**Harding Lawson Associates**

August 25, 1987

18106,002.04

Blue Print Service Company
c/o Garcia/Wagner and Associates
555 Sutter Street
San Francisco, California 94102

Attention: Mr. Felix Rodriguez

Gentlemen:

Professional Services during Tank Removal
City Blue Production Facility
17th and Jefferson Streets
Oakland, California

This letter presents the results of our investigation and observations during the removal of three underground gasoline tanks at the City Blue Production facility site at 1700 Jefferson Street, Oakland, California. Our work was performed in accordance with the guidelines for addressing fuel leaks by the California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region.

BACKGROUND

The former underground fuel storage system comprised a cluster of three gasoline tanks of steel construction. The two outer tanks (east and west) had a 1000-gallon capacity and the center tank had a 550-gallon capacity. The age of the tanks is unknown. A sketch of the excavation to remove the underground storage tanks is presented on the Site Plan, Plate 1.

We previously performed a soil investigation and preliminary hazardous waste assessment for the project and presented the results in reports dated May 4 and June 3, 1987, respectively. The results of our preliminary hazardous waste assessment indicated that some gasoline had leaked. From conversations with employees of the Blue Print Service Company, we understand that the tanks were pressure-tested four to five years before our investigation, but no documentation of tank testing or test results is available.

FIELD INVESTIGATION AND OBSERVATIONS

On June 15, 1987, we were notified that tank removal activities would begin the following afternoon. When HLA's field engineer arrived on site, the three underground storage tanks and all product lines and dispensers had been removed from the excavation. The tanks were removed by Thomas Eychner Demolition Company of Oakland, California. Tank Removal Permit No. 8996, dated June 3, 1987, was obtained by the contractor from the City of Oakland. To our knowledge, no inspector from the Oakland Fire Department or the Alameda County Health Department was on site during tank removal.

Following removal of the three tanks, our field engineer observed the excavation sidewalls and bottom, collected samples of native soils underlying the excavations, and submitted the samples for laboratory analysis. The excavations for removal of the product lines and dispensers were backfilled and could not be sampled. The observed soils consisted of brown silty sand fill (tank backfill) and orange-brown clayey sand (native soil). Gasoline staining was observed in the majority of the silty sand backfill and in the native soil at the bottom of the excavation at the eastern end. Both the backfill and the native soil had a moderate to strong petroleum odor. The bottom of the excavation was approximately 8 feet below ground surface, and no free water was encountered. After the sampling, the excavation was deepened to approximately 9-1/2 feet below the ground surface so that contaminated soil within reach of the excavation equipment could be removed. All excavated soil was stockpiled adjacent to the excavation.

The three tanks were in poor condition. Numerous cracks were found in the steel sidewalls and end seams; some pitting of the steel was also observed. Because we did not observe the actual tank removal, we do not know which, if any, of the cracks in the tanks occurred during removal.

SOIL SAMPLING AND CHEMICAL ANALYSIS

The soil was sampled and the samples preserved in accordance with the RWQCB guidelines. All soil samples from the tank excavations were collected from the backhoe bucket, which had excavated approximately 18 inches below the floor of the excavation at the ends of each tank. Each soil sample was inserted into a clean brass tube, which was then closed with aluminum foil, capped, and sealed with tape. All sample tubes were stored on ice until delivery to the analytical laboratory.

The samples were delivered with proper chain-of-custody records to Trace Analysis Laboratory (TAL) in Hayward, California on the day they were collected. The samples were analyzed for total volatile petroleum hydrocarbons (TVH) by EPA-approved methods. The results of the analysis are presented on the attached TAL laboratory report and summarized in Table 1.

Table 1. Analysis Results

| Sample No. | Sample Location within Tank Excavation | Total Volatile Hydrocarbon Concentration (parts per million) |
|---|---|---|
| 1 | Northwest at 9 feet | 17 |
| 2 | Southwest at 9 feet | 170 |
| 3 | North Center at 6.5 feet | 8800 |
| 4 | South Center at 6.5 feet | 2900 |
| 5 | Northeast at 8 feet | 920 |
| 6 | Southeast at 8 feet | 690 |

STOCKPILE SAMPLE ANALYSIS

Three soil samples were collected from three separate areas within the stockpile. The samples were composited and analyzed by TAL for TVH. The TVH concentration was found to be 410 parts per million (ppm), which is noted in the attached TAL report.

CONCLUSIONS

On the basis of the results of our preliminary hazardous waste assessment and our observations and chemical analysis during tank removal, we conclude that at least one, and possibly all, of the clustered gasoline tanks have leaked. Although it is likely that some overfill spillage occurred, the condition of the tanks and the extent of hydrocarbons encountered in the soils also indicates leakage. Both overfilling and leakage may have contributed to the measured hydrocarbon concentrations.

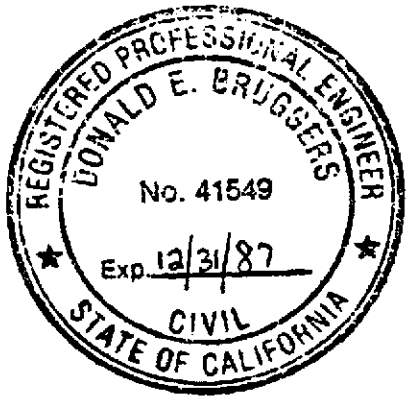
We trust that this provides the information you require at this time. If you have any questions, please call.

Yours very truly,

HARDING LAWSON ASSOCIATES

Daniel A. Louis
Project Engineer

Donald E. Bruggers
Civil Engineer




DAL/DEB/nlh

Attachments: Plate 1 - Site Plan
TAL Report

cc: Blue Print Service Company
149 Second Street
San Francisco, California 94105
Attention: Mr. Paul Koze

3 copies submitted

Depressed Area

EXISTING THREE STORY BRICK BUILDING WITH BASEMENT

EXISTING TWO STORY BRICK BUILDING

EXISTING CONCRETE BLOCK WALL

Concrete Walkway

Site Boundary

PROPOSED PARKING AREA

EXISTING TWO STORY WOOD FRAME BUILDING WITH BASEMENT

PROPOSED CITY BLUE PRODUCTION FACILITY

Gas Filler Caps

Pump Island

EXISTING ONE STORY METAL FRAME GAS STATION

Brick Wall

JEFFERSON STREET

Concrete Sidewalk

SEVENTEENTH STREET

**EXPLANATION**

1 — Boring and Number Location, this Investigation

4 — Boring and Number Location, Underground Tank Investigation

N

0 16

Scale in feet

REFERENCES: 1. "Preliminary Site Plan, City Blue Production Facility, 1700 Jefferson Street, Oakland, California," by Garcia/Wagner and Associates, dated Feb. 17, 1987.
2. Untitled Survey (partial print), Seventeenth Street and Jefferson Street, Surveyor unknown

Harding Lawson Associates
Engineers, Geologists & Geophysicists

**Site Plan** (Soil Investigation)
City Blue Production Facility
Oakland, California

PLATE 1

| DRAWN | JOB NUMBER | APPROVED | DATE | REVISED | DATE |
|---|---|---|---|---|---|
| AG | 18106,001.04 | DL | 2/87 | | |

Depressed Area

EXISTING THREE STORY BRICK BUILDING WITH BASEMENT

EXISTING TWO STORY BRICK BUILDING

EXISTING CONCRETE BLOCK WALL

Concrete Walkway

Site Boundary

JEFFERSON STREET

Concrete Sidewalk

Approximate Boundary of Tank Removal Excavation

Gas Filler Caps (removed)

Pump Island (removed)

ONE STORY METAL FRAME GAS STATION (removed)

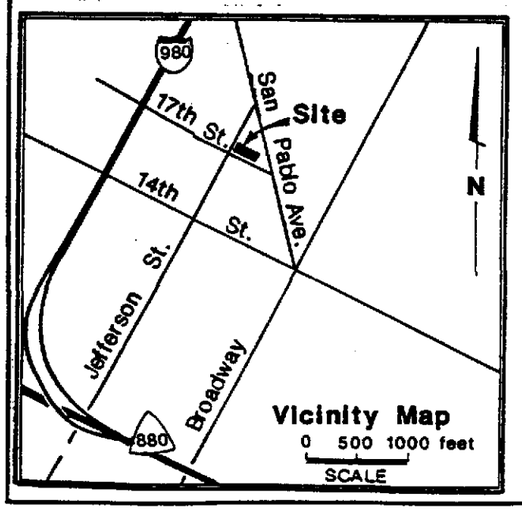
PROPOSED CITY BLUE PRODUCTION FACILITY

EXISTING TWO STORY WOOD FRAME BUILDING WITH BASEMENT

Brick Wall

Concrete Sidewalk

SEVENTEENTH STREET




**EXPLANATION**

1 Boring and Number Location, (Previous Investigations)

REFERENCES:

1. "Preliminary Site Plan, City Blue Production Facility, 1700 Jefferson Street, Oakland, California," by Garcia/Wagner and Associates, dated Feb. 17, 1987.
2. Untitled Survey (partial print), Seventeenth Street and Jefferson Street, Surveyor unknown.

N

0 16

Scale in feet

**Harding Lawson Associates**
Engineers, Geologists & Geophysicists

**Site Plan**
City Blue Production Facility
Oakland, California

PLATE 1

| DRAWN | JOB NUMBER | APPROVED | DATE | REVISED | DATE |
|---|---|---|---|---|---|
| AG | 18106,001.04 | DL | 2/87 | DL | 8/87 |

Depressed Area

EXISTING THREE STORY BRICK BUILDING WITH BASEMENT

EXISTING TWO STORY BRICK BUILDING

CONCRETE BLOCK WALL

Concrete Walkway

Site Boundary

MW-1

Approximate Boundary of Tank Removal Excavation

Tank Excavation Stockpile

MW-2

MW-3

PROPOSED CITY BLUE PRODUCTION FACILITY

Area where soil was spread out to be aerated.

EXISTING TWO STORY WOOD FRAME BUILDING WITH BASEMENT

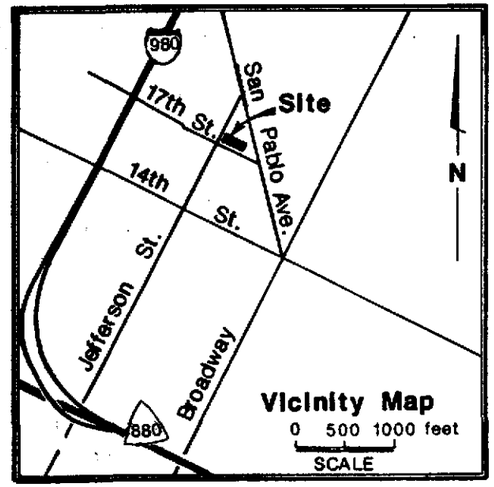
Brick Wall

JEFFERSON STREET

Concrete Sidewalk

Concrete Sidewalk

SEVENTEENTH STREET




## EXPLANATION

- 4 — Boring Location and Number, Preliminary Hazardous Waste Assessment
- 1 — Boring Location and Number, Soil Investigation
- MW-1 — Approximate Monitoring Well or Boring Location, this Investigation

REFERENCES:


1. "Preliminary Site Plan, City Blue Production Facility, 1700 Jefferson Street, Oakland, California," by Garcia/Wagner and Associates, dated Feb. 17, 1987.
2. Untitled Survey (partial print), Seventeenth Street and Jefferson Street, Surveyor unknown.


N

0 16

Scale in feet

Harding Lawson Associates
Engineers, Geologists & Geophysicists

**Site Plan**
City Blue Production Facility
Oakland, California

PLATE 1

| DRAWN | JOB NUMBER | APPROVED | DATE | REVISED | DATE |
|---|---|---|---|---|---|
| AG | 18106,002.04 | DL | 2/87 | | 7/87 |

*Trace Analysis Laboratory, Inc.*
*3423 Investment Boulevard, #8 • Hayw... California 94545* *(415) 783-6960*

TAL

DATE: 7/6/87

LOG NO.: 4872

DATE SAMPLED: 6/16/87

DATE RECEIVED: 6/16/87

CUSTOMER: Harding Lawson Associates

REQUESTER: Dan Louis

PROJECT: No. 18106, 001.04, City Blue/Oakland

| Method and Constituent | Units | Detection Limit | Sample Type: Soil<br>No. 1-N.W.@9'<br>Concentration | <br>No. 2-S.W.@9'<br>Concentration |
|---|---|---|---|---|
| Modified EPA Method 8015: | | | | |
| Volatile Hydrocarbons | mg/kg | 0.4 | 17 | 170 |
| | | | No. 3-N. Center@6.5' | No. 4-S. Center@6.5' |
| Modified EPA Method 8015: | | | | |
| Volatile Hydrocarbons | mg/kg | 1 | 8800 | 2900 |
| | | | No. 5-N.E.@8' | No. 6-S.E.@8' |
| Modified EPA Method 8015: | | | | |
| Volatile Hydrocarbons | mg/kg | 0.4 | 920 | 690 |
| | | | Composite of Nos. 7,8,9-Stockpiles A,B,C | |
| Modified EPA Method 8015: | | | | |
| Volatile Hydrocarbons | mg/kg | 0.4 | 410 | |

Ronald H. Ming Chew
Supervisory Chemist

RHC:mln

**Harding Lawson Associates**

**Transmittal/Memorandum**

**To:** Blue Print Service Co.
149 Second Street
San Francisco, CA 94105

Attention: Mr. Paul Koze, Jr.

**From:** Daniel Louis
**Date:** April 9, 1987
**Subject:** City Blue Production Facility
**Job No.:** 18106,001.09

**Remarks:**

Attached is a completed copy of the contamination report for the City Blue Production Facility in Oakland, California.

**cc:** Alameda Co. Environmental Health Service
Garcia/Wagner and Associates
State Water Resources Control Board
Regional Water Quality Control Board
Toxic Substances Control Division

# UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK)/CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO — HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☒ NO — STATE TANK ID # N/A

| REPORT DATE | LOCAL CASE # | REGIONAL BOARD CASE # | US EPA ID # |
|---|---|---|---|
| 04/08/87 | N/A | N/A | N/A |

**REPORTED BY**

| NAME OF INDIVIDUAL FILING REPORT | PHONE | SIGNATURE |
|---|---|---|
| Daniel A. Louis | ( 415 ) 543-8422 | |

REPRESENTING ☐ LOCAL AGENCY ☐ OTHER ☒ OWNER/OPERATOR ☐ REGIONAL BOARD

COMPANY OR AGENCY NAME: Harding Lawson Associates

ADDRESS: 666 Howard Street (STREET), Third Floor, San Francisco (CITY), California (STATE) 94105 (ZIP)

**RESPONSIBLE PARTY**

| NAME | CONTACT PERSON | PHONE |
|---|---|---|
| BAM Properties/ Blue Print Service Co. ☐ UNKNOWN | Paul Koze, Jr. | ( 415 ) 495-8700 |

ADDRESS: 149 Second Street (STREET), San Francisco (CITY), California (STATE) 94105 (ZIP)

**SITE LOCATION**

| FACILITY NAME (IF APPLICABLE) | OPERATOR | PHONE |
|---|---|---|
| N/A | Blue Print Service Co. | ( 415 ) 495-8700 |

ADDRESS: 1700 Jefferson Street (STREET), Oakland (CITY), Alameda (COUNTY) (ZIP)

CROSS STREET: 17th St.

TYPE OF AREA: ☒ COMMERCIAL ☐ INDUSTRIAL ☒ RESIDENTIAL ☐ RURAL ☐ OTHER

TYPE OF BUSINESS: ☐ RETAIL FUEL STATION ☐ UNKNOWN ☒ OTHER Private Fuel Station

**IMPLEMENTING AGENCIES**

| LOCAL AGENCY / AGENCY NAME | CONTACT PERSON | PHONE |
|---|---|---|
| Alameda Co. Environmental Health Service | Ted Gerow | ( 415 ) 874-6434 |
| REGIONAL BOARD: S.F. Bay Region, RWQCB | Peter Johnson | ( 415 ) 464-0838 |
| TSCD: Underground Tank Program | N/A | ( 916 ) 324-1826 |

**SUBSTANCE(S) INVOLVED**

| CAS # (ATTACH EXTRA SHEET IF NEEDED) | NAME | QUANTITY LOST (GALLONS) |
|---|---|---|
| (1) | Gasoline | ☒ UNKNOWN |
| (2) | | ☐ UNKNOWN |

**DISCOVERY/ ABATEMENT**

DATE DISCOVERED: 12/09/87

HOW DISCOVERED: ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ ROUTINE MONITORING ☐ TANK REMOVAL ☐ NUISANCE CONDITIONS ☒ OTHER: Soil Boring

DATE DISCHARGE BEGAN: ☒ UNKNOWN

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): ☒ REMOVE CONTENTS ☒ REPLACE TANK ☐ CLOSE TANK

HAS DISCHARGE BEEN STOPPED? Unknown ☐ YES ☐ NO IF YES, DATE

☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURES ☒ OTHER Tanks will be emptied and removed.

**SOURCE/CAUSE**

SOURCE(S) OF DISCHARGE: Unknown — ☐ TANK LEAK ☒ UNKNOWN ☒ PIPING LEAK (suspected) ☐ OTHER (SPECIFY)

TANKS ONLY/CAPACITY: 2550 GAL — AGE: YRS. ☒ UNKNOWN — MATERIAL: ☒ STEEL ☐ FIBERGLASS ☐ OTHER

CAUSE(S): ☒ OVERFILL (suspected) ☐ CORROSION ☒ RUPTURE/FAILURE (suspected) ☐ SPILL ☒ UNKNOWN ☐ OTHER

**RESOURCES AFFECTED/ AT RISK**

| RESOURCES AFFECTED | YES | NO | THREATENED | UNKNOWN |
|---|---|---|---|---|
| AIR (VAPOR) | ☐ | ☒ | ☐ | ☐ |
| SOIL (VADOSE ZONE) | ☒ | ☐ | ☐ | ☐ |
| GROUNDWATER | ☐ | ☐ | ☒ | ☐ |
| SURFACE WATER OR STORM DRAIN | ☐ | ☐ | ☐ | ☒ |
| BUILDING OR UTILITY VAULT | ☐ | ☒ | ☐ | ☐ |
| OTHER (SPECIFY) | ☐ | ☐ | ☐ | ☐ |

GROUNDWATER BASIN NAME ☐ UNKNOWN

| WATER SUPPLIES AFFECTED | YES | NO | THREATENED | UNKNOWN | # OF WELLS |
|---|---|---|---|---|---|
| PUBLIC DRINKING WATER | ☐ | ☐ | ☐ | ☒ | |
| PRIVATE DRINKING WATER | ☐ | ☐ | ☐ | ☒ | |
| INDUSTRIAL | ☐ | ☐ | ☐ | ☒ | |
| AGRICULTURAL | ☐ | ☐ | ☐ | ☒ | |
| OTHER (SPECIFY) | ☐ | ☐ | ☐ | ☐ | |

**COMMENTS**

COMMENTS:

Tanks (3) are being emptied and removed from the site. Backfill and reachable contaminated soil will be removed or aerated and replaced. Monitoring well(s) will be installed to monitor groundwater.

COMPLETE AND ATTACH A CLEANUP TRACKING REPORT IF ANY CLEANUP WORK OR PLANNING HAS STARTED

HSC 28 (10/88)

NEW FORM by SG 2/24/98

# UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK)/CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO — HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☒ NO

STATE TANK ID # N/A — Setnam, AC HD

REPORT DATE: 04/08/97 | LOCAL CASE #: N/A. | REGIONAL BOARD CASE #: N/A | US EPA ID #: N/A

**REPORTED BY**

NAME OF INDIVIDUAL FILING REPORT: Daniel A. Louis | PHONE: ( 415 ) 543-8422 | SIGNATURE:

REPRESENTING ☐ LOCAL AGENCY ☐ OTHER ☒ OWNER/OPERATOR ☐ REGIONAL BOARD | COMPANY OR AGENCY NAME: Harding Lawson Associates

ADDRESS: 666 Howard Street (STREET), Third Floor, San Francisco (CITY), California (STATE) 94105 (ZIP)

**RESPONSIBLE PARTY**

NAME: BAM Properties/ Blue Print Service Co. ☐ UNKNOWN | CONTACT PERSON: Paul Koze, Jr. | PHONE: ( 415 ) 495-8700

ADDRESS: 149 Second Street (STREET), San Francisco (CITY), California (STATE) 94105 (ZIP)

**SITE LOCATION**

FACILITY NAME (IF APPLICABLE): N/A | OPERATOR: Blue Print Service Co. | PHONE: ( 415 ) 495-8700

ADDRESS: 1700 Jefferson Street (STREET), Oakland (CITY), Alameda (COUNTY) ZIP

CROSS STREET: 17th St. | TYPE OF AREA ☒ COMMERCIAL ☐ INDUSTRIAL ☒ RESIDENTIAL ☐ RURAL ☐ OTHER | TYPE OF BUSINESS ☐ RETAIL FUEL STATION ☐ UNKNOWN ☒ OTHER Private Fuel Station

**IMPLEMENTING AGENCIES**

| LOCAL AGENCY / AGENCY NAME | CONTACT PERSON | PHONE |
|---|---|---|
| Alameda Co. Environmental Health Service | ~~Ted Gerlow~~ S Gorman | ( 415 ) 874-6434 |
| REGIONAL BOARD: S.F. Bay Region, RWQCB | Peter Johnson | ( 415 ) 464-0838 |
| TSCD: Underground Tank Program | N/A | ( 916 ) 324-1826 |

**SUBSTANCE(S) INVOLVED**

CAS # (ATTACH EXTRA SHEET IF NEEDED) | NAME | QUANTITY LOST (GALLONS)

(1) | Gasoline | ☒ UNKNOWN

(2) | ☐ UNKNOWN

**DISCOVERY/ ABATEMENT**

DATE DISCOVERED: 04/08/97 | HOW DISCOVERED ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ ROUTINE MONITORING ☐ TANK REMOVAL ☐ NUISANCE CONDITIONS ☒ OTHER: Soil Boring

DATE DISCHARGE BEGAN: ☒ UNKNOWN

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): ☒ REMOVE CONTENTS ☒ REPLACE TANK ☐ CLOSE TANK ☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURES ☒ OTHER Tanks will be emptied and removed.

HAS DISCHARGE BEEN STOPPED? Unknown ☐ YES ☐ NO IF YES, DATE

**SOURCE/CAUSE**

SOURCE(S) OF DISCHARGE Unknown: ☐ TANK LEAK ☒ UNKNOWN ☒ PIPING LEAK (suspected) ☐ OTHER (SPECIFY)

TANKS ONLY/CAPACITY 2550 GAL | AGE ☐ YRS. ☒ UNKNOWN | MATERIAL ☒ STEEL ☐ FIBERGLASS ☐ OTHER

CAUSE(S): ☒ OVERFILL (suspected) ☐ CORROSION ☒ RUPTURE/FAILURE (suspected) ☐ SPILL ☒ UNKNOWN ☐ OTHER

**RESOURCES AFFECTED/ AT RISK**

| RESOURCES AFFECTED | YES | NO | THREATENED | UNKNOWN |
|---|---|---|---|---|
| AIR (VAPOR) | ☐ | ☒ | ☐ | ☐ |
| SOIL (VADOSE ZONE) | ☒ | ☐ | ☐ | ☐ |
| GROUNDWATER | ☒ | ☐ | ☒ | ☐ |
| SURFACE WATER OR STORM DRAIN | ☐ | ☐ | ☐ | ☒ |
| BUILDING OR UTILITY VAULT | ☐ | ☒ | ☐ | ☐ |
| OTHER (SPECIFY) | ☐ | ☐ | ☐ | ☐ |

GROUNDWATER BASIN NAME ☒ UNKNOWN

| WATER SUPPLIES AFFECTED | YES | NO | THREATENED | UNKNOWN | # OF WELLS |
|---|---|---|---|---|---|
| PUBLIC DRINKING WATER | ☐ | ☐ | ☐ | ☒ | |
| PRIVATE DRINKING WATER | ☐ | ☐ | ☐ | ☒ | |
| INDUSTRIAL | ☐ | ☐ | ☐ | ☒ | |
| AGRICULTURAL | ☐ | ☐ | ☐ | ☒ | |
| OTHER (SPECIFY) | ☐ | ☐ | ☐ | ☐ | |

**COMMENTS**

COMMENTS:

Tanks (3) are being emptied and removed from the site. Backfill and reachable contaminated soil will be removed or aerated and replaced. Monitoring well(s) will be installed to monitor groundwater. Free product currently being removed from site. Other media

COMPLETE AND ATTACH A CLEANUP TRACKING REPORT IF ANY CLEANUP WORK OR PLANNING HAS STARTED