



A Burlington
Environmental Inc
Company

CHEMICAL PROCESSORS, INC.

Northern California Division

~~February 26, 1991~~
Project No. 1041

Mr. Alex Baillie
Source Control Inspector
Water Reclamation Plant
1250 Kitty Hawk Road
Livermore, California 94550

Re: MONITORING REPORT
4904 South Front St, Livermore, California

Dear Mr. Baillie:

This report presents monitoring results from the groundwater extraction and treatment system located at Chevron Service Station No. 9-1924 at the above referenced site.

The total quantity of groundwater treated through the system as of December 6, 1990 was 480,999 gallons. The groundwater flow rate through the treatment system has averaged 0.36 gallons per minute during the month of December (see Table 1). Samples of the system influent and first carbon effluent were collected and analyzed for total petroleum hydrocarbons as gasoline (TPH) as well as benzene, toluene, ethylbenzene, and total xylenes (BTEX). All the effluent groundwater analyses have shown TPH and BTEX concentrations to be below detection limits. Certified analytical results and chain-of-custody documents are attached.

During December 1990, the aqueous-phase carbon absorption vessels became inoperable as a result of scale formation. The carbon vessels were replaced in January 1991. Presently, the remediation system is under evaluation and the system is not operating. I will notify the district when the system resumes operation.

Burlington Environmental, Inc.-Chempro Division is submitting this information on behalf of Chevron USA, Inc. If any additional information is required, please feel free to contact me at (415) 524-9372.

Sincerely,
BURLINGTON ENVIRONMENTAL, INC.-Chempro Division

Felicia A Rein
Environmental Scientist

Enclosures

cc: Clint Rogers (Chevron)



A Burlington
Environmental Inc.
Company

CHEMICAL PROCESSORS, INC.

Northern California Division

February 26, 1991
Project No. 1041

Ms. Anne C. Werth
Air Quality Engineer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109

Re: MONITORING REPORT
Application No. 2648
4904 South Front Street, Livermore, California

Dear Ms. Werth:

This report presents monitoring results from the groundwater extraction and treatment system located at Chevron Service Station No. 9-1924 at the above referenced site.

The total quantity of groundwater treated through the system as of December 6, 1990 was 480,999 gallons. The groundwater flow rate through the treatment system averaged 0.36 gallons per minute during the month of December (see Table 1). During the month of December all effluent concentrations of total petroleum hydrocarbons as gasoline (TPH) were below analytical detection limits. The air emissions were calculated based on the average groundwater flow rate to the air stripping tower and the analytical results of the VOC content in the influent and effluent groundwater (see Table 2). Assuming an efficiency of 95% removal by the air stripper, the emissions to the air show 0.005 lb TPH/day. This is significantly below the permit restriction of 15 lb TPH/day, as well as below limits for each individual component. We will perform this calculation on a quarterly basis. Certified analytical reports and chain-of-custody documents are attached.

During December 1990, the aqueous carbon vessels became inoperable as a result of scale formation. The carbon vessels were replaced in January 1991. Presently the remediation system is under evaluation and the system is not operating. I will notify the district when the system resumes operation.

Burlington Environmental Inc.-Chempro Division is submitting this information on behalf of Chevron USA, Inc. If additional information is required, please feel free to contact me at (415) 524-9372.

Sincerely,
BURLINGTON ENVIRONMENTAL, INC.-Chempro Division

Felicia A Rein
Environmental Scientist

Enclosures

cc: Clint Rogers (Chevron)
Elaine Everman (BAAQMD)

950 Gilman Street, Suite B
Berkeley, California 94710
(415) 524-9372

Table 1
PERFORMANCE SUMMARY

Chevron Service Station No. 9-1924
4904 South Front Street, Livermore, California

Date Site Visit	Total flow (gal)	V2-V1 (gal)	T2-T1 (days)	Q avg (gal/min)	Comments
3/27/90	34				
3/28/90	54	20	1	0.01	
3/29/90	65	11	1	0.01	
3/30/90	65	0	1	0.00	Flow meter inoperable
4/11/90	65	0	12	0.00	New flow meter, new reading=0.0
4/12/90	5,927	5,862	1	4.07	
4/20/90	28,099	22,172	8	1.92	Replace tower A motor
4/21/90	30,466	2,367	1	1.64	
4/25/90	42,376	11,910	4	2.07	
5/14/90	103,158	60,782	19	2.22	System Down-scaling
5/16/90	103,178	20	2	0.01	System On--
5/25/90	130,350	27,172	9	2.10	--cleaned scaling
6/1/90	151,099	20,749	7	2.06	
6/7/90	168,195	17,096	6	1.98	
6/11/90	179,542	11,347	4	1.97	
6/15/90	187,562	8,020	4	1.39	Anti-sealant Install injection sys.
6/21/90	203,909	16,347	6	1.89	--cleaned scaling
6/26/90	216,733	12,824	5	1.78	
7/3/90	234,375	17,642	7	1.75	
7/6/90	241,654	7,279	3	1.68	
7/17/90	273,100	31,446	11	1.99	System Down
7/27/90	273,268	168	10	0.01	System on
7/30/90	281,574	8,306	3	1.92	
8/8/90	301,773	20,199	9	1.56	
8/15/90	318,398	16,625	7	1.65	
8/23/90	336,800	18,402	8	1.60	
8/24/90	338,846	2,046	1	1.42	
8/31/90	355,200	16,354	7	1.62	
9/12/90	382,470	43,624	12	2.52	
9/13/90	384,595	2,125	1	1.48	
9/25/90	413,368	28,773	13	1.54	
10/1/90	426,925	13,557	6	1.57	
10/3/90	432,133	5,208	2	1.81	
10/11/90	449,274	17,141	8	1.49	
10/17/90	460,667	11,393	6	1.32	
10/26/90	469,476	8,809	9	0.68	**System down
10/29/90	469,482	6	3	0.00	System on
11/9/90	NM	NM	NM	NM	Replace tower B motor
11/27/90	476,330	6,848	29	0.16	
12/6/90	480,999	4,669	9	0.36	

Initial Start up date: March 26, 1990

V2-V1: Flow between readings

T2-T1: Days between readings

Q avg: Average flow

~~System down due to swelling of the carbon vessels - replaced carbons on 7/27/90~~

** System down - - pressure gauge broken, replaced 10/29/90

During December 1990, carbon vessels scaled -- replaced carbon in January 1991.

System down for evaluation.

Table 2
GROUNDWATER ANALYTIC RESULTS

Chevron Service Station No. 9-1924
4904 South Front Street, Livermore, California

Date Site Visit	System Influent		First Carbon		Lead
	TPH (ppb)	Benzene (ppb)	TPH (ppb)	Benzene (ppb)	
3/27/90	2100	30	ND	ND	NA
3/28/90	530	110	ND	ND	NA
3/29/90	ND	1.1	ND	ND	NA
3/30/90	850	110	ND	ND	NA
4/12/90	NA	NA	ND	ND	NA
4/25/90	130	29	ND	ND	NA
5/16/90	370	46	ND	ND	NA
5/25/90	80	10	ND	ND	NA
6/11/90	ND	8.3	ND	ND	ND
6/21/90	54	8.5	ND	ND	NA
7/3/90	ND	5.5	ND	ND	NA
7/27/90	220	12	ND	ND	NA
7/30/90	NA	NA	ND	ND	NA
8/24/90	ND	ND	ND	ND	NA
8/31/90	ND	2.7	ND	ND	ND
9/13/90	ND	1.9	NA	NA	NA
10/1/90	ND	0.9	NA	NA	NA
10/11/90	ND	1.3	ND	ND	NA
12/6/90	70	4.7	ND	ND	NA

TPH: Total petroleum hydrocarbons as gasoline
ppb: Parts per billion
NA: Not analyzed
ND: None Detected



Chempro Environmental Services
950 Gilman Street, Suite B
Berkeley, CA 94710

December 19, 1990
PACE Project
Number: 401210502

Attn: Ms. Felicia Rein

CH,9-1924Chempro1041

PACE Sample Number:			70 0849209	70 0849217	70 0849225
Date Collected:			12/06/90	12/06/90	12/06/90
Date Received:			12/10/90	12/10/90	12/10/90
Parameter	Units	MDL	WS1L	WS2L	WS3L

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):

Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND	ND	70
PURGEABLE AROMATICS (BTXE BY EPA 8020):					
Benzene	ug/L	0.5	ND	ND	4.7
Ethylbenzene	ug/L	0.5	ND	ND	1.3
Toluene	ug/L	0.5	ND	ND	ND
Xylenes, Total	ug/L	0.5	ND	ND	ND

MDL Method Detection Limit
ND Not detected at or above the MDL.

The data contained in this report were obtained using EPA or other approved methodologies. All analyses were performed by me or under my supervision.

Ruth J. Siegmund
Organic Chemistry Manager

Chevron U.S.A. Inc.
 P.O. BOX 5004
 San Ramon, CA 94583
 FAX (415)842-9591

Chevron Facility Number 9-1924
 Facility Address 4904 S. FRONT ST, LIVERMORE, CA
 Consultant Project Number 1041
 Consultant Name Chempro
 Address 950 B GILMAN ST, BERKELEY, CA
 Project Contact (Name) FELICIA A REIN
 (Phone) 524-7372 (Fax Number) 524-7439

Chevron Contact (Name) Nancy Vukelich
 (Phone) 842-9581
 Laboratory Name PACE
 Laboratory Release Number 2532410
 Samples Collected by (Name) DARYL A. CAMP
 Collection Date 12/6/90
 Signature [Signature]

Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed										Remarks			
							BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Chlorinated HC (8010)	Non Chlorinated HC (8020)	Total Lead (AA)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)							
WS1L	3	W	G	8 ⁰⁰	HCL	Y	X											84920.9	1 vial has LV on label, not just L	SYS EFF
WS2L	3	W	G	8 ⁰⁵	HCL	Y	X											21.7		1 SEC
WS3L	3	W	G	8 ¹⁰	HCL	Y	X											22.5		SYS IN
QL#																		23.3		

9/1

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>Chempro</u>	Date/Time <u>12/14/90 2:00</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>Pace</u>	Date/Time <u>12/10/90</u>	Turn Around Time (Circle Choice) <input type="radio"/> 24 Hrs. <input type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input checked="" type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>PACE</u>	Date/Time <u>12/10 (64)</u>	Received By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>[Signature]</u>	
Relinquished By (Signature) <u>[Signature]</u>	Organization <u>[Signature]</u>	Date/Time <u>[Signature]</u>	Received For Laboratory By (Signature) <u>steph m... PACE inc</u>	Date/Time <u>12/10/90</u>		

SECTION B

CHEVRON'S LIVERMORE SERVICE STATION NO. 9-1924
TRANSPORTABLE TREATMENT UNIT
WASTE ANALYSIS PLAN

Revised: April 2, 1990

SECTION B: WASTE ANALYSIS PLAN

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PREFACE

CCR Title 22, Section 67102 (b)

The Chevron Transportable Treatment Unit Waste Analysis Plan summarizes the transportable treatment unit (TTU), the waste streams and the treatment processes. This plan also describes sample test methods, analytical parameters and rationale, sample management, sampling frequency and the special requirements to comply with the CAC section. The purpose of this plan is to describe the analytical methodologies used to characterize wastes to ensure safe and appropriate treatment and disposal.

B1.0 TTU Description

Generator's EPA Identification Number: CAL 000 030 019

Owner's Name: Chevron U.S.A., Inc.

Address: 2410 Camino Ramon, San Ramon, CA

Telephone Number: (415)842-9525

Operator's Name: Chemical Processors, Inc. (Chempro)

Address: 950 Gilman St., Suite B
Berkeley, California 94910

Telephone Number: (415) 524-9372

The TTU is located on approximately 250 sq. ft. and includes two modules for the treatment of contaminated groundwater. The modules include an air stripper for removal of volatile hydrocarbons from the contaminated groundwater and an aqueous carbon module for removal of

any residual petroleum in the groundwater. The TTU treats a waste stream composed of petroleum mixed with groundwater. Treatment processes generally includes air stripping and an aqueous carbon treatment phase. An extraction pump pumps the petroleum contaminated groundwater from the well through an air stripper. The air stripper removes at least 95% of the volatile hydrocarbons. The gasoline/water mixture is pumped through a flow quantity indicator to the top of the air stripper tower where it is released through a distributor. Air is blown into the tower which volatizes the hydrocarbons. The gasoline/water mixture is recycled into the air stripper four times. The water mixture is then pumped into a 90 gallon RFP covered sump. The sump has a high/low level switch to prevent overflow. A sample tap is located on the sump. The water then flows into a centrifuge pump where it is pumped to the aqueous carbon module. Sample taps are located: (1) before the air stripper (2) after the air stripper, and (3) between the two series connected aqueous carbon units.

The aqueous carbon module removes residual hydrocarbons from the water through serial flow into two carbon filled cannisters. The carbon is checked by taking samples between the two carbon units as required by the permits issued. When the first carbon unit shows indication of breakthrough, it is replaced. The treated water is pumped through a flow indicator/recorder and then to the discharge outlet.

Waste water is discharged to the City of Livermore Water Reclamation Plant in accordance with the plant's permit requirements.

1) Oil and Grease

The test for oil and grease quantifies the amount of dissolved or emulsified oil and grease present in treated wastewater prior to discharge to the sewer. The test methods used are EPA method 403; and/or EPA methods 503 D and E for soil analysis and method 503 A and E for water analysis.

2) Leaded Gasoline

For soil analyses, EPA method 5030 (GCFID) is used for TPH-G and method 8020 or 8240 is used for BTEX. Water analyses use EPA method 5030 (GCFID) for TPH-G; method 602 or 624 for BTEX; DHS-LUFT method for TEL; and DHS-AB1803 for EDB.

3) Unleaded Gasoline

For soil analyses, EPA method 5030 (GCFID) is used for TPH-G and method 8020 or 8240 is used for BTEX. The water analyses are performed using EPA method 5030 (GCFID) for TPH-G and method 602 or 624 for BTEX.

B1.4 Sample Management

B1.4.1 Equipment

The sampling methods and equipment used for the various materials are presented in Table B1-2, Sampling Methods and Equipment. Sampling equipment is rinsed or disposed of between successive sampling of vessels to avoid contamination.

Samples are stored in containers that are compatible with the sampled material. All samples are stored in glass or plastic container. Solid samples and oils can be stored in glass, plastic or metal containers. Containers are liquid-tight and range in size from 100 ml to 1,000 ml. Sample/Container compatibility is summarized in Table B1-3.

TABLE B1-1. SAMPLING METHODS AND EQUIPMENT

WASTE TYPE	EQUIPMENT TYPES		METHOD
			REFERENCE SW846 ^(a) / ASTM ^(b)
Free flowing liquids	-Glass/PVC Tube -Coliwasa	-Weighted bottle	1.2.1.1/D4057-81
		-Dipper	1.2.1.2
		-Glass Tube	1.2.1.3
Sludges	-Glass/PVC Tube -Trier	-Dipper	1.2.1.3/D4057-81
		-Trier	1.2.1.5
		-Metallic tube	
Extremely viscous liquid/sludge	-Scoop -Auger -Metallic tube	-Shovel	1.2.1.7/D140-70
			1.2.1.6
Soil-like and packed solids	-Auger -Metallic tube -Trier		1.2.1.7/D1452-65
			1.2.1.6
			1.2.1.5
Solids Impervious	-Auger -Knife -Saw		

(a) SW 846-U.S. Environmental Protection Agency. Test Methods for Evaluating Solid Waste, November 1986. Office of Water and Waste Management, Washington, D.C.

(b) ASTM-American Society for Testing Materials. Annual Book of ASTM Standards, Philadelphia, PA.

TABLE B1-3. SAMPLE/CONTAINER COMPATIBILITY

<u>Sample</u>	<u>Container</u>		
	<u>Plastic</u>	<u>Glass</u>	<u>Metal</u>
Oils	*	*	*
Solids	*	*	*
Aqueous	*	*	

* Sample compatible for storage in this type of container.

B1.4.2 Sample Frequency

A sample will be taken as part of the pilot test for the unit or (initially when the unit starts up if there is no pilot test) to confirm the TPH levels. Water samples will be taken throughout the treatment in compliance with the permit monitoring requirements. A sample will be taken at the end of the treatment to ensure that the groundwater is below permit effluent limits. All samples will be reviewed by Chempro Regulatory Affairs Department. Samples will also be taken at the TTU closure.

B1.4.3 Sampling Procedures

Sampling is performed at the Chevron facility by personnel who are properly trained in representative sampling methodology. Refer to Section D, Training Document, for a detailed description of the personnel training. Sampling

will be performed to ensure a representative sample is obtained. Grab samples from the discharge will be taken as required by the water quality discharge permit. Air samples will be taken as required by the air permit. At the time of closure samples will be taken of the pipes and sumps to ensure this equipment has been properly decontaminated. Samples are placed in appropriate containers and labeled with a standardized label. They are preserved, if necessary, and taken to a qualified hazardous waste testing laboratory for analysis.

B1.4.4 Sampling Techniques: QA/QC

Quality assurance and quality control in relation to sampling consists of using the following components:

1. Representative sampling methods
2. Appropriate sample containers and equipment
3. Standard labeling procedures
4. Adequate preservation of samples prior to discovery at the laboratory.
5. Chain of custody procedures.

Sampling is performed to ensure a representative sample of the waste is collected.

Containers and equipment are selected to prevent contamination or degradation of the sample. In addition, equipment is cleaned and triple-rinsed or disposed of between the collection of consecutive samples to avoid sample contamination. Labels are applied to the sample

containers at the time of sampling. Each sample is labeled with the following information, when applicable:

- Date and time sample collected
- Name of sampler
- Sample description
- Generator name
- Source of sample
- Analysis requested

Examples of Sample Preservatives

<u>Analytical Parameter</u>	<u>Preservation Technique</u>
TPH	Cool, proper preservative, pH<2
Oil and Grease	Cool, proper preservative pH<2

B1.4.5 Selection/Criteria for the Outside Laboratory

Outside laboratories will be selected to perform the analysis based on the following criteria:

- Capability of performing the required analyses;
- Response time;
- Reliability;
- Precision and accuracy of data generated; and
- Status as a Contract Laboratory Program with State hazardous testing laboratory certification.
- Listing on Chevron's approved laboratory list.

B1.4.6 Chain of Custody Procedures

A chain of custody form will be included with the sample. An example of this form is found in Appendix B-1. The form will be filled out by all personnel handling the sample.

B1.4.7 Requirements for Ignitable Wastes

The petroleum/water and sump will be tested for ignitable wastes as identified by the analytical methods described in Section B1.3, Sample Test Methods. These wastes are stored in a segregated secondarily contained storage box. These storage areas are in compliance with National Fire Protection Association (NFPA) buffer zone requirements. A fire extinguisher is located at the TTU for use in the event of a fire.

B1.4.8 Recordkeeping

As required by CCR Title 22, Section 67102 (b), all records of test results, waste analyses, or other determinations performed for the purpose of treating or disposing of hazardous waste are kept for at least 3 years at Chevron's Marketing Department and Chempro Regulatory Affairs Department.

Recordkeeping includes but is not limited to:

- Results of analyses performed by approved outside laboratories
- Chain of custody records
- Hazardous waste manifests and bills of lading

B1.5 Analytical Test Methods

Some of the analytical test methods for each waste parameter are selected from available technical methods described in the following publications (or latest edition):

1. "Standard Methods for the Examination of Water and Waste Water," 16th Edition, American Public Health Association.
2. "Test Methods for Evaluating Solid Waste," SW-846, U.S. Environmental Protection Agency, Office of Water and Waste Management, Washington, D.C. 20406, November 1986.
3. "1986 Annual Book of ASTM Standards," American Testing Society for Testing Materials, 1916 Race Street, Philadelphia, PA 19103.
4. "EPA Methods for Chemical Analysis of Water and Wastes", EPA-600/400-79-020, March 1983.

APPENDIX B-1
CHAIN OF CUSTODY FORM

Revised: April 2, 1990

SECTION C
TRANSPORTABLE TREATMENT UNIT
INSPECTION SCHEDULE

Revised: March 13, 1990

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PREFACE

CCR Title 22, Section 67104 (b)

The inspection plan is intended to detect and prevent system and equipment malfunctions and deteriorations, operator errors and unplanned discharges, which without remedial action may lead to a situation where human health or the environment are threatened. The inspection schedule is based on operational experience and engineering knowledge of the transportable treatment unit (TTU) and equipment, and the rate of possible deterioration. The inspection shall include checking safety and emergency equipment. The schedule will be kept at the transportable treatment unit.

C1.0 Inspected Equipment and Frequency of Inspection

Safety and emergency equipment is checked monthly for access and readiness in the event of an emergency. The fencing surrounding the TTU is inspected monthly. Operational equipment is inspected before use to ensure safe operation, and regular scheduled servicing is completed to maintain the equipment in good operational condition. The sumps and secondary containment structures are visually inspected monthly during operational hours, for leakage or accumulated liquids.

All the TTU units are equipped with an automated dialing phone system, that calls three emergency phone numbers when there is a problem at the site. These systems are checked monthly.

Examples of the inspection forms used at the TTU are provided in Appendix C-1. The inspection forms are designed to address all pertinent features of the equipment to ensure

their safe operation and readiness. The inspection forms will be periodically updated and modified to accommodate the changing needs of the TTU.

If a periodic inspection indicates a system or equipment malfunction, deterioration or other improper condition the following procedure for repair or remediation is followed.

The inspector notes and describes the situation in the column and comments section of the inspection form. The form is reviewed by the supervisor and the appropriate repair/remedial action for the problem or improper condition and a response level is assigned for its completion. An urgent response level indicates the repair/remedial action is to be initiated immediately and closely monitored until completion. If there is an urgent situation (e.g. leaking container) where a direct response by an employee or inspector discovering the situation is necessary, the situation will first be brought under control, after which the maintenance request form will be completed noting the situation and corrective action taken. Routine response levels for repair actions are typically expected to be completed within two weeks following their detection. Physical or operational constraints such as availability of replacement parts or equipment may require longer routine repair times.

The inspection observations and frequency of the general facility equipment is described in Tables C-1 through C-3.

TABLE C-1 INSPECTION SCHEDULE FOR SAFETY AND EMERGENCY EQUIPMENT

EQUIPMENT/AREA	INSPECTION OBSERVATION	FREQUENCY
Absorbent Materials:	100 T-156 Oil Sorbent Four 3" - 4' Sorbent Booms 50 Universal Sorbent Pads Five 6 mil poly bags	Monthly
Spill Response:	Check that barrels are intact and accessible; that barrel seals are unbroken	Monthly
	Check that Emergency Response Trailer seal is unbroken (Chempro, Berkeley)	Monthly
First Aid Kit:	Intact and accessible; inven- tory is complete (see inside cover of kit)	Monthly
Fire Extinguishers:	Intact and accessible; check that pressure gauge is charged; check that servicing tags are attached and up to date	Monthly
Phone:	Check that automatic phone is operating	Monthly

TABLE C-2 INSPECTION SCHEDULE FOR SECURITY EQUIPMENT

EQUIPMENT/AREA	INSPECTION OBSERVATION	FREQUENCY
Fences:	Check for holes, breaches	Monthly
Gates:	Verify unobstructed access; locks are intact & operable	Monthly
Facility Access:	Verify unobstructed access; verify facility exits/ assembly areas information is posted	Monthly

ABLE C-3 INSPECTION SCHEDULE FOR OPERATIONAL EQUIPMENT

EQUIPMENT/AREA	INSPECTION OBSERVATION	FREQUENCY
Drip Buckets:	Check for minimum stock: Two 5 gallon One 2.5 gallon Two small drip pans	Monthly
Facility Pumps:	Check for leaks, corrosion, hot temperatures, noises; monthly maintenance inspection	Before/ during use
Electrical Control:	Verify all electricity grounded, panel is intact, clean and accessible	Monthly
Sanitary Sewer Discharge:	Check permit date; check that flow meter is operational; check for leaks or corrosion	Monthly

APPENDIX C-1
FACILITY INSPECTION LOG

Revised: March 13, 1990

FACILITY INSPECTION LOG

Site Location: _____

Project Number: _____ Date: _____

Persons present: _____

Flow Meter Readings: _____

Collected Samples (type/time): _____

Task:	Inspected & No Action Needed	Maintenance Needed
Spill Response Materials		
Drip Buckets		
First Aid Kit		
Fire Extinguisher		
Fences/Gate/Lock		
Facility Access		
Facility Pumps		
Electrical Control Panels		
Test System Shutdown & Overflow Safety Switches		
Automatic Phone		
Sump/Secondary Containment Structure		
Permit Compliance		
Air Temperature		
Comments/Maintenance Performed		

SECTION D

TRANSPORTABLE TREATMENT UNIT
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Revised March 13, 1990

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PREFACE

CCR Title 22, Section 67105 (d)

The training program conducted by Chemical Processors, Inc. (Chempro) prepares personnel to maintain and operate the hazardous waste transportable treatment unit (TTU) in a safe manner and in compliance with regulatory requirements.

Personnel also receive the OSHA Hazardous Waste Training.

All personnel who install, operate or maintain the TTU undergo training according to this document. A copy of this document is kept at the TTU and at Chempro offices at all times.

The Chempro training document addresses the following types of training:

- General orientation training (Section D1.0)
- Job-specific introductory training (Section D2.0)
- Continuing training (Section D3.0)

All new employees receive orientation training and job-specific introductory training. Job-specific introductory training is training related to the specific duties of each job function. It is uniquely tailored for the position based on the new employee's education, experience and other qualifications.

In addition, every employee involved in the operations of the facility will participate in continuing training for hazardous waste handling. Employees receive continuing training to maintain proficiency, learn new techniques and procedures, and reinforce safety, quality and compliance consciousness.

Documentation of the training is described in Section D4.0. Job descriptions and personnel duties are provided in Section D5.0.

D1.0 GENERAL ORIENTATION TRAINING

All new employees undergo an OSHA hazardous waste handling course of approximately 40 hours. This training includes a health and safety orientation, safety rules, and an overview of personal protective equipment.

D2.0 JOB SPECIFIC INTRODUCTORY TRAINING

Employees receive introductory training relevant to their specific job responsibilities. As part of job-specific introductory training, designated employees involved in facility operations are instructed in their specific duties and responsibilities related to emergency response.

Job-specific emergency response training includes:

- Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment;
- Communications;
- Response to fires or explosions;
- Response to spill or groundwater contamination incidents; and
- Shutdown of operations.

D3.0 CONTINUING TRAINING

Continuing training is required including an eight (8) hour OSHA hazardous waste handling refresher course each year. Employees participate in other ongoing professional training.

D4.0 DOCUMENTATION OF TRAINING

Training records of employees working at the facility are maintained at Chempro. Training records of former and current employees are kept at least 3 years from the date the employee last worked at the facility.

A personal training record for each facility employee is kept at the Chempro office. All orientation, introductory and continuing training is filed at Chempro.

D5.0 PERSONNEL DUTIES, JOB DESCRIPTIONS AND REQUISITE
QUALIFICATIONS

This section contains the job descriptions for positions involved with the handling and/or the transportation of hazardous wastes at TTU. These job descriptions identify the responsibilities, job title, name of employee(s) filling each job, duties, and requisite qualifications of each position. The type and amount of education and continuing education is indicated.

JOB TITLE - MANAGER

REPORTS TO: VICE PRESIDENT OF ENGINEERING AND FIELD SERVICES

FUNCTION: Manage the day-to-day operations of the Berkeley office to ensure all jobs are accomplished safely, efficiently and in compliance with company policy and all applicable local, state and federal regulations.

NAME OF EMPLOYEE FILLING JOB: L. Blevins

DUTIES:

Manage and control personnel requirements and scheduling to ensure maximum productivity.

Conduct and/or coordinate tours for customers, regulatory agencies, employees and other approved visitors.

Develop and implement the personnel training program including orientation, on-the-job and continuing training.

Coordinate material flow including scheduling, receiving, sampling and analysis, treatment, transfer, sewer discharge and off-site disposal.

Issue routine operating reports to sales/operations departments as needed.

Oversee compliance with the Hazard Communication Standard including training, availability of material safety data sheets (MSDS) and proper storage, labeling and handling techniques.

Develop and enforce job safety practices including use of personal protective equipment, good housekeeping techniques, lockout/tagout procedures, mobile equipment operation, etc. to ensure a safe and healthy work environment for all employees.

Conduct site inspections to ensure compliance with all applicable local, state and federal regulations and identify and implement corrective action when necessary.

Manager - (continued)

Develop the operating budget and monitor on an ongoing basis by comparing actual expenses to budget and account for variances.

Maintain all required documents and records in a current, accessible and orderly manner. This includes maintaining training records, reconciling manifest discrepancies, developing waste profile sheets on generated wastes and other related information as required by generator.

Implement and coordinate published Contingency Plan emergency response procedures, as needed and act as Primary Emergency Coordinator for all TTU sites.

Direct the operations of the plant ensuring all policies and practices are in compliance with Equal Opportunity regulations and Affirmative Action commitments.

SPECIFIC SKILLS REQUIRED:

Knowledge of chemistry with an emphasis in hazardous waste treatment and handling. Thorough knowledge of all TTU operations and equipment. Ability to express self effectively, both orally and in writing. Ability to establish effective working relationships with operational groups, customers and regulators.

EDUCATION AND EXPERIENCE REQUIRED:

B.S. degree or equivalent experience and training. Minimum of 3 years experience in hazardous waste treatment operations or equivalent. Working knowledge of all applicable local, state and federal regulations. Minimum one year supervisory experience.

WORKING CONDITIONS:

Outdoor environment where there is exposure to dirt, dust, noise, odors, temperature extremes, machinery and a potential exposure to hazardous chemicals and fumes:
20%

Normal office environment: 80%

OTHER REQUIREMENTS:

Facial hair must conform to requirements of proper fitting and sealing of respiratory equipment.

JOB TITLE - CONSTRUCTION PROJECT MANAGER

REPORTS TO: MANAGER

FUNCTION:

Supervise field personnel and sub-contractor in site preparation for installation of TTU units. Manage all field operations to ensure the system is installed in compliance with local, state and federal agency regulations.

NAME OF EMPLOYEE FILLING JOB: Bill McGrath

DUTIES:

Coordinate material flow including scheduling, receiving, sampling and analysis, treatment, transfer, sewer discharge and off-site disposal.

Plan and schedule the daily work activities of the field crew so that all required work is accomplished in a timely manner. Coordinate work assignments between company personnel and subcontractors based on production schedules.

Assign work to supervisors and monitor their performance for quality, quantity, safety conformance and utilization of resources to ensure maximum effectiveness, productivity and regulatory compliance.

Investigate methods improvement projects to improve work performance of the crew and increase efficiency, productivity and compliance with regulations.

Assist in presentation of personnel training program by providing training in safety, regulations, policies and procedures.

Inspect work area and equipment including properly completing required inspection forms, identifying regulatory compliance and maintenance problems and implementing appropriate corrective action.

Construction Project Manager (Continued)

Complete and issue routine paperwork and operating reports, including manifests, monitoring logs, reconciling manifest discrepancies and other related information. etc.

Enforce and monitor safety rules and practices to ensure a safe and healthy work environment for all employees.

Responsible for company/Chevron compliance with safety and housekeeping practices and rules. Conduct crew safety meetings. Make recommendations to achieve and maintain safe working conditions.

Report and respond to emergencies, as needed. Perform published Contingency Plan emergency response procedures and act as an Alternate Emergency Coordinator for the TTU facility.

SPECIFIC SKILLS REQUIRED:

A knowledge of construction technique, federal (OSHA) and state (CalOSHA) regulations. Good problem solving and analytical skills. Ability to express self effectively, both orally and in writing. Ability to establish effective working relationships with employees, management, customers and regulators.

EDUCATION AND EXPERIENCE REQUIRED:

5-10 years experience in dangerous waste the construction industries, class A contractor license with hazardous substance remedial action endorsement. Supervisory experience required. First aid and safety training required.

WORKING CONDITIONS:

Outdoor environment where there is exposure to dirt, dust, noise, odors, heat and cold, machinery and potential exposure to hazardous chemicals and fumes: 60%

Normal office environment: 40%

OTHER REQUIREMENTS:

Facial hair must conform to requirements of proper fitting and sealing of respiratory equipment.

JOB TITLE - SHOP SUPERVISOR

REPORTS TO: MANAGER

FUNCTION:

Supervise production personnel and operations to ensure the proper handling and treatment of all wastestreams in compliance with company policy and local, state and federal regulations.

NAME OF EMPLOYEE FILLING JOB: Mike Quinn

DUTIES:

Assign work to production crew and supervise their activities throughout the shift. Audit the crew's performance for quality, quantity, safety conformance and utilization of resources to ensure maximum effectiveness and productivity.

Monitor production schedules and progress to coordinate work between shifts.

Review schedule board, shift reports, procedures and records for receiving and transporting materials to ensure accuracy, safety, efficiency and compliance with all applicable regulations.

Complete and issue routine paperwork and operating reports, including waste receipts, etc.

Inspect production area and equipment including properly completing required inspection forms, identifying regulatory compliance and maintenance problems and implementing appropriate corrective action.

Enforce and monitor safety rules and practices to ensure a safe and healthy work environment for all employees.

Assist in presentation of personnel training program by providing on-the-job training.

Report and respond to emergencies, as needed. Perform published Contingency Plan emergency response procedures and act as an Alternate Emergency Coordinator for the TTU facility.

Shop Supervisor (continued)

SPECIFIC SKILLS REQUIRED:

A knowledge of math and science. Good problem solving and analytical skills. Ability to express self effectively, both orally and in writing. Ability to assume responsibility. Ability to establish effective working relationships with others.

EDUCATION AND EXPERIENCE REQUIRED:

Bachelors degree or A.A. degree with minimum 2 years experience in related industry. Supervisory experience required. First aid and safety training required.

WORKING CONDITIONS:

Outdoor environment where there is exposure to dirt, dust, noise, odors, heat and cold, machinery and potential exposure to hazardous chemicals and fumes:
60%

Normal office environment: 40%

OTHER REQUIREMENTS:

Able to work any shift. Facial hair must conform to requirements of proper fitting and sealing of respiratory equipment.

JOB TITLE - SYSTEM TECHNICIAN

REPORTS TO: SENIOR ENGINEER

FUNCTION:

Perform a variety of duties related to processing and shipping hazardous materials. Collects samples and inspects TTU units to ensure they are in good operating condition.

NAME OF EMPLOYEE FILLING JOB:

Larry Miller, Mark Storaasli, Felicia Rein

DUTIES:

Ship and receive materials in compliance with operational procedures and regulatory requirements. Report discrepancies to supervisor.

Sample all TTU units' effluent, as required by permits, to verify the system is working properly and assure appropriate safety equipment is in place.

Distribute materials to proper storage and treatment areas. This includes operating industrial mobile equipment such as forklifts, etc. and selecting, inspecting and operating pumps, hoses, fittings, gaskets, compressors.

Conform to all job safe operating procedures including keeping equipment and work area in a clean and orderly condition, using proper chemical storage, labeling and handling techniques and using personal protective equipment.

Inspect TTU sites for proper storage, labeling, leaks, equipment and material deficiencies and process malfunctions. Report discrepancies to supervisor.

Report and respond to emergencies, as needed, and in accordance with the Contingency Plan.

JOB TITLE - FIELD SUPERVISOR

REPORTS TO: MANAGER

FUNCTION:

Supervise production personnel and operations to ensure the proper handling and treatment of all wastestreams in compliance with company policy and local, state and federal regulations.

NAME OF EMPLOYEE FILLING JOB: Jeff Allen

DUTIES:

Assign work to production crew and supervise their activities throughout the shift. Audit the crew's performance for quality, quantity, safety conformance effectiveness and productivity.

Monitor production schedules and progress to coordinate work for field installation crew.

Review schedule board, shift reports, procedures and records for receiving and transporting materials to ensure accuracy, safety, efficiency and compliance with all applicable regulations.

Complete and issue routine paperwork and operating reports, including manifests, waste receipts, etc.

Inspect production area and equipment including properly completing required inspection forms, identifying regulatory compliance and maintenance problems and implementing appropriate corrective action.

Enforce and monitor safety rules and practices to ensure a safe and healthy work environment for all employees.

Assist in presentation of personnel training program by providing on-the-job training.

Report and respond to emergencies, as needed. Perform published Contingency Plan emergency response procedures and act as an Alternate Emergency Coordinator for the TTU.

Field Supervisor (continued)

SPECIFIC SKILLS REQUIRED:

A knowledge of math and science. Good problem solving and analytical skills. Ability to express self effectively, both orally and in writing. Ability to assume responsibility. Ability to establish effective working relationships with others.

EDUCATION AND EXPERIENCE REQUIRED:

Bachelors degree or A.A. degree with minimum 2 years experience in related industry. Supervisory experience required. First aid and safety training required.

WORKING CONDITIONS:

Outdoor environment where there is exposure to dirt, dust, noise, odors, heat and cold, machinery and potential exposure to hazardous chemicals and fumes:
60%

Normal office environment: 40%

OTHER REQUIREMENTS:

Able to work any shift. Facial hair must conform to requirements of proper fitting and sealing of respiratory equipment.

McGrath just reported on board and will be receiving the required OSHA training.

SECTION E

CHEVRON'S LIVERMORE SERVICE STATION #9-1924
TRANSPORTABLE TREATMENT UNIT
CONTINGENCY PLAN

Revised January 29, 1991

SECTION E: CONTINGENCY PLAN

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PREFACE

CAC Title 22, Section 67140

The objectives of the Contingency Plan are to minimize and prevent hazards to human health or the environment from fires, explosions or any unplanned, sudden or non-sudden release of hazardous wastes or hazardous waste constituents to air, soil or surface water. This plan will be implemented immediately wherever there is a fire, explosion or release of hazardous wastes. This plan also applies to the management of hazardous materials, in which a release may require preventative and responsive actions on the part of Chevron. A current copy of this plan is kept at the transportable treatment unit (TTU) at all times and is provided to the appropriate State and local authorities.

E1.0 GENERAL FACILITY DESCRIPTION

E1.1 Facility Identification, Location and Site Plan

Transportable Treatment Unit

Facility Owner

Chevron USA, Inc.

P.O. Box 5004

San Ramon, CA 94583-0804

Transportable Treatment Unit

Operator

Chemical Processors, Inc. (Chempro)

950 Gilman St., Suite B

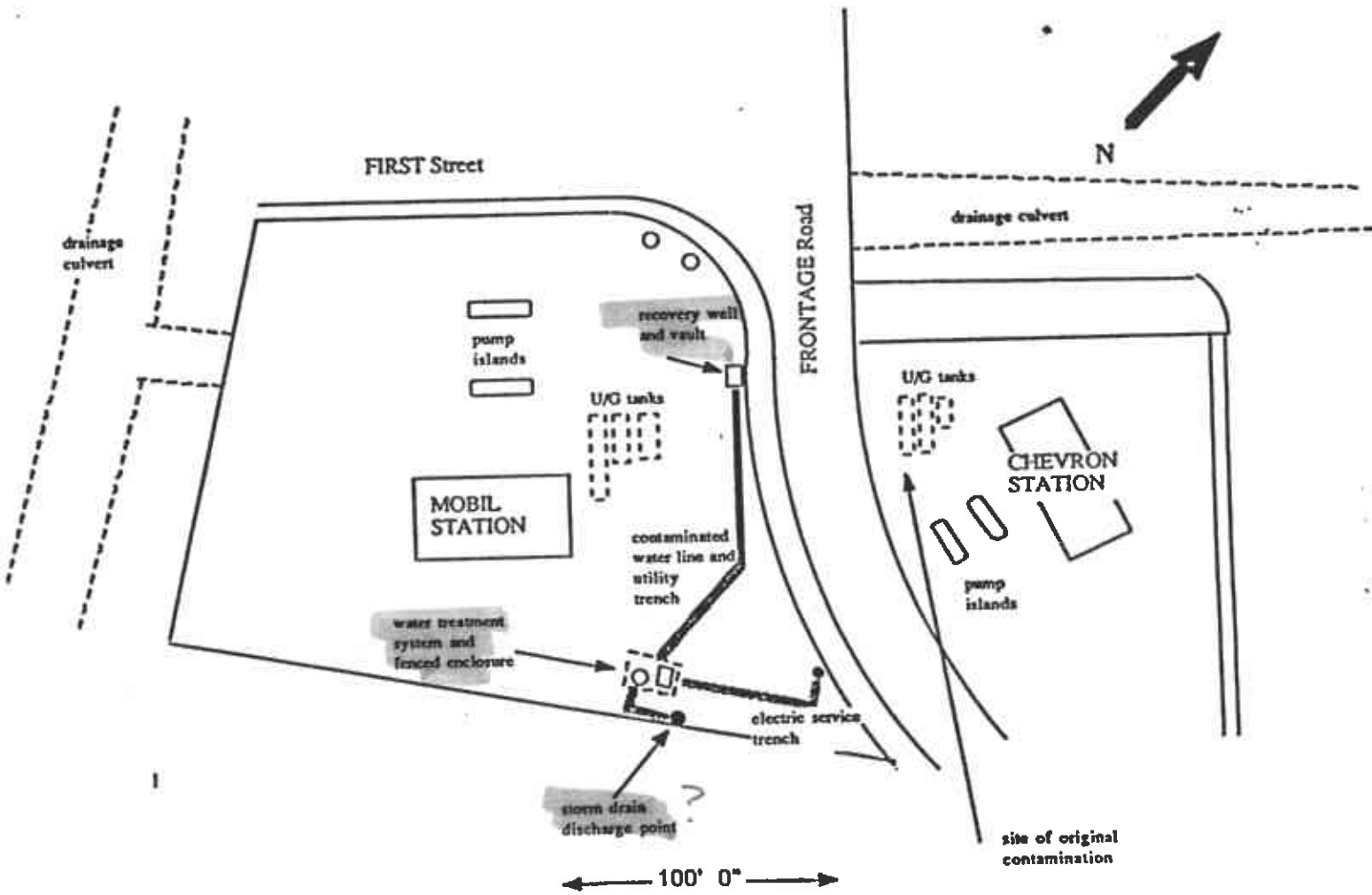
Berkeley, CA 94710

(415)524-9372

Location

The transportation treatment unit is located at 4904 South Front Street, Livermore, California. Vehicles transporting hazardous waste from the facility leave the site along First Street to Interstate 580. Access to I 580 is from the First Street exit in Livermore.

Figure E1-1 shows the access routes to the Chevron Service Station and the location of the transportable treatment unit on the service station property.



CHEMPRO ENVIRONMENTAL SERVICES

Job 887041 DWG by JLH Date 06/20/89

**GENERAL SITE PLAN
CHEVRON STATION#91924
4904 S. FRONT ST.
LIVERMORE, CA**

**FIGURE
E1-1**

E2.0 FACILITY OPERATIONS

The transportable treatment unit operates 24 hours per day seven days per week. The entire TTU is surrounded by an eight-foot-high chain link fence. All gates are kept closed and locked. Personnel inspect the facility at least monthly in accordance with Section C, Inspection Schedule.

E3.0 EMERGENCY COORDINATOR RESPONSIBILITIES

The Emergency Coordinator (EC) (or his/her designee when the emergency coordinator is unavailable) is responsible for coordinating emergency response procedures in the event of imminent or actual fires, explosions, unplanned releases, spills or other emergency situations occurring at the facility. The EC's duties include the following:

- identify and assess the character, exact source, severity and aerial extent of any released material(s) involved in the situation;
- assess potential hazards to human health or the environment;
- initiate the Contingency Plan, if appropriate and evacuation of the facility if necessary;
- direct containment and control of the released material;
- notify state or local emergency agencies, as needed;

- notify the State Office of Emergency Services;
- initiate appropriate clean-up operations.

The EC is thoroughly familiar with all aspects of the Contingency Plan and all operations and properties of wastes handled, the location of all records within the TTU in accordance with CAC Title 22, Section 67144.

The Primary or an Alternate Emergency Coordinator (EC) will be on call at all times during both operational and non-operational hours. The on-duty EC can be reached by telephone or personal pager. Table E3-1 lists the names, addresses, office and home telephone numbers of the Chevron's designated Primary Emergency Coordinator and Alternate in the order in which they assume Emergency Coordinator responsibilities.

The TTU will automatically shut down if there is an equipment malfunction. The following phone numbers will be automatically dialed:

(415) 524-9327.....Chempro, Paul Goble

(415) 881-5569.....Larry Miller's home

TABLE E3-1. EMERGENCY COORDINATORS, CHEVRON FACILITY

EMERGENCY COORDINATORS	TELEPHONE NUMBERS		HOME ADDRESS
	DAY	EVENING	

Primary

1. Paul Goble (415) 524-9372 (415) 943-7565 2967 Santos Ln, #303
Walnut Creek, CA
Title: Chempro Manager

Alternates

2. Chevron's Maintenance (800)772-2415 (800)772-3301
3. Gordon Davitt (415) 842-9525
Title: Chevron Engineer

E4.0 IMPLEMENTATION OF THE CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Where human health or the environment are threatened, the following emergencies would call for the implementation of the Contingency Plan in accordance with CAC Title 22, Section 67140:

- a. Fire/explosion anywhere on premises.
- b. On-site and off-site releases of hazardous wastes.
- c. The occurrence of natural disasters.

Listed below are more detailed examples of the emergency incidents described above.

a. Fire/Explosion

- A fire in which the use of water or water and chemical fire suppressant could result in contaminated runoff.
- A fire which causes the release of toxic fumes.
- A fire which spreads and could possibly ignite stored materials in other locations on site.
- A fire which could cause heat-induced explosions of materials/chemicals on site. The potential for explosion poses hazards of flying fragments, ignition of other hazardous materials and their release.

b. Material Release

- A sudden or non-sudden release which poses a threat to human health or the environment outside the facility or is an uncontrolled release of a reportable quantity of a hazardous substance.
- A release on site which has been contained yet the potential exists for contamination of soil, surface or groundwater.
- A release which cannot be contained on site, resulting in off-site soil or surface water or potential groundwater contamination.
- A release of gas to the air originating from an explosion of materials.

c. Natural Disaster

- A release or potential for release of hazardous materials caused by earthquake or severe flooding conditions which damage equipment, foundations or structures.
- A release or potential for release of hazardous materials caused by a severe storm involving high velocity winds or lightning which damage or overturn the unit.

E4.1 Employee Response

Any employee, when faced with an actual or imminent emergency, will first attend to his safety. Then, if it is safe to do

so, he will attend to other employees requiring immediate assistance. The employee will also notify all facility personnel of the need for assistance.

In all emergency situations (regardless of size or extent) the employee involved in or discovering the situation will contact the Emergency Coordinator (EC) and provide information as to the location, nature and extent of the incident. The names, addresses and telephone numbers of the Primary and Alternate Emergency Coordinators are found in Table E3-1.

E4.2 Emergency Coordinator Response

The EC will immediately assess the situation to determine the appropriate emergency response actions including implementation of the Contingency Plan where human health or the environment are threatened. The EC will evaluate the severity and nature of the incident, and the character, source, quantity and extent of the released materials will be identified. If necessary, the EC will contact outside emergency service providers. Neighboring facilities/personnel who may be in danger will be notified. The notification of facilities/personnel who may be in danger will be determined by the local fire department and the EC.

In the event of any emergency (regardless of size or extent) the EC will contact Chevron's Maintenance Dispatch and Chempro

and, as required, appropriate local, state and federal agencies will be notified.

The selection of appropriate response actions will depend on the consideration and assessment of the following factors:

- a. The severity and nature of the incident; fire, explosion or material release.
- b. The potential of severe consequences; what is the location of the incident and to what extent might other areas become involved; are persons off site in danger; will surrounding property be damaged or contaminated; is there a threat to surface and groundwater?
- c. The current weather conditions; temperature, wind direction and velocity and how response activities might be affected.

Identification of the character, exact source, amount and aerial extent of the released materials can be made through the following sources of information:

- a. Eyewitness accounts; employee discovering emergency.
- b. Visual inspection; areal extent, noted fumes, odors, reactions.
- c. Source; origin of leak.
- d. TTU module involved; type of waste treated.

e. Location of incident.

A sampling and analysis plan to quantify the extent of contamination and associated extent of clean up will be initiated if identification of the released material cannot be made from the above sources of information.

E4.4 Containment and Control of Emergencies

The sections which follow discuss emergency response procedures to minimize possible impact of emergency incidents on human health or the environment. These containment and control procedures may not entail the complete implementation of the Contingency Plan. Emergency response procedures are described for the containment and control of emergency situations including injured or endangered employees (Section E4.3.1), fires and explosions (Section E4.3.2), spills and releases (E4.3.3), flood conditions (Section E4.3.4).

The EC will commit all necessary resources of the company and may also call a contract clean-up service to assist in the control, containment and clean up of a release. The EC will coordinate the activities of the emergency response agencies.

Section E6.0 lists the type, location and description of the emergency equipment maintained at the facility. Figure E4-1 shows the locations of the facility's emergency and fire control equipment.

E4.4.1 Injured or Endangered Employees

- Alert others who may be endangered, call for backup.
- Use appropriate protective clothing and equipment.
- Apply first aid; first aid kits are located in the TTU and Chempro trucks.
- Phone 911 if ambulance is needed.
- Immediately notify EC (Table E3-1).

E4.4.2 Fires and Explosions

- Shout "FIRE" warning.
- Alert others who may be endangered ,call for back up.
- Cut off source, close valves, shut down pumps/equipment.
- Use appropriate protective clothing and equipment.
- Control small fires with extinguishers located at the TTU (Figure E4-1).
- Phone 911.
- Immediately notify EC (Table E3-1).
- Attempt to contain spills or runoff by use of absorbent material and diking material. Plug sewer and storm system drains.

- Remove or isolate incompatible wastes, containers and other materials away from fire when possible.

E4.4.3 Spills and Releases

Loading Hazardous Waste - Filled Drums Spill

- Alert others who may be endangered , call for back up.
- Cut off source, close valves, shut down pumps, eliminate ignition sources.
- Immediately notify EC (Table E3-1).
- Use appropriate protective clothing and equipment.
- Attempt to contain spills or runoff by use of absorbent material and diking.
- Remove or isolate incompatible wastes from the affected area when possible.

Sump Leak

- Alert others who may be endangered , call for back up.
- Cut off source to sump, close valves, shut down pumps, eliminate ignition sources.
- Immediately notify EC (Table E3-1).
- Use appropriate protective clothing and equipment.
- Provide for containment of spill if containment berms have been damaged.

- Remove or isolate incompatible wastes from the affected area when possible.
- After quantity and character of spill has been determined, transfer remaining contents of leaking sump to an appropriate storage tank.
- Assess reason for leak.

Piping Leaks or Ruptures

- Alert others who may be endangered, call for back up.
- Cut off flow, close valves, shut down pumps.
- Use appropriate protective clothing and equipment.
- Use absorbent materials and diking to contain spill and prevent exposure to incompatible materials.
- Immediately notify EC (Table E3-1).
- Remove or isolate incompatible wastes from the affected area when possible.
- After quantity and character of spill has been determined, transfer spilled material in pipes, sumps or bermed area to an appropriate storage tank.

Non-Permitted Discharge to Sewer

- Cut off flow, close valves, shut down pumps.
- Immediately notify EC (Table E3-1).

- Record event, noting quantity, source and duration of release.
- Contact sewer district as required by permit.

E4.4.4 Flood Conditions

- Alert others who may be endangered, call for back up.
- Use appropriate protective clothing and equipment.
- Eliminate ignition sources, shut down operations.
- Immediately notify EC (Table E3-1).
- Use diking to prevent flooding of the TTU.

The EC will take all necessary and reasonable steps to ensure that a secondary release, fire or explosion does not recur after the initial incident.

If the facility stops operations in response to a fire, explosion or release, the EC will monitor pressure build up, or leaks and ruptures in valves, pipes or other equipment until the emergency has ended and normal operations can resume.

The EC together with the assistance of Chevron's Marketing Department will evaluate the incident to understand why and how the incident occurred and what future modifications can be initiated to prevent a recurrence of the same or similar

situation. Evaluations will include equipment design, operational procedures, response tactics and personnel safety.

E4.3 Notification

The EC will contact Chevron's Maintenance Dispatch or Chempro's manager in the event of any emergency regardless of size or extent. The EC will supply specific information as to the type, quantity and location of released material.

Chevron's Maintenance Dispatch and/or Chempro together with the EC will evaluate this information and if it is determined that the facility has had a hazardous substance release, fire or explosion which could threaten human health or the environment outside the facility or is an uncontained release of a reportable quantity of a hazardous substance, the proper local and state agencies will be immediately notified by Chevron's Maintenance Dispatch. The EC will immediately contact these agencies if it is readily determined that the emergency threatens human health or the environment outside the facility. The name and phone numbers of these agencies are listed below.

- a. State Office of Emergency Services (916) 427-4341
- b. Local Fire Department (916) 373-5400 or 911
- c. Local Police Department (916) 373-5300
- d. National Response Center (800) 852-7550
- e. Regional Water Quality Control Board, if potential for release to water, soil or ground water (916) 225-2045

- f. AQMD, if release to air exceeds permit limitations
(415) 771-6000
- g. County Environmental Health (415) 271-4320
- h. Reclamation Plant, if discharge exceeds permit limits
and if required by the permit (415) 447-2896
- i. Sheriff (916) 667-7721

Specific information concerning the spill will need to be provided to the agencies. An example Emergency Information Reporting Form is located in Appendix E-1. Copies of this form are located at the TTU and with Chevron's Maintenance Dispatch and Chempro Regulatory Affairs Department.

Notification to the Office of Emergency Services will include the following:

- Name and phone number of reporter,
- Name and address of facility,
- Time and type of incident (eg. fire, release),
- Name and the quantity of material(s) involved to the extent known,
- Extent of injuries, if any, and
- Possible off-site hazards to human health or the environment outside the facility.

Notification to Local and other State agencies will further include, to the extent known:

- Duration of the release,
- Medium or media into which the release occurred,
- Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for the exposed individuals.
- Proper precautions to take as a result of the release, including evacuation, and
- Names and telephone numbers of person(s) to be contacted for further information.

A written report on any event which requires implementation of the contingency plan will be submitted to the Department of Health Services within 15 days including the following:

- Name, address and telephone number of the owner,
- Name, address and telephone number of the facility,
- Date, time, and type of accident,
- Name and quantity of material(s) involved,
- The extent of injuries if any,
- An assessment of actual or potential hazards, and

- Estimated quantity and disposition of recovered material resulting from the incident.

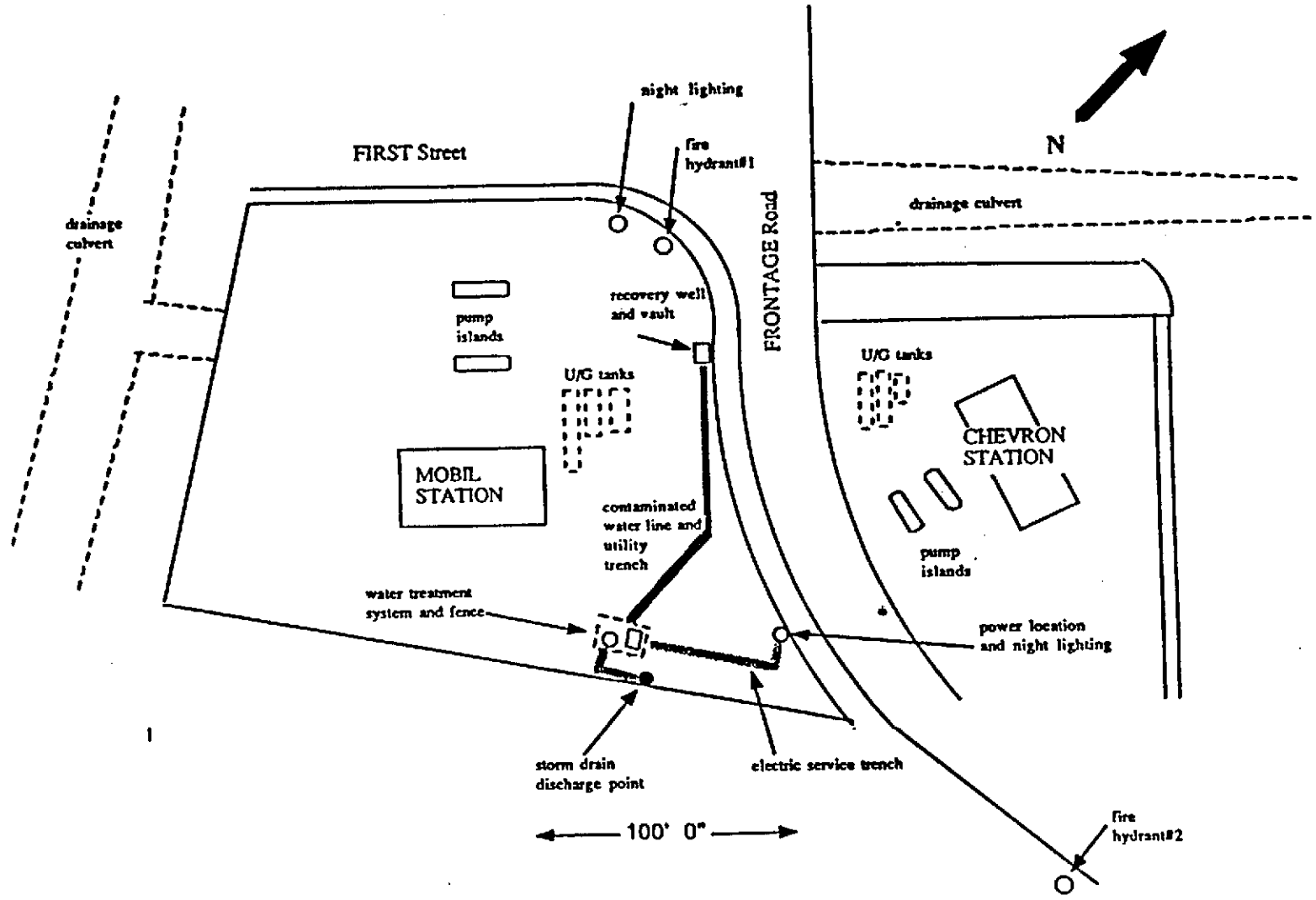
Job 887041 Dwg by JLH Date 06/20/89



CHEMPRO ENVIRONMENTAL SERVICES

**EMERGENCY/FIRE CONTROL DIAGRAM
CHEVRON STATION#91924
4904 S.FRONT ST.**

**FIGURE
E4-1**



E5.0 EMERGENCY EQUIPMENT

Table E6-1 lists the type, location, and description of emergency equipment maintained on site at the Chevron facility. Figure E4-1 shows the locations of the facility's emergency equipment and fire control equipment. Quantities of emergency equipment listed in Table E5-1 represent minimum stock quantities. Procedures for regular inspection of emergency equipment are described in Section C, Inspection Schedule.

TABLE ES-1 - EMERGENCY EQUIPMENT, CHEVRON TTU

<u>EQUIPMENT</u>	<u>LOCATION</u>	<u>DESCRIPTION/ USE/CAPABILITIES</u>
Absorbent Materials		Free liquid absorbent, diking, spill containment.
- general absorbents	Spill Kit adjacent to TTU	- 1 case universal absorbent - 4 - 3" x 4' absorbent booms - 100 Oilabs/water repellent pads
- general absorbents	Chempro response trailer	- 4 - 50 lb. bags safe-t-sorb - 3" x 4' abs. booms
Overpack Drums	Chempro response trailer	- contain leaking drums - 85 gal - stock 10 total
Hand Tools	Chempro response trailer	
- brooms	Chempro response trailer	- clean up - hand and push, stock 6 total
- shovels	Chempro response trailer	- spreading, digging - spade and flat blades, stock 10 total
- squeegees	Chempro response trailer	- corral free liquids - stock 4 total
- scrapers	Chempro response trailer	- scrapping, chipping - stock 4 total
- wheelbarrow	Chempro response trailer	- hauling, consolidation - stock 1 each
- drum dolly	Chempro response trailer	- moving drums
- visquine (plastic)	Chempro response trailer	- protection from exposure - appx. 32 x 100 ft. rolls - stock 1 roll
- barrier tape	Chempro response trailer	- sealing off areas - high visibility, printed with caution warning - stock 500-1000 feet
Drip Buckets	Adjacent to TTU	- contain small drips, leaks - 5 - 5 gal, 2 - 2.5 gal, 2 small - 5 total

TABLE ES-1. EMERGENCY EQUIPMENT, CHEVRON TTU

<u>EQUIPMENT</u>	<u>LOCATION</u>	<u>DESCRIPTION/ USE/CAPABILITIES</u>
Gloves	Chempro response trailer	- protection from exposure - PVC, nitrile - stock 10-15 pair total
Coveralls	Chempro response trailer	- protection from exposure - tyvek, disposable - stock 5 pair
Rain Suits	Chempro response trailer	- protection from exposure - PVC, jackets and pants - stock 5 pair
Florescent Safety Vest	Chempro response trailer	- stock 10
Hearing Protection	Chempro response trailer	- foam plug type - stock 1 box
Safety Goggles	Chempro response trailer	- stock 5 pairs
Traffic Cones	Chempro response trailer	- stock 25
Emergency Lighting	Chempro response trailer	- 2 - halogen floodlights 2 - DC lanterns 2 - DC floodlights portable 2,000 watt generator 15 - flashing lights for cones
First Aid Kits	Chempro response trailer	- on-site first aid, minor injuries
Fire Extinguishers	Adjacent to TTU	- portable, multi and specific purpose size and type; A= ordinary combustible, B= flammable liquids, C= electrical,
#1	Adjacent to TTU	- 10A:80BC
#2	Chempro response trailer	- 10A:80BC
#3 & 4	Chempro response trailer	- 1A:10BC
Fire Hydrants	Frontage Road <hr/> <hr/>	- water for fire control - maintained by City of Livermore
Diaphragm Pump	Chempro response trailer	- one 1/2" with hoses
Air Compressor	Chempro response trailer	- for diaphragm pump

TABLE ES-1. EMERGENCY EQUIPMENT, CHEVRON TTU

<u>EQUIPMENT</u>	<u>LOCATION</u>	<u>DESCRIPTION/ USE/CAPABILITIES</u>
Electrical Control Panels	Adjacent to TTU	- circuit breaker panels for TTU electrical system and equipment
Automated Phone Dialing System	TTU	- Phone system which dials three numbers if equipment shuts down
Shutdown and Overflow Switcher	TTU	- Shuts down equipment if pump or other operating equipment malfunctions. Prevents sump overflow.

E6.0 POST EMERGENCY ACTIVITIES

Once the emergency situation has ended, the EC will initiate the proper clean up, storage and treatment of the released material and residues. This will occur as soon as possible in order to minimize potential danger to human health or the environment.

Spill residues and clean up materials such as absorbents, diking material and protective clothing will be consolidated for off-site disposal. Water from fire control or flooding will be contained, collected, analyzed and removed for storage/treatment if contaminated.

The EC is responsible for initiating and overseeing post-emergency equipment replenishment, maintenance and inspection

All equipment used during the emergency will be decontaminated (if necessary) and readied for future use. Decontamination will be done by steam cleaning and/or triple washing with appropriate cleaner. All rinsate will be contained and tested to determine appropriate disposal. Fire extinguishers will be recharged and personnel protective equipment and absorbent materials replenished.

E7.0 EVACUATION PLAN

In the event a fire or release of a hazardous material could endanger the lives of persons in and outside the facility premises, evacuation of the facility will occur according to procedures outlined below. A map indicating the exit routes and assembly areas is posted outside of the unit (figure E7-1).

- The EC coordinates all evacuation procedures.
- All personnel will be immediately notified of an emergency requiring evacuation to the primary or secondary assembly area.
- Neighboring facilities/personnel will be notified if necessary by Chevron personnel or by emergency response personnel (e.g. police, fire).
- The primary assembly area is across Frontage Road northeast of the facility; if this area is downwind of potentially hazardous emissions, the secondary assembly area is north of the facility across the Frontage Road and First Street intersection (Figure E7-1).

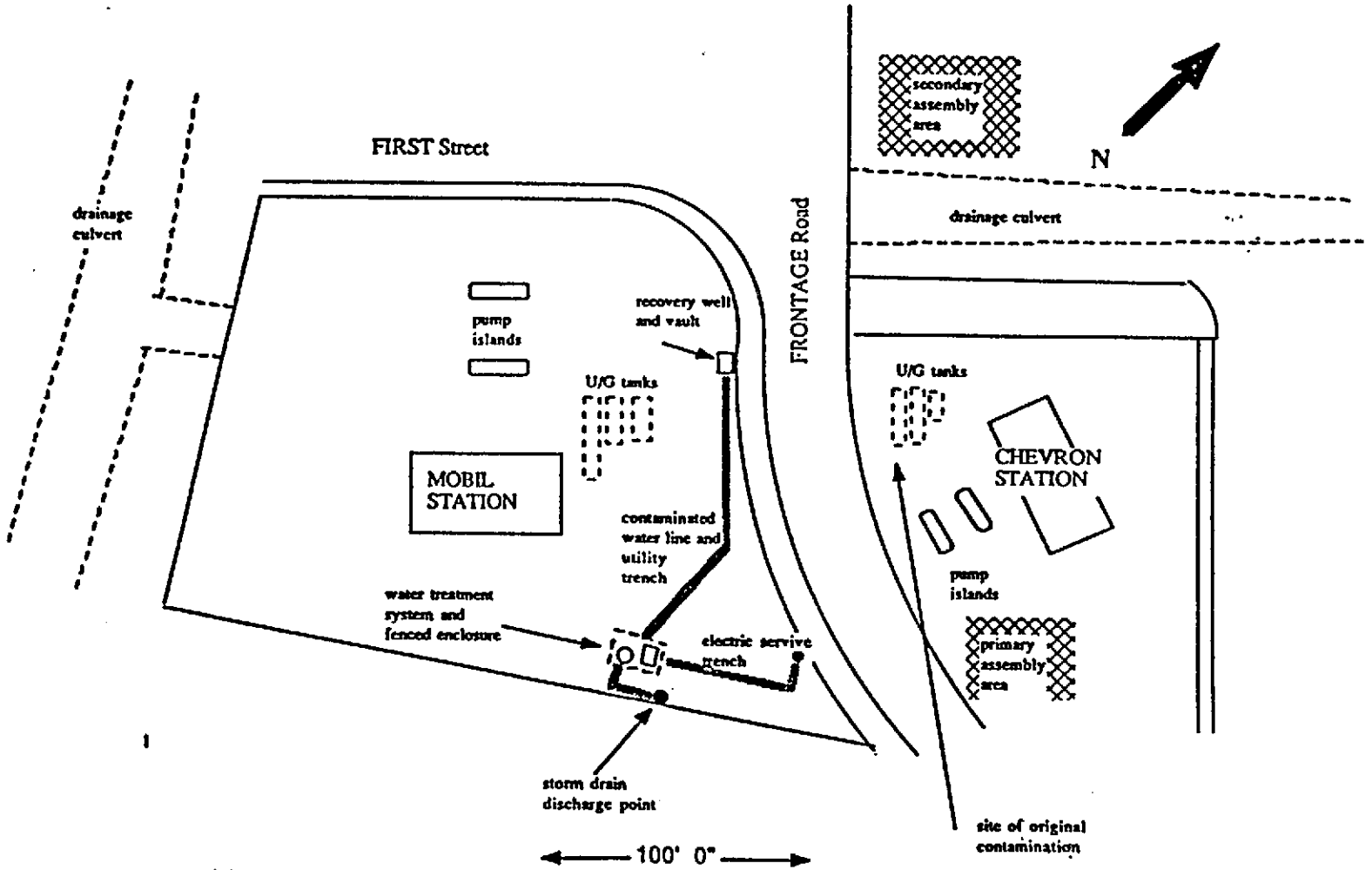
- At the assembly area, the EC or designee will account for all persons.
- Call 911 - Emergency.
- Notify neighboring facilities/personnel if necessary.
- The local fire department in conjunction with the EC will determine the need to evacuate beyond the area of the service station.
- No one will re-enter the TTU during evacuation conditions without the permission of the EC and without the proper protective clothing and equipment.
- Approval of the safe re-occupancy of the TTU area will be determined by the EC in consultation with the responding emergency service agencies.

Job 887041 Dwg by JLH Date 06/20/89

CHEMPRO ENVIRONMENTAL SERVICES

EVACUATION PLAN
CHEVRON STATION#91924
4904 S. FRONT ST.
LIVERMORE, CA

FIGURE
E7-1



E8.0 ARRANGEMENT WITH LOCAL AUTHORITIES

Pursuant to Title 22, Section 67126, Chevron or Chempro at Chevron's request have contacted local emergency agencies to familiarize police, fire departments, emergency response teams and the local office of Emergency Services with the contingency plan for the TTU.

E9.0 AMENDMENTS TO CONTINGENCY PLAN

The Contingency Plan will be reviewed and amended for the following reasons:

- a. Applicable regulations or the TTU permit are revised.
- b. The plan fails in an emergency.
- c. The TTU changes (in its design, construction, operation, maintenance, or other circumstances) in a way that materially increases the potential for fires, explosions, or releases of dangerous waste or dangerous waste constituents, or in a way that changes the response necessary in an emergency.
- d. The list of Emergency Coordinators changes.
- e. The list of emergency equipment changes.

Copies of the updated Contingency Plan will be distributed to the emergency agencies, and Chevron personnel responsible for its implementation.

APPENDIX E-1
EXAMPLE EMERGENCY INFORMATION
REPORTING FORM

CHEMICAL PROCESSORS
EMERGENCY INFORMATION REPORTING FORM

NAME AND ADDRESS OF FACILITY	NAME OF REPORTER AND PHONE # WHERE REPORTER MAY BE LOCATED
NAME AND PHONE NUMBERS OF ADDITIONAL CONTACTS FOR INFORMATION	
DATE	TIME
TYPE OF INCIDENT (SPILL, GAS RELEASE, ETC.)	MEDIUM INTO WHICH RELEASE OCCURRED (WATER, AIR, SOIL, ETC.)
IDENTIFICATION OF MATERIAL	
IS MATERIAL AN EXTREMELY HAZARDOUS SUBSTANCE? (REF: APPX A & B, 40 CFR 355)	QUANTITY AND DURATION OF RELEASE
POSSIBLE HAZARDS TO THE ENVIRONMENT	
ASSOCIATED ACUTE OR CHRONIC HEALTH RISKS (KNOWN OR ANTICIPATED)	
PRECAUTIONS TO BE TAKEN	
EXTENT OF INJURIES	
OTHER COMMENTS	