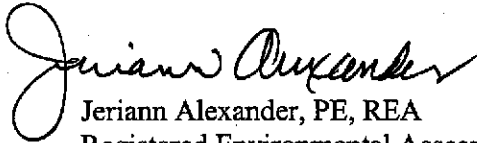
Page 2 - **PRIVILEGED AND CONFIDENTIAL**

manufacturing facility has been observed personally by her (copy of statement is attached) for at least the last eighteen years.

The records do not contain any documentation of site characterization studies, other than those related to the UST's. Further there is no indication that a report documenting the July 1999 release was ever prepared by Alliance Gas. It does not appear that confirmation sampling was ever conducted following emergency response actions. In addition recent correspondence from Alliance Gas suggests that some additional cleanup activities have been conducted without oversight of any regulatory agency (copy of March 2000 Alliance Gas letter).

SCI contacted Barney Chan on March 23, 2000 to inquire about the status of the release. Mr. Chan was unaware that the release had occurred. He also indicated that with the creation of the new Oakland CUPA program, the ACHCSA would not have jurisdiction in this matter unless the City of Oakland requested their assistance. He suggested that Mr. Leroy Griffin of the Oakland Fire Services Department be contacted. Further, Mr. Chan commented that Mr. Griffin might have authority to issue orders to conduct site assessment and investigation studies, and the preparation of reports.

If you have any questions regarding our limited review and comments, please call.



Jeriann Alexander, PE, REA
Registered Environmental Assessor No. 3130
Civil Engineer No. 40469

Attachments: Site Inspection Report and Notes from 1980
Emergency Response Plan Excerpts
Oakland Fire Department Report for July 1999 Release
Port of Oakland Site Inspection Report January 2000
July 1999 Witness Statement
March 15, 2000 Alliance Gas Letter

TO: JOHN BLASCO

6/24/81

FROM: ROBIN BREWER, JOANNE COY

SUBJECT: LIQUID CARBONIC, OAKLAND

ON 24 JUNE 80, WE INSPECTED THE LIQUID CARBONIC PLANT, AT 901 EMBARCADERO, OAKLAND, IN RESPONSE TO A RETURNED QUESTIONNAIRE. PROBLEMS NOTED WERE:

HS still
where
MDW
8-12-81

- THERE IS A DIRT AREA, APPROXIMATELY 3' X 20' WHICH IS COVERED WITH A VARIETY OF SUBSTANCES. IN AREAS THE SOIL IS STAINED BLUE, GREEN, & WHITE FROM UNKNOWN MATERIALS.

- IN THE SAME AREA THERE IS AN OIL O FLOW PIPE WHICH DISCHARGES TO A 6" PIPE SET DOWN INTO THE GROUND. THERE WAS VISIBLE OIL FLOATING, ABOUT 1 FOOT BELOW GROUND LEVEL. JERRY AVERY (PRODUCTION MANAGER) SAID THE OIL IS NOT REMOVED FROM THE PIPE (WELL?), BUT ALLOWED TO PERCOLATE THROUGH THE GROUND. WE WERE UNABLE TO DETERMINE THE DEPTH OF EITHER THE WASTE OIL PIPE, OR THE STAINED SOIL.

- THERE IS A ^{lined} WASTE WATER POND (FROM AVERY WASTE SETTLING TANKS), WHICH OVER FLOWS, A FREQUENTLY BUT REGULARLY. THIS SURROUNDING

THERE IS NO OVERFLOW COLLECTION SYSTEM THE SURROUNDING AREA IS DIRT.

- 10'-15' EAST OF POND THERE IS A SMALL DEP OF BLACK 'TARRY' SUBSTANCE (APPROXIMATELY - 2' SQUARE). DEPTH UNKNOWN.

- THE ACETYLENE WASTE IS PUMPED DIRECTLY TO A SUMP (PRIOR TO SETTLING TANKS AND POND).

MR. AVERY DID NOT KNOW SOURCE OF ^{TWO} WASTE WATER HOSES DISCHARGING TO THE SUMP.

- CO. IS CURRENTLY DISPOSING OF WASTE PAINT (FROM ~~SPRAY~~ SPRAY BOOTH) IN THE GARBAGE; WASTE SOLVENT IS DILUTED AND PUT DOWN THE SEWER.

WE ADVISED MR. AVERY THAT SOMEONE FROM ENFORCEMENT WOULD BE OUT TO INFORM HIM OF CORRECT DISPOSAL & CLEAN-UP PROCEDURES. EITHER ROBIN OR I WOULD LIKE TO GO OUT WITH YOU ON THE INSPECTION.

- MR. AVERY INFORMED US THAT 'POOL TRUCK' REMOVED THE SLUDGE FROM THE WASTE WATER POND LAST MARCH.

Site Name: Liquid Carbonic
901 Embarcadero

City: Oakland

County: Alameda

Company Contact: Mr. Jerry Avery

Staff Person Responsible: Joanne Cox and Robin Breuer

Problem: Discharge and dump waste on plant property, acetylene sludge from 1967.

History: Recent plant explosion and fire closed down this operation to rebuild. Plant containerizes gases into cylinders. Pond on property occasionally overflows onto surrounding grounds. On site dumping and oil residue on ground.

Action to Date: Site inspection by Joanne and Robin. We found a multi-colored dumping area; an oil outflow pipe discharging into ground pit; lined acetylene wastewater pond with overflow evidence; paint waste being disposed of into garbage.

John Blasco notified of our findings 6/24/80, (field inspector to go out sampling).

cc: Mark White; Dick B.

report by: Robin Breuer
8/11/80



AREA CODE 415 451-4100

LIQUID CARBONIC

INDUSTRIAL/MEDICAL CORPORATION

901 EMBARCADERO ROAD OAKLAND, CALIFORNIA 94606

EMERGENCY RESPONSE PLAN

FOR: LIQUID CARBONIC SPECIALTY GAS CORP., OAKLAND, CA. 94606

EMERGENCY COORDINATORS:

1. DENNIS E. FORGASH, PLANT MANAGER
OFFICE PHONE: (415) 451-4100
HOME PHONE: (415) 829-0435
2. JOHN S. TAYLOR, ASST. PLANT MANAGER
OFFICE PHONE: (415) 451-4100
HOME PHONE: (415) 420-1126

FACILITY DESCRIPTION: (SITE PLAN ATTACHED)

THE PLANT IS LOCATED AT 901 EMBARCADERO ROAD, OAKLAND, CA. 94606
THIS IS A
NON-RESIDENTIAL AREA.

THE PLANT IS BORDERED ON THE EAST BY, EMBARCADERO RD. AND
INTERSTATE 880, ON THE WEST BY EDEN NATIONAL STEEL, ON THE NORTH
BY 9th AVE., AND ON THE SOUTH BY THE PORT OF OAKLAND AND 10th AVE.
THERE ARE PUBLIC RESTAURANTS ALSO TO THE SOUTH.

PLANT OPERATING HOURS ARE 06:00 AM TO MIDNIGHT, MONDAY THRU FRIDAY.
ACCESS TO THE PROPERTY IS THRU GATES LOCATED ON EMBARCADERO RD. AND
9th AVE. THE PROPERTY IS FENCED ON ALL SIDES.



AREA CODE 415 451-4100

LIQUID CARBONIC

INDUSTRIAL/MEDICAL CORPORATION

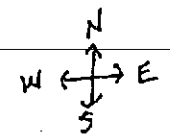
901 EMBARCADERO ROAD GARLAND, CALIFORNIA 94608

ON SITE HAZARDOUS MATERIALS

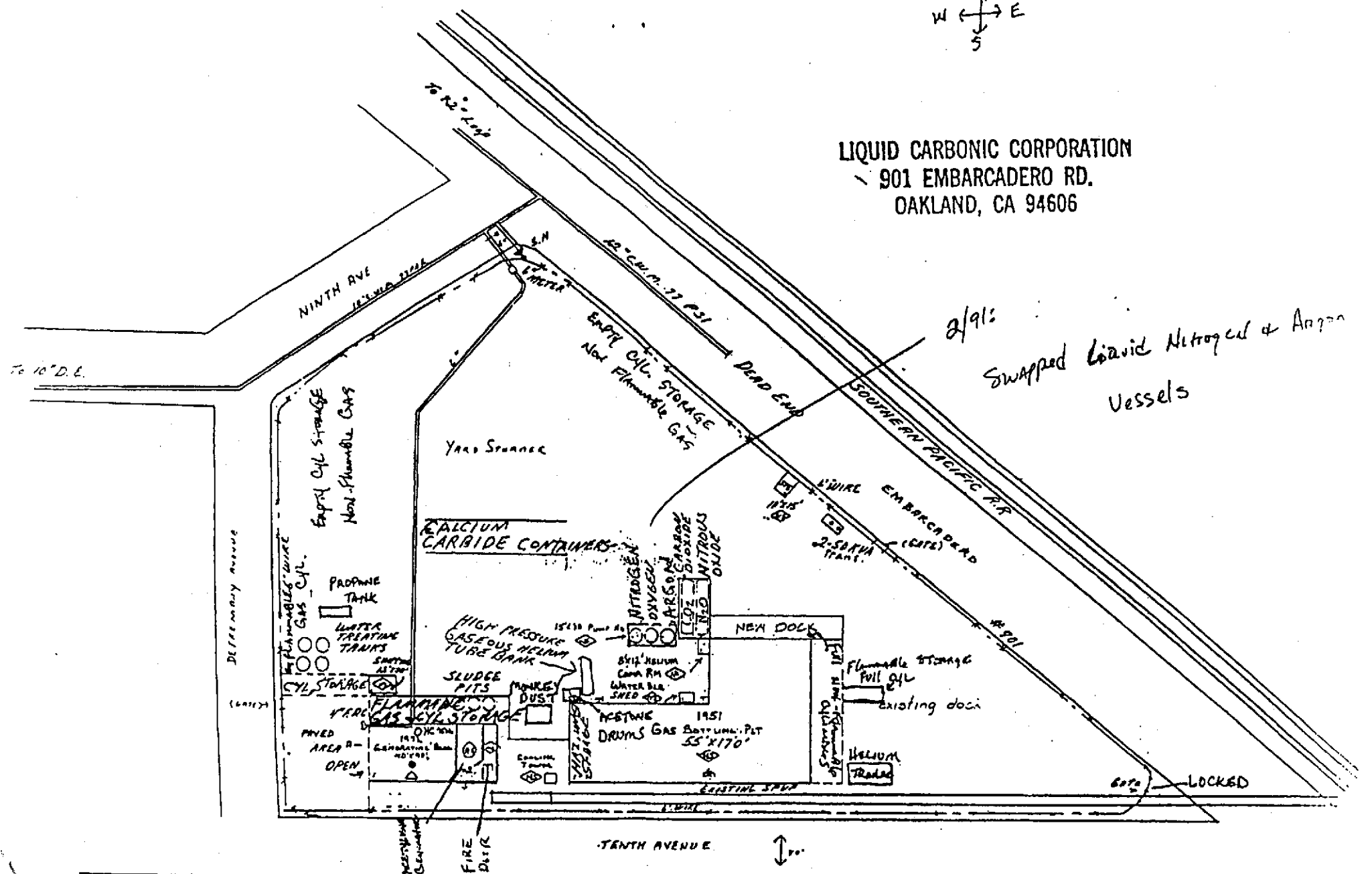
OXYGEN- GASEOUS AND LIQUID
NITROGEN- GASEOUS AND LIQUID
ARGON- GASEOUS AND LIQUID
CARBON DIOXIDE- GASEOUS AND LIQUID
NITROUS OXIDE- GASEOUS AND LIQUID
HELIUM- GASEOUS ONLY
COMPRESSED AIR- GASEOUS AND LIQUID
HYDROGEN- GASEOUS ONLY
ACETYLENE- GASEOUS ONLY
CARBON MONOXIDE- GASEOUS ONLY
CHLORINE- GASEOUS ONLY
FLUOROCARBONS- GASEOUS ONLY
METHANE- GASEOUS ONLY
MIXTURES THERE OF- GASEOUS ONLY
CALCIUM CARBIDE
CALCIUM CHLORIDE
ACETONE
DIESEL FUEL
PAINT (WATER SOLUBLE)

* SEE PLOT PLAN FOR STORAGE AREAS

REVISED 0. 7/2011



LIQUID CARBONIC CORPORATION
901 EMBARCADERO RD.
OAKLAND, CA 94606



2/9/12
Swapped Liquid Nitrogen & Argon
Vessels

To 10" D.E.

Delaney Avenue
Flammable Gas Cyl.
Propane Tank
Water Treating Tanks
Cyl Storage
Flammable Gas Cyl Storage
Paved Area - OPEN

CALCIUM CARBIDE CONTAINERS

HIGH PRESSURE GASEOUS HELIUM TUBE BANK

SLUDGE PITS

1951 HELIUM GAS BOTTLING PLANT 55' x 170'

TENTH AVENUE

SOUTHERN PACIFIC RR
EMBARCADERO
2-SATVA TRANS.

Flammable Storage Full Oil existing dock

HELIUM TRAILER

LOCKED

55.75

Report: Lime spill at Alliance Gas Products, 901 Embarcadero, Oakland CA
Date of Incident: July 22nd, 23rd, 1999
OFSA Incident # 934332
Report Written by Firefighter Dan Keenan

On July 22nd, 1999 Oakland Fire Haz Mat 2598 responded to a reported milky white substance flowing into the estuary at 1000 Embarcadero. Engine 2544 was first to respond and upon their arrival they informed us via radio of the white substance flowing into the estuary and reported that it had an odor similar to hydrogen sulfide (rotten eggs). Haz Mat 2598 arrived at 1000 Embarcadero at 1410 hrs. Prior to our arrival, Firefighter Sweeney from Engine 2544 in an attempt to locate the source of the spill went and looked over the fence at the perimeter of the Alliance Gas Products property, 901 Embarcadero Road. He informed us (the crew of 2598 - Captain Mike Fahey and FF Dan Keenan) that he saw a large puddle on the ground of a thick white liquid slurry. Representatives from USCG and the Port of Oakland Harbormaster Louise Irvin-Jones met us at 1000 Embarcadero.

Captain Fahey and I went to take a look at the estuary. I saw the flow of a white milky substance from a concealed storm drain into the waters of the estuary. I also saw what appeared to be dead marine plant life on the rocks at the shore near the outlet of this drain. I climbed over the railing down onto the rocks and located the 24" storm drain pipe that the flow was coming from. Using pH paper I tested the water issuing from the pipe and found that it was a pH of ~13. I then proceeded to take an 8 oz sample of the water coming from the mouth of the drainage pipe (sample #07-22-99-djk-1412). Haz Mat 2598 contacted Oakland Fire Dispatch and requested that they contact Oakland Public Works to obtain an inflatable plug for the storm drain.

OPD Environmental Crimes Unit Officer Ken Whitman arrived on the scene. Oakland Fire Dispatch was contacted to request a representative from the Department of Fish & Game respond to the scene. At this point Haz Mat 2598, USCG and OPD Environmental Crimes Unit Ken Whitman proceeded over to the Alliance Gas Products property. We drove into the property and kept driving through the lot until we found the large white puddle on the ground. I went and took a pH of the puddle and found that it also was a pH of ~13. We were met at the puddle by the General Manager of the plant Russell Wortham. We proceeded to walk the perimeter of the puddle and found where it flowed under a metal plate into a storm drain. I informed Russell Wortham that he needed to immediately dike the flow of the material into the storm drain. At this point I took an 8 oz sample of the white slurry that was in the storm drain box (sample #07-22-99-djk-1422). OPD Sergeant Ken Whitman took pictures to document the scene and the location of the sample taken. OPD also took statements from the Alliance employees. Harbormaster Irvin-Jones and the Port Security Guard also came to the site of the spill on Alliance property and took pictures of the spill. Russell and his employee Jeff proceeded to immediately dike the flow of the slurry into the storm drain. I asked Russell what the cause of the spill was and he informed me that "a valve had been accidentally left open".

Haz Mat 2599 was dispatched to 901 Embarcadero to assist. Oakland Public Works informed us that they did not have the correct size plug available to plug the storm drain. Oakland Fire Dispatch was contacted to request Morgan Environmental to respond to the scene for assistance in mitigation efforts. Upon their arrival Engineer Kirchner and FF Fontelera from Haz Mat 2599 searched the property for more storm drain inlets. At least two other inlets were found and there were flows of water from other parts of the plant going into these drains. The source of the water flows were shut down. Port of Oakland Environmental Compliance Supervisor Neil Werner arrived at Alliance and took photos of the spill. Captain Mike Fahey went back to the outfall to attempt to insert a plug into the storm drain outlet.

Alliance Gas Products General Manager Russell Wortham was informed that he needed to make immediate arrangements to clean up the spill and the storm drain pipe leading to the estuary. At some point Russell Wortham hired Morgan Environmental to perform the mitigation and clean-up. Russell was very cooperative with all the requests made to him by the various agencies at the scene. While Captain Fahey was attempting to plug the outfall; I asked Russell to show me the valve that was accidentally left open. He brought me around to the back of the large tank #2 and pointed to some plumbing near the bottom of the tanks inside of the secondary containment walls. Russell also told me that he didn't think the lime slurry was that bad because it is used all the time as an agricultural soil additive to increase alkalinity, and as a component of road bed construction. He said that he was not aware of the storm drain inlet on the property and was not aware that it drained straight into the estuary.

Captain Fahey returned from the estuary. The plug that HM 2599 had was too small for the 24" outlet. Morgan Environmental was able to arrange for the rental of a larger plug for the outlet, although it would take some time for it to arrive on the scene. While Captain Fahey was at the outfall he took a sample of the thick white slurry he found on the inside of the outfall pipe (sample #07-22-99-mf-1515).

Russell was again asked to tell us how the spill occurred. He walked us through the Acetylene gas production process and showed us how the lime slurry/water byproduct was pumped into the large tank #1 and the solid lime (calcium hydroxide) allowed to settle. He told us how the water, with a smaller percentage of suspended solids, was pumped from the top of tank #1 into tank #2 and once again allowed to settle. Then the water from the top of tank #2 was pumped off and reused in the reaction vessel to produce the acetylene. He told us how part of the process was not operating properly and as a remedy a sump pump with a length of 1 1/2 " hose attached was on a routine basis lowered into tank #2 on a rope and the water from the top of the tank was pumped off into a lined pool. This lined pool was at the time 3/4 full of water. The water was then somehow pumped from the pool back into the reaction vessel.

He said that the pump was lowered into tank #2 sometime on the afternoon of July 21 and when he showed up to work in the morning at approximately 0730 hrs he turned on the switch that powered the pump. He stated to me that at some point the end of the hose kicked itself out of the pool and started emptying it's flow onto the ground. He said that he discovered the accident at approximately 1000 hrs. I asked him that when he originally told me that a valve had been left open was this what he meant by it. He said yes. He said that somehow they miscalculated the level of the solids in tank #2 when they were lowering the pump into the tank and that the pump must have been into the solids layer of the settling tank. As he was showing us what happened I noticed that the pump was lowered into the lined pool. I asked Russell how the pump got there and he stated that he removed it from tank #2 and placed it in there.

I proceeded back to 1000 Embarcadero to take more samples at the outfall. I took two 1 gallon water samples of the estuary water on the shore near the outfall (07-22-99-djk-1545 & 1540), one 8 oz sample of a mussel in water from the shoreline (07-22-99-djk-1550), and an 8 oz sample of the marine plant life attached to the rocks near the outfall (07-22-99-djk-1558). I took notice of the bleached color of the plant life attached to the rocks in an area covering ~ 2ft wide by 6ft long parallel to the shore. I also at this time took one 8 oz sample of the water & lime slurry from the mouth of the drainage pipe. I took notice of the thickness of the layer of white lime slurry - one inch thick on the bottom of the drain pipe extending as far into the mouth of the pipe as I could see with a flashlight. Photos of the sampled locations were taken by OPD Sergeant Ken Whitman. Field pH measurements were taken at different spots along the embarcadero shoreline and pictures of the tested locations were taken by OPD Sergeant Ken Whitman. The pH at every location tested proved to be between pH12 & pH13.

Oakland Fire Services Leroy Griffin, and Department of Fish & Game Warden Danny Reno arrived on the scene. At this point in time Russell arrived at the outfall and began discussions with Leroy Griffin, Captain Fahey, & Danny Reno as concerning the proper way to clean up the spill on Alliance property. It was Russell's opinion that his employees should be allowed to clean up the spill on their own property. It was the opinion of Leroy Griffin, OFSA that a licensed clean-up contractor and hazardous waste hauler should perform the clean up. It was not known exactly whether the pH was above 12.5, thus uncertain if the waste met the criteria for corrosivity. The pH of the waste was between 12 and 13 according to field measurements. I proceeded to take a sample to ALCO lab for a pH measurement using a calibrated digital pH meter. After filtering solids from some of the liquid out of sample #07-22-99-djk-1412 ALCO Chemist Newton Leung found that the sample had a pH of 12.35.

I returned from the ALCO lab with this information to find that the clean up on Alliance property had commenced. Safety issues & HAZWOPER training requirements were taken into consideration when the decision was made by Leroy Griffin to require Alliance Gas Products to have the cleanup performed by a licensed clean up contractor/haz waste hauler. Morgan Environmental was scooping up the slurry and putting it into 55 gallon drums. A total of ~ 26 - 55 gal drums were filled.

The storm drain plug arrived sometime around 1600 hrs. A regulator and valve set up was needed to make it work. Alliance Gas Products employees helped rig up a system with a nitrogen cylinder and coupling adaptors to make the system work. The plug was brought over to the Estuary storm drain outfall. Morgan Environmental employees with the help of myself and Capt. Fahey inserted the plug and inflated it thus stopping any further flow of product into the estuary. This was accomplished at approximately 1840 hrs. The incident was considered stabilized at this time. Haz Mat 2598 returned to quarters. I maintained chain of custody on all the samples storing them in the evidence refrigerator at Station 03 overnight. Morgan Environmental stayed on the scene at Alliance Gas Products completing the clean up of the spill on their property until ~ 2200 hrs that evening.

The next day, Friday, July 23rd, 1999 at 0600 hrs I met with two representatives from the Department of Fish & Game – Warden Danny Reno and Environmental Specialist John Tarpley at the scene of the spill on the Estuary at 1000 Embarcadero. This time of day was chosen for the meeting because it was very close to low tide. There was very good access to the Estuary waterfront at this time in the morning. John and I climbed down onto the waterfront and began surveying the scene. John examined, sampled and photographed the marine organisms and plant life. The extent of the spill was more visible and it was obvious that the spill encompassed a much larger area than previously thought. There were two areas along the waterfront that appeared to have been bleached out significantly. These areas were separated by about 10 feet of waterfront that seemed to have been less affected. Five of the samples that I took on the 22nd were released to Fish & Game for transport to the F&G laboratory in Yountville, CA. Environmental Specialist John Tarpley completed his examination of the waterfront and left the scene to return to his office. Regional Water Quality Board Field Response Team member George Leyva arrived on scene at 0630 hrs and also examined the waterfront area. Warden Danny Reno remained the rest of the day to help monitor and assist in the clean up efforts. Port of Oakland Environmental Compliance Supervisor Neil Werner arrived on the scene at 1000 hrs and documented the clean up efforts with a digital camera.

A clean up crew from Morgan Environmental started work at ~ 0600 hrs. A dam was built out of rocks and sandbags, plastic tarps and plastic sheeting to catch the flush water as it was sent through the storm drain. A 4,600 gallon capacity vacuum truck was positioned and vacuum hoses were laid out to catch the flush water as it cascaded into the dam. A Roto-Rooter hydroflusher with 600' of hose and a special nozzle was brought to the scene to hydroflush the storm drain. The plug was pulled and the Roto-Rooter hose was inserted from the Estuary side. The hose was sent ~ 540' into the storm line and then pulled back onto it's reel. Water flushing was performed the entire time during this operation.

Early into the operation a second release site was discovered as white milky waste began to fill the waterfront about 20 feet from the actual storm outlet. The operation was stopped immediately and the source of the second flow was searched for by moving rocks away from the shore. The retaining wall had a 2" by 8" rectangular hole in it and the milky waste water was issuing from it. It was surmised that there must exist a break in the storm drain pipe somewhere within 40' of the shore. A second dam was built to catch this flush water and a second vacuum hose was brought into place to catch the flow issuing from this hole. The water for the flushing was taken from a Hydrant close to the scene.

The flush water was periodically monitored for appearance and pH. The pH of the water issuing from the storm drain was at all times between pH 12 and pH 13. The Roto-Rooter truck was then repositioned at the storm drain inlet on Alliance Gas Property and the same operation was performed from that end of the spill. The appearance and pH of the flush water was again monitored and it's pH continued to stay high above pH 12. At the end of the flushing operation I took samples of the solid slurry in the bottom of the outfall, and of the water issuing from the mouth of the outfall (sample # 07-23-99-djk-1755 and # 07-23-99-djk-1748). I tested the pH of the water at this time and found that it was still between pH 12 and pH 13. Tom Morgan of Morgan Environmental took a sample of the water/solids matrix inside the vacuum truck at the request of Warden Danny Reno (sample # 001).

It was decided at this time that the emergency phase of the spill was over and that a possible best course of action was to allow the storm drain pipe to aerate. The calcium hydroxide (lime) readily absorbs carbon dioxide from the air, reacts and forms calcium carbonate (chalk). Calcium carbonate is much less soluble (practically insoluble) in water than calcium hydroxide and does not create a high pH when it does dissolve in water. Calcium Hydroxide (lime) is only slightly soluble in water and the pH of an aqueous solution at 78° F is 12.4. The flushing action using the special Roto-Rooter nozzle was run through the length of the storm drain pipe 4 times at pressures averaging 1000 psi. A great deal of aeration and mixing with the flush water should have brought the lime into contact with lots of CO₂, hopefully creating calcium carbonate – one of the most stable, common and widely dispersed materials in nature – occurring naturally as oyster shells, chalk, limestone and marble. At one point during the incident discussions were held concerning the potential benefit of flushing the line with a citric acid wash. It was determined that this type of operation should receive further study until a decision could be made on it's potential benefits and detriments. According to Environmental Specialist John Tarpley, Fish & Game, after consultation with a scientist at the lab in Yountville the best course of action was to allow the lime to naturally stabilize and a citric acid wash was not recommended. Rain water naturally has an acidic pH of about 5.6. Acid Rain, the result of polluted air, often has a pH lower than this, so a few good rainfalls will also help to naturally stabilize any excess lime left in the storm drain pipe. According to Water Quality biologist Mike Rugg of DF&G, the tide waters that fill the Estuary are also buffered very well and should help counteract the high pH caused by the lime slurry.

Samples: # 07-22-99-djk-1545, 1540, 1558, 1550, and 1628 were brought to the Fish & Game lab in Yountville and analyzed by biologist Mike Rugg (707)944-5523. Some of the analysis performed were pH, total alkalinity, hardness and fresh water bioassay.

Samples: # 07-23-99-djk-1755, and 07-22-99-djk-1412 were brought to the EBMUD environmental laboratory (510)287-1664. Some of the analysis requested were total alkalinity, total carbonate, total bicarbonate, total calcium, and pH. Senior Chemist Jack Lim can be contacted about these samples.

**PORT OF OAKLAND
CLEAN WATER PROGRAM
STORM WATER INSPECTION REPORT FORM**

Date: January 26, 2000

Name, Site Address: Alliance Gas Products, 901 Embarcadero, Oakland 94606

Contact Name: Russel Wortham/(Marvin Rodgers -Accounts Payable)

Phone Number: 510-663-9353 Cell 385-7317 / (510-834-9353)

Business Activity/SIC Code: Manufacture and Store Presurized Gas/2813

Property Owner: Port of Oakland
Port Representative: Douglas Herman
Phone Number: 510-627-1184
Fax: 510-451-5916
Mailing Address: 530 Water Street, Oakland, CA 94607

Please respond to facility compliance issues listed below within 30 calendar days.

Response Date: February 26, 2000

Please analyze sand blast grit for hazardous characteristics and dispose according to local, state, and Federal law

Please perform additional soil removal in the vicinity of the lime settling tanks to remove residue and prevent discharge to storm drain

It is unclear whether facility is required to comply with the State General Industrial Permit (Industrial Gas Facilities? Are required to comply - SIC Code 2813) Please review Industrial Permit to determine status.

Spill Incident – On or around July 26, 1999, a spill of calcium hydroxide occurred at the Alliance Gas Products facility, entered a storm drain and discharged to the estuary near the Reef Restaurant – See attached report.

In July 1999, Mr. Russell Wortham of Alliance was attempting to siphon water from a tank that contained a water/lime mixture, and pump the water to a nearby holding pond and eventually back into the acetylene gas process. The spill occurred evidently when the pump dropped into the lime mixture and at the same time pulled the other end of the hose out of the holding pond and onto the adjacent ground. The lime mixture then flowed to a storm drain and the estuary.

The Port of Oakland is not providing and does not intend to provide any legal advice or assistance and does not warrant that the information, representations or conclusions set forth herein comply with applicable law, including, but not limited to, the requirements of the Clean Water Act or the General Permit. The Port emphasizes that, with respect to Port tenant facilities or operations, it is the Port tenant's responsibility to comply with all applicable laws, including the CWA and the General Permit.

Facility Representative Signature: _____ Date: _____

Print Name of Facility Representative: _____ Inspectors Signature: _____

Distribution: White - Tenant Yellow - Port of Oakland
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PORT OF OAKLAND

MEMO

TO: Joe Wong, Director of Engineering
David Alexander, Port Attorney

FROM: Neil Werner, EH&SC *NBW*

DATE: July 26, 1999

SUBJECT: Spill at the Liquid Carbonic Site

As the Port Spill Response Coordinator, I have prepared a short report on the subject spill for your information. Liquid Carbonic, now called Praxair after a recent merger, is a Port tenant in the 9th Avenue Terminal area.

The operator (Alliance Gas Products) who caused the calcium hydroxide spill has taken responsibility for the initial cleanup. The estimate for the cleanup is about \$25,000. Alliance Gas Products apparently subleases from Praxair.

I recommend the Port continue to look into the operator's remediation efforts and make sure that no soil or groundwater contamination has resulted from the releases on the leasehold.

cc: Omar Benjamin
Michele Heffes
Roberta Bradley

file: agpmemo.doc

Liquid Carbonic a.k.a. Alliance Gas Products Spill Report July 25, 1999

According to routine spill procedures, on Wednesday afternoon, July 21, 1999, Leni Tash, Assistant Harbormaster, called EH&SC to alert Neil Werner of a "white milky substance" in the Estuary adjacent to the Reef Restaurant at the North Basin of the Embarcadero Cove Marina. Mark O'Brien and Neil Werner investigated and confirmed that a whitish cloudy liquid was indeed seeping from the riprap bank just west of the Reef restaurant.

The restaurant operator said that the substance had been noticeable by its appearance and by a sulphur smell, similar to hydrogen sulfide, for a period of time, perhaps a couple of weeks. The source of the spill and the exact nature of the substance in the water was not evident on Wednesday afternoon. Thinking it could be a sanitary sewer line break, the spill was reported to the US Coast Guard and the Regional Water Quality Control Board.

On Thursday morning, the Coast Guard (Petty Officer Evans, 437-3663) called and offered to meet Neil Werner at the site of the spill. Thinking that he should check out the site again, Neil Werner went back to the spill area and observed that the water was clear, but he also observed that the normally green algae on the rocks was white in the spill area and looked bleached or dead. Neil called the Coast Guard back and left a message indicating the spill was not occurring.

Later Thursday afternoon, the Harbormaster reported that the milky substance spill was occurring again and the Hazmat Unit of the Oakland Fire Department was on scene as was the Environmental Investigation officer, Sergeant Ken Whitman, of the Oakland Police Department. The source of the white substance was determined to be the gas manufacturing plant, commonly referred to as Liquid Carbonic. The operator admitted to spilling carbide lime sludge, a by-product of acetylene manufacture, on Thursday morning, but

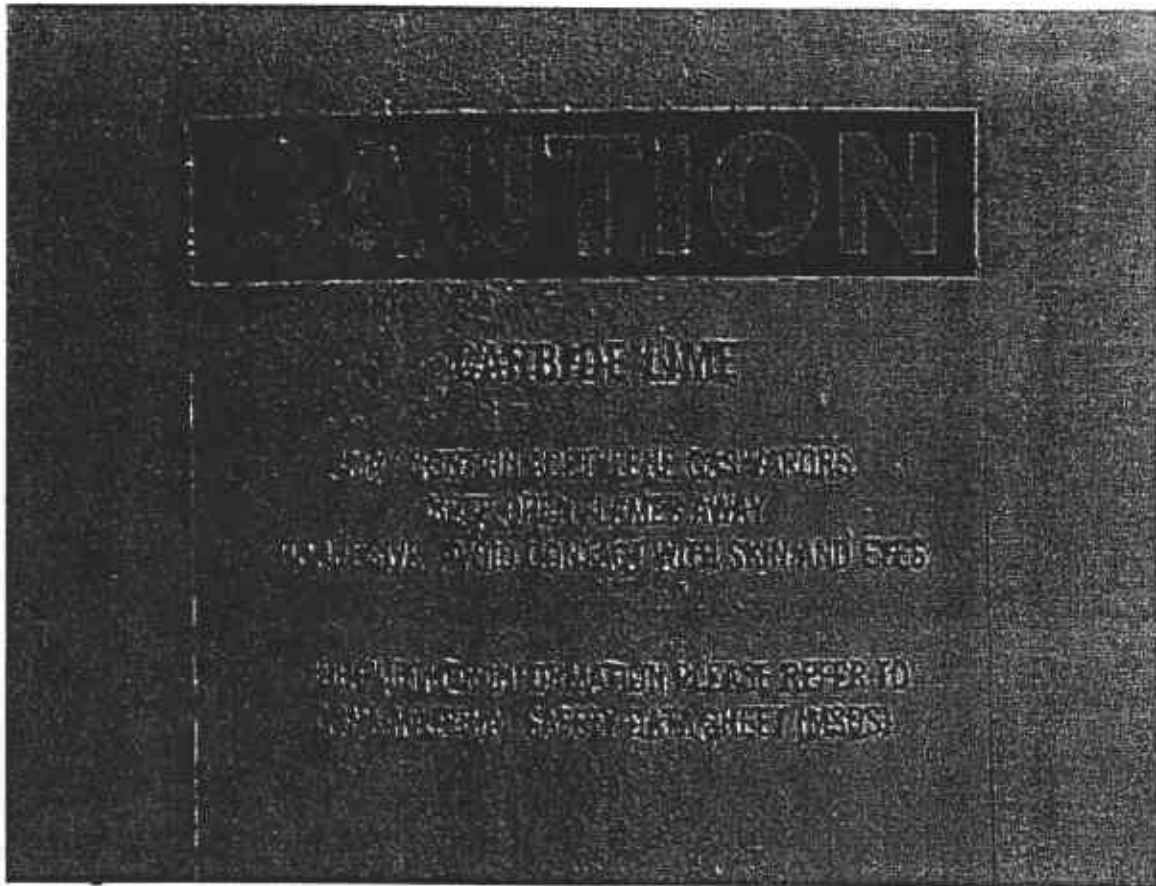


Figure 1

denied that it occurred prior to that time. The operator also took responsibility for engaging a clean-up contractor, Morgan Environmental. The substance was spilled over an unpaved area measuring roughly 150' by 50'. Carbide lime (Figure 1) is a common name for calcium hydroxide. Calcium hydroxide is highly alkaline, pH 12, when mixed with water. The calcium hydroxide had entered a storm drain line on the property and found its way approximately 300 feet to the outfall where it entered the estuary (Figure 2).

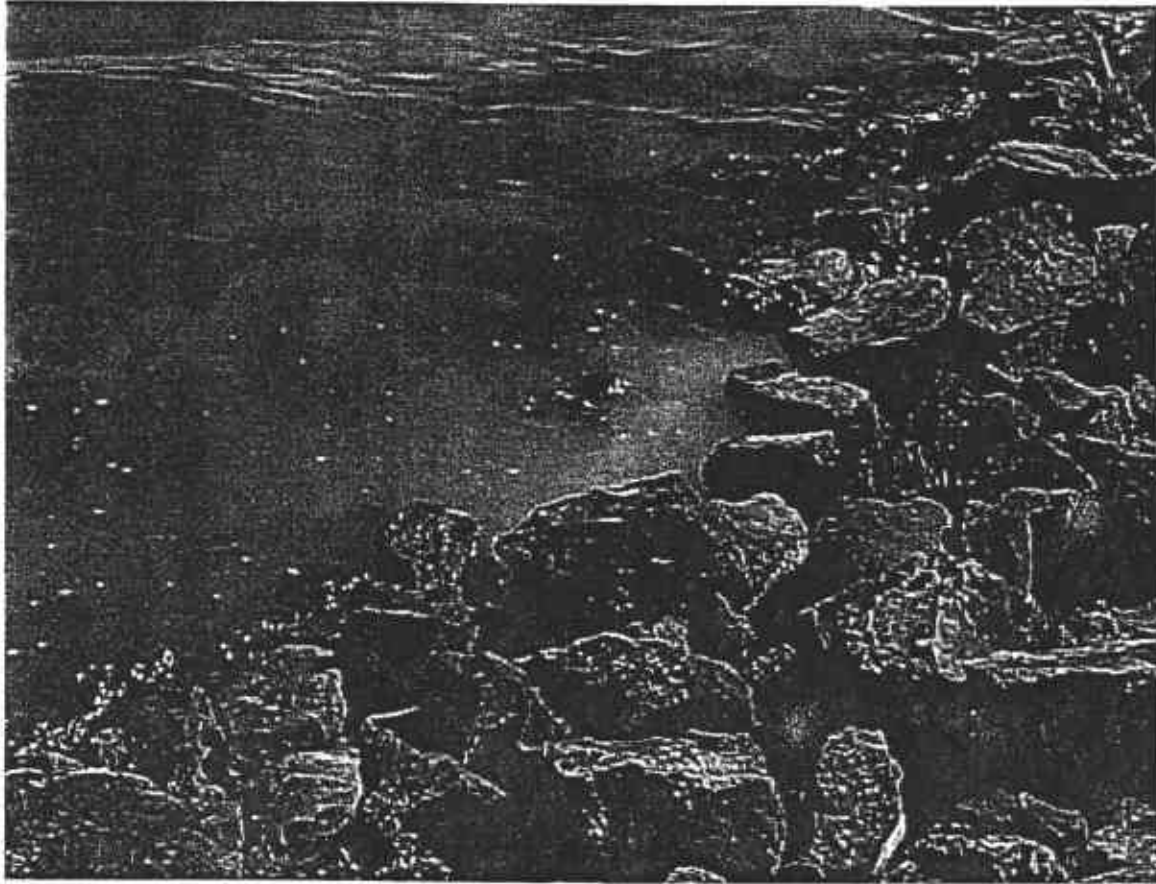


Figure 2

The property on which the spill occurred (Figure 3) is Port owned and leased to the gas plant operator (Alliance Gas Products). Apparently, no structures on the Liquid Carbonic property are owned by the Port.

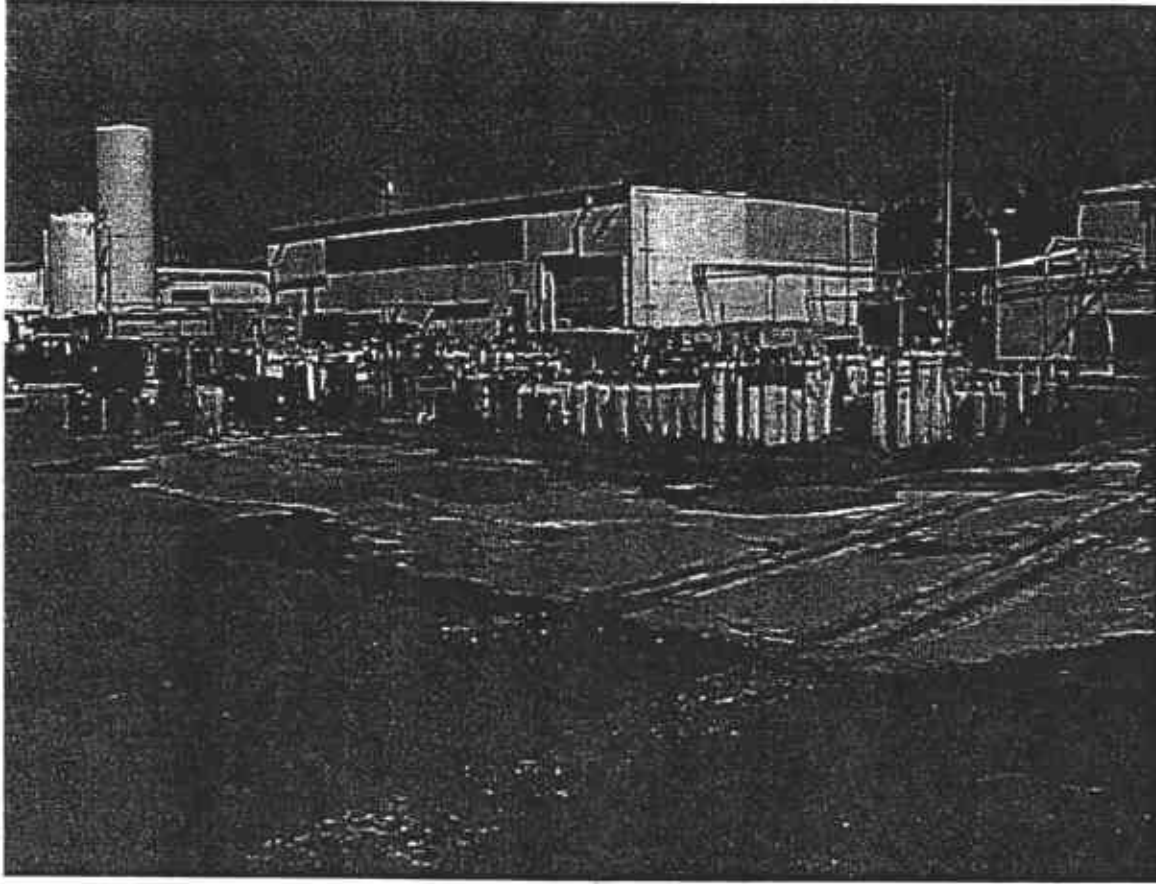


Figure 3

On Friday morning, Morgan Environmental had constructed a temporary catchment structure (Figure 4) at the outfall and had a vacuum truck ready to suck up material flushed from the storm drain. Cal Fish and Game (Warden Danny Reno, telephone 916-445-0045) was present at the scene. Samples of the sludge, the milky bay water, and biological organisms were obtained. The OFD also has samples of the sludge and water. George Leyva and Rich Hiatt of the Regional Water Quality Control were on scene. Leroy Griffin of the Oakland Fire Services Agency (CUPA) was also present.

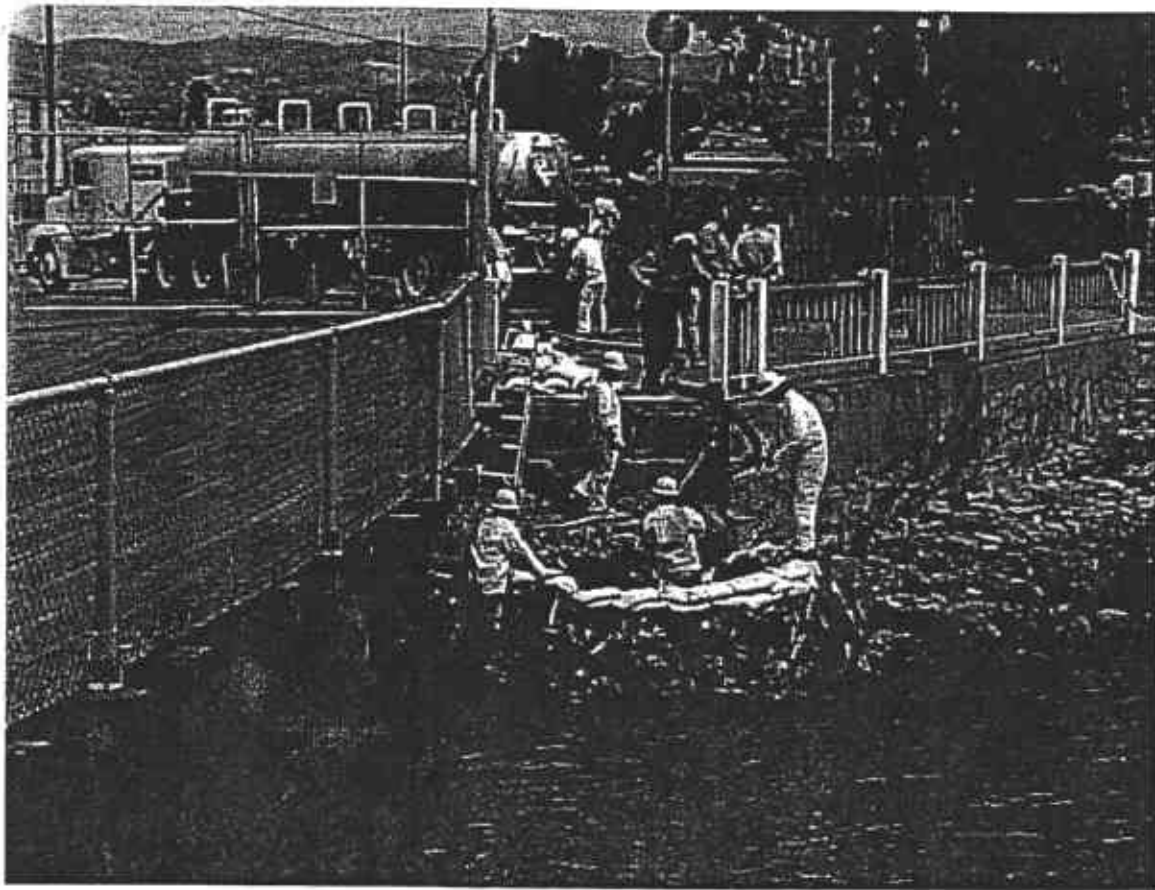


Figure 4

Neil Werner continued to monitor the clean-up as it progressed and he documented the events with photos.

PORT OF OAKLAND
CLEAN WATER PROGRAM
STORM WATER INSPECTION REPORT FORM

Date: 1-26-00
Name, Site Address: Alliance Gas
Contact Name(s): Russell Worthan
Phone Number(s): 663-9353
Business Activity/SIC Code: Manufacture and store gas products.
Property Owner: Port of Oakland
Port Representative: Douglas Herman
Phone Number: 510-272-1184
Fax: 510-451-5916
Mailing Address: 530 Water Street, Oakland, CA 94607

- SWPPP
- NOI
- Training Records
- Monitoring Records
- Two Contacts

Unknown about need to comply

As an active member in the Port's Group Monitoring Program, you are required to respond in writing to facility compliance issues listed below within 30 calendar days.

Response Date: 2-26-00
Reinspection Date: Yes/No

- Please test sand blast material for hazardous characteristics
- Please perform additional soil removal to remove film from storm water discharge
+ lime
- It is unclear whether facility needs to comply with NPDES regulations. Please consult with env. firm.

The Port of Oakland is not providing and does not intend to provide any legal advice or assistance and does not warrant that the information, representations or conclusions set forth herein comply with applicable law, including, but not limited to, the requirements of the Clean Water Act or the General Permit. The Port emphasizes that, with respect to Port tenant facilities or operations, it is the Port tenant's responsibility to comply with all applicable laws, including the CWA and the General Permit.

Print Name of Facility Representative: Russell Worthan
Facility Representative Signature: [Signature] Inspector Signature: [Signature]

problem by pro

Distribution: White - Tenant Yellow - Port of Oakland
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* calcium carbide + H₂O → acetylene gas + H₂O + lime
acetylene gas + calcium chloride → remove H₂O from gas
acetylene gas is mixed with acetone in storage tanks

99 73691

1. Complainant
City of Oakland

Offense/Crime
25189.5(d) HFS

3. Name of Person Giving Statement
Bego, Amy

Sex/Race/DOB
FA 6-26-47

Complainant Suspect Driver
 Reporting Person Witness

4. Residence Address
1562 Meadowlark

City/Zip
Yuba City

Phone
(530) 755-2669

5. Employment (Name, Address, Phone, Occupation, Work Hours, Days Off) of Supplemental Information if Unemployed or Transient
Oyster Reef, 1000 Embarcadero, 1130-2200, 7 days a week

6. Statement Taken By
J. Grant

Serial No.
8215

Date
2 JUL 99

Time Started - Completed
1530-1545

7. Location Where Statement Taken
1000 Embarcadero

Names, Addresses of Persons Present During Statement

FOR VEHICLE COLLISIONS ONLY

8. License No. | State | Veh. Yr. | Make | Model | Type | Color(s) | Driver License No. | State

9. Registered Owner | Address | City/Zip | Residence/Business Phone

ADMONITION: You have the right to remain silent. Anything you say can be used against you in a court of law. You have the right to talk to a lawyer and have him present with you while you are being questioned. If you cannot afford a lawyer, one will be appointed to represent you before any questioning if you wish one. Subject's Initials

WAIVER: Do you understand each of these rights I have explained to you? _____
Having these rights in mind, do you wish to talk to us now? _____

Statement:
Today is the 22nd of July 1999 and at about 1:45 pm, I was working at the Oyster Reef Restaurant at 1000 Embarcadero where I'm the manager. At about 1:45 pm I smelled a terrible odor which I have smelled many times before. It smells like the toilet or rotten eggs. I looked outside at the estuary and I saw a white cloudy substance coming from a drainage pipe just to the right (west) of the restaurant. The substance empties into about a fifteen square foot area and then it disperses even more throughout the estuary. The smell is very sulfuric like. This exact same thing happened yesterday on the 21st of July. It also happened for one full week about two weeks ago. This has happened on and off for the last eighteen ~~and~~ years I have been working here. I know its the same material which is dumped because it always smells and looks the same. It is always dumped from the pipe at the Alliance Gas Products on m rts

Signature of Person Giving Statement: Amy Bego Date: 7-22-99

#1535

STATEMENT CONTINUATION
Oakland Police Department

536-200-2 (6/93)

Page 2 of 2

2. Report No.

99 73691

Complainant

City of Oakland

Offense/Crime

25189.3(d) H&S

3. Name of Person Giving Statement

Rego, Amy

Sex/Race/DOB

FA 6-26-47

Complainant

Suspect

Driver

Reporting Person

Witness

STATEMENT:

A lot of times you can only smell the sulfur smell because of high tide it covers the pipe and you don't see the white film. The area which is usually affected is about 15' square feet. ^{A.P.R.} This is I called the police at about 2pm to report the spill that I saw. This is a true statement. X Amy Rego

Signature of Person Giving Statement

Date

ALLIANCE GAS PRODUCTS

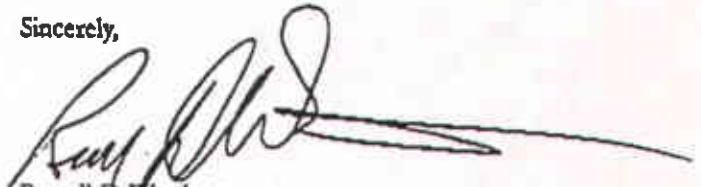
March 15, 2000

Mr. Douglas Herman
Fort of Oakland
530 Water Street
Oakland, Ca. 94607

Dear Sir;

This is to respond to your inspection of January 26, 2000. We have reviewed with the State of California Water Resources Board and have determined that under SIC Code 5169 that a NPDES permit is not required. We have done additional soil removal to remove film from the standing water which you observed in the yard. Lastly, we have tested the shotblast machine dust for hazardous characteristics. We have found that it contains lead at a level which will cause this dust to become hazardous waste. We are in the process of implementing a training and documentation program so that we may collect this dust into appropriate barrels, label them for temporary storage and make appropriate arrangements for proper disposal with an appropriate disposal site. We have no material currently in storage and will not need to dispose of product for at least three months. The initial notification to the EPA of hazardous waste activity has been made so we may obtain a EPA I.D. number. (SEE ATTACHMENTS)

Sincerely,



Russell D. Wortham
General Manager