SECOND FIVE-YEAR REVIEW REPORT FOR PETROCHEM/EKOTEK SUPERFUND SITE SALT LAKE CITY, SALT LAKE COUNTY, UTAH

Prepared by

Utah Department of Environmental Quality
Division of Response and Remediation

For

U.S. Environmental Protection Agency
Region 8
Denver, Colorado

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LIST OF ABBREVIATIONS & ACRONYMS

AST	Aboveground Storage Tank
ARARs	Applicable or Relevant and Appropriate Requirements
AOC	Administrative Orders on Consent
bgs	below ground surface
BSHW	Bureau of Solid and Hazardous Waste
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Contaminant of concern
DCE	Dichloroethene
DERR	Division of Environmental Response and Remediation
EC	Environmental Covenant
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
ESRC	Ekotek Site Remediation Committee
FCOR	Final Close Out Report
FS	Feasibility Study
ICs	Institutional controls
LNAPL	Light Non-Aqueous Phase Liquid
MCL	Maximum Contaminant Level
mg/kg	milligram per kilogram
mg/kg-day	milligram per kilogram per day
mg/L	milligram per liter
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PCB	Polychlorinated Biphenyls
PRG	Preliminary remediation goals
POTW	Publicly owned treatment works
RAO	Remedial Action Objectives
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RfD	reference dose
RI	Remedial Investigation
ROD	Record of Decision
SF	Slope Factor
SVOC	Semi-volatile organic compound
TCDD	Tetrachlorodibenzo-p-dioxin
TEF	Toxicity Equivalency Factors
UDEQ	Utah Department of Environmental Quality
UST	Underground storage tank
UU/UE	Unlimited use and unrestricted exposure

I. Introduction

The purpose of a Five-Year Review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The Utah Department of Environmental Quality (UDEQ), Division of Environmental Response and Remediation (DERR) has been tasked by the U.S. Environmental Protection Agency (EPA) Region 8, to conduct a FYR of the remedial and removal actions implemented at the Petrochem/Ekotek Superfund Site (Site). UDEQ is preparing this FYR report pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP)(40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the second FYR for the Petrochem/Ekotek Superfund Site (Site). The triggering action for this statutory review is the completion of the first FYR completed in September 2016. These FYRs have been prepared due to the fact that hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

This Site FYR was led by Maureen Petit, UDEQ Project Manager. Participants included, but were not limited to, Scott Everett, UDEQ Toxicologist and Dave Allison, UDEQ Public Information Officer. This FYR began in December 2020.

The EPA has determined in this FYR that the cleanup at the Site is protective of human health and the environment. The Site has been deleted from the National Priorities List. However, because waste has been left in place, FYRs must continue to be conducted. Protectiveness of human health and the environment has been ensured by removing contaminated soil and treatment of groundwater. Additionally, an Environmental Covenant is in place on the Site which only allows industrial use.

Site Background

The Site is in a predominantly industrial area of northern Salt Lake City, Utah, with Interstate 15 to the west and the Wasatch Mountains to the east. The Site is bordered by auto salvage yards to the north and southeast, storage units and residential properties to the south, and commercial properties to the west. The Site encompasses approximately seven acres and includes one operable unit (OU), OU1.

The Site originally operated as a heavy equipment maintenance and repair facility from 1949 to 1975. From 1975 through 1988 the entire Site was used as an oil refinery and oil reclaiming/recycling facility. From 1980 to 1987 the facility operated under Resource Conservation Recovery Act (RCRA) interim status and received a hazardous waste storage permit in July 1984 for a limited number of activities. Operations at the Site ceased in February 1988.

Currently, the Site is owned and occupied by a single property owner. Approximately four acres on the southeast portion of the Site are used for storing delivery trucks, garbage trucks, and truck parts. The remaining three acres on the northwest side of the Site are leased to Liberty Tire Recycling, LLC who uses the Site for tire storage.

Refer to Appendix B for an expanded Site background and Appendix C for Site chronology.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Petrochem/Ekotek		
EPA ID: UTD093119196		
Region: 8	**State:** UT	**City/County:** Salt Lake City/Salt Lake County
SITE STATUS		
NPL Status: Deleted		
Multiple OUs? No	**Has the site achieved construction completion?** Yes	
REVIEW STATUS		
Lead agency: State ***[If "Other Federal Agency", enter Agency name]*:**		
Author name (Federal or State Project Manager): Maureen Petit		
Author affiliation: UDEQ Project Manager		
Review period: 12/14/2020 - 4/14/2021		
Date of site inspection: 3/25/2021		
Type of review: Statutory		
Review number: 2		
Triggering action date: 9/23/2016		
Due date *(five years after triggering action date)*: 9/23/2021		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

When operations at the Site ceased in February 1988 approximately 60 aboveground storage tanks (ASTs) ranging in size from less than 1,000 – 90,000 gallons were located on the northern portion of the Site. This included: 1) 3,200 drums and 1,500 smaller containers stored in five warehouse buildings and elsewhere on the Site 2) approximately 1,100 tons of spent filter cake and sugar beet wastes contained on the east side of the Site; and 3) numerous large underground storage tanks (USTs) located throughout the Site. Additionally, three retention basin/bermed areas used to contain contaminated runoff were present on the Site.

Contaminants associated with on-Site sources included several organic substances, such as chlorinated solvents, other volatile organic compounds, polynuclear aromatic hydrocarbons, phthalates, pesticides, polychlorinated byphenyls (PCBs; Aroclor 1260), dioxin and furans. Heavy metals were also present in the source areas. The receptors are industrial workers.

Response Actions

The Site was placed on the National Priorities List (NPL) on October 14, 1992. Initial response actions addressed the immediate risks to human health and included:

- February 1988 – The Petrochem facility was shut down for failing to comply with the Order for Compliance issued to Petrochem by the Utah State Bureau of Air Quality and the Utah Bureau of Solid and Hazardous Waste (BSHW) for violating their RCRA Part B permit.
- November 1988 – The Utah BSHW requested that the EPA Emergency Response Branch inventory potentially hazardous material and initiate a removal action to stabilize wastes.
- August 1989 – An Emergency Surface Removal was conducted and included the removal and disposal of ASTs and USTs, processing equipment, containers, pooled liquids, and various sludge piles from the Site.

The emergency response action was conducted immediately after the facility was shut down to remove the immediate danger posed by the Site. Following the emergency removal of sludges and liquids on-Site, a Remedial Investigation (RI) took place to quantify and characterize the remaining waste on Site.

Results of the 1994 RI indicated surface soils on the property contained petroleum hydrocarbon contaminants, including semi-volatile organic compounds (SVOCs) and PCBs. Contaminated soil extended to the water table in the area of the former tank farm and processing area where a groundwater plume of light non-aqueous phase liquids (LNAPL) was present. RI results also indicated vinyl chloride, cis-1,2-dichloroethene (DCE), benzene and arsenic were present in groundwater at concentrations above their respective maximum contaminant levels (MCLs).

The selected remedy for the Petrochem/Ekotek Site addressed the soil, LNAPL and groundwater. The Record of Decision (ROD) was signed by the EPA on September 27, 1996. It should be noted that the ROD refers to Preliminary Remediation Goals (PRGs), but all other documents (including this FYR report) use the term Performance Standards for the action levels selected for the Site. The major components of the remedy selected in the ROD included:

- Excavation of surface soils exceeding the soil hot spots criteria and appropriate off-site disposal in a TSCA, hazardous waste, or solid waste permitted landfill;
- Partial excavation of the buried debris for appropriate off-site disposal of debris and soils containing PCBs and saturated with light non-aqueous phase liquid (LNAPL) in a TSCA, hazardous waste, or solid waste permitted landfill;
- Consolidation of soils exceeding the soil performance standanrds and remaining buried debris under a 42-inch onsite soil cap;
- Direct Excavation of LNAPL with recovered LNAPL being incinerated offsite and saturated soils being disposed offsite;

- The ground water component is containment via intrinsic bioremediation with allows natural attenuation through biodegradation, dispersion, dilution and adsorption to reduce contaminants in the ground water to concentrations protective of human health in a timeframe comparable to that which could be achieved through active restoration which has been determined to be within 10 years. The selection of intrinsic remediation includes monitoring and pilot studies to determine whether biodegradation of vinyl chloride is occurring and, if so, at what rate.

The remedial action objectives (RAOs) in the ROD were as follows:

For soil:

- Protect industrial workers from direct dermal contact or ingestion of onsite surface soils containing COCs in excess of the PRGs; and
- Protect industrial workers from inhalation of airborne particulate matter from onsite surface soils containing COCs in excess of the Preliminary Remediation Goals (PRGs).

For groundwater:

- Protect human health from ingestion of onsite groundwater that contains chemicals that exceed the PRGs; and
- Protect human health from dermal contact with and inhalation of airborne vapors from on-Site groundwater that contains chemicals that exceed the PRGs.

For surface water:

- Protect water quality of surface water bodies located northwest of the Site from Site-related impacts.

Table 1: Soil Hot Spot Performance Standards

Parameter	Action Level
Benzo(a)anthracene	780 mg/kg
Benzo(a)pyrene	78 mg/kg
Benzo(a)fluoranthene	780 mg/kg
Dibenz(a,h)athracene	78 mg/kg
Indeno(1,2,3-c,d)pyrene	780 mg/kg
PCBs	25 mg/kg*
2,3,7,8-TCDD (TEF)	3.7E-03 mg/kg*
Thallium	160 mg/kg

Notes:
*Standard was revised in the 1997 ESD.
mg/kg: milligrams per kilogram
PCB: Polychlorinated biphenyl
TCDD: tetrachlorodibenzo-p-dioxin
TEF: Toxic equivalence factors

Table 2: Soil Performance Standards

Parameter	Action Level
Benzo(a)anthracene	7.8 mg/kg
Benzo(a)pyrene	0.78 mg/kg
Benzo(b)fluoranthene	7.8 mg/kg
Dibenz(a,h)athracene	0.78 mg/kg

Parameter	Action Level
Indeno(1,2,3-c,d)pyrene	7.8 mg/kg
PCBs	2.7 mg/kg*
2,3,7,8-TCDD (TEF)	3.7E-05 mg/kg*
Thallium	160 mg/kg

Notes:
*Standard was revised in the 1997 ESD.
mg/kg: milligrams per kilogram
PCB: Polychlorinated biphenyl
TCDD: tetrachlorodibenzo-p-dioxin
TEF: Toxic equivalence factors

Table 3: Groundwater Performance Standards

Parameter	Action Level
Benzene	0.005 mg/L
Chloroform	0.1 mg/L
Cis-1,2-dichloroethene	0.07 mg/L
Vinyl Chloride	0.002 mg/L
Benzo(b)fluoranthene	0.0002 mg/L
Antimony	0.006 mg/L
Arsenic	0.05 mg/L
Beryllium	0.004 mg/L
Mercury	0.002 mg/L
Nickel	0.1 mg/L
Silver	0.05 mg/L
Thallium	0.002 mg/L

Notes:
Manganese was included as a Groundwater Performance Standard COC in the 1996 ROD, but was removed in the 1999 ESD.
mg/L: milligrams per liter

An Explanation of Significant Differences (ESD) was issued by the EPA in December 1997 to modify certain remediation criteria established in the 1996 ROD. The changes to the ROD were made as a result of new information the EPA received subsequent to the issuance of the ROD; however, the changes did not alter the Site-wide remedy presented in the ROD. The differences between the ROD and the ESD are:

- The Soil Performance Standard for 2,3,7,8-TCDD (TEF) was revised from 1.86E-06 to 3.7E-05 mg/kg for a cancer risk of 1E-06.
- The Soil Hot Spot Performance Standard for 2,3,7,8-TCDD (TEF) was revised from 1.86E-04 to 3.7E-03 mg/kg for a cancer risk of 1E-04.
- The Soil Performance Standard for PCBs was revised from 0.15 to 2.7 mg/kg.
- The Soil Hot Spot Performance Standard for PCBs was revised from 10 mg/kg to 25 mg/kg.
- Contingency measures were revised to permit the discharge of groundwater to re-injection wells or to a surface water/storm drain via the substantive requirements of a Utah Pollutant Discharge Elimination System permit, as an alternative to discharge to the publicly owned treatment works.

A second ESD was issued by the EPA in May 1999 to modify certain remediation criteria established in the 1996 ROD. The changes to the ROD were made as a result of new information the EPA received subsequent to the issuance of the ROD; however, the changes did not alter the Site-wide remedy presented in the ROD. The differences between the ROD and the 1999 ESD are:

- Manganese was removed as a groundwater performance standard.

- All soil exceeding the Soil Performance Standards were to be sent off-Site to a RCRA permitted landfill.

The two ESDs did not address surface water and defined the RAOs as follows:

For soil:

- Eliminate the pathway of direct exposure to soils, of an industrial worker, through excavation and off-Site disposal of "hot spot" soils; and
- Contain low-level contaminated soil on Site under a 42-inch soil cap.

For groundwater:

- Eliminate partitioning of LNAPL to the groundwater through removal and treatment of LNAPL; and
- Eliminate the potential future ingestion of contaminated drinking water through intrinsic remediation/attenuation of the groundwater.

Status of Implementation

The Remedial Design began in April 1998 and the Remedial Action began in July 1999. The physical construction was completed in February 2000. The remedial actions were as follows:

- Drummed wastes remaining from the Emergency Surface Removal Action, the Remedial Investigation, and any remaining sludge from historical operations were shipped off-Site to a Subtitle C Landfill or incinerator for disposal, as appropriate.
- The Site was cleared of all buildings and structures to facilitate soil excavation. Buildings and structures cleared included the main concrete warehouse, the metal warehouse, concrete walks and slabs, asphalt pavement, a portion of the railroad tracks, and USTs.
- Soils and buried debris exceeding the Soil Hot Spot Performance Standards were excavated and disposed of off-Site.
- After the overburden soils were removed, LNAPL floating on the water was removed down to a thickness of 0.02 feet, via a vacuum truck. Soils contaminated with LNAPL from the smear zone and saturated zone were also excavated and removed off-Site.
- Site excavations were backfilled with clean soil and compacted. The entire Site was then regraded and hydro-seeded.
- Groundwater was treated through natural attenuation/intrinsic remediation, and monitored until contamination levels were below the Performance Standards.
- Portions of the rail spur on-Site were removed during construction, and contaminated soil was excavated in those areas.

The Final Close Out Report (FCOR) and the Final Remedial Action Report (RA Report) were completed in September 2002. The Site was deleted from the NPL on June 30, 2003.

Institutional Controls

In 2008 an environmental covenant (EC) was placed on the Site because potentially contaminated soil may remain on Site above levels that allow for unlimited use and unrestricted exposure. The Site is currently zoned for industrial use and the EC restricts future land use on the Site to industrial use only. Any change in land use may require additional remediation.

Systems Operations/Operation & Maintenance

Contaminated soils above the Performance Standard levels identified in the ROD and ESDs were removed off-Site and groundwater was remediated through natural attenuation to the Groundwater Performance Standards identified in the ROD and ESDs. Therefore, the need for Operations and Maintenance (O&M) was eliminated.

Under the 2008 EC, the property owner is required to handle, transport and dispose of contaminated soil in accordance with applicable laws. The owner is also required to develop worker protection and health and safety plans for the excavation/removal of contaminated soil and to comply with applicable worker health and safety laws.

III. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the last FYR as well as the recommendations from the last FYR and the current status of those recommendations.

Table 4: Protectiveness Determinations/Statements from the 2016 FYR

OU #	Protectiveness Determination	Protectiveness Statement
Sitewide	Protective	The remedy implemented at the Site currently protects human health and the environment because contaminated soil has been excavated and groundwater concentrations are below the Performance Standards. Institutional controls are in place for the Site but not included in Site decision documents. In order for the remedy to be protective in the long term, statutory five-year reviews should be conducted, the Site decision document should be modified to incorporate appropriate ICs as a remedy component and wells should be installed/sampled to check the current status of groundwater.

Table 5: Status of Recommendations from the 2016 FYR

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
Sitewide	Soil contaminants are above levels that allow for unlimited use and unrestricted exposure.	Five-year reviews should be conducted for the Site.	Completed	Statutory five-year reviews are being conducted at the Site.	9/23/2016
Sitewide	ICs are not provided for in Site decision documents.	The Site decision document should be modified to incorporate appropriate ICs as a remedy component.	Considered But Not Implemented	After review of the Site decision documents, it was determined that the ICs contained therein are adequate. Section 10.1 of the 1996 ROD states, “Access and land use restrictions, to ensure no future activity takes place at the Site that is incompatible or inconsistent with the selected	8/30/2021

OU #	Issue	Recommendations	Current Status	Current Implementation Status Description	Completion Date (if applicable)
				remedy, shall be established that will run with the land." This was followed with the EC in 2008, which provided for such Activity and Use Limitations.	
Sitewide	There are no viable wells to check the current status of groundwater.	Wells should be installed and sampled to check the current status of groundwater and, if necessary, determine a plan of action.	Considered but not implemented	After closer consideration, it was determined that a large monitoring effort would be ineffective as it would likely turn up false positives due to the industrial activities in the area. Consequently, this issue was resolved without implementing the recommendation.	8/30/2021

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Involvement & Site Interviews

A public notice (Appendix D) was placed in the *Salt Lake Tribune* on March 21, 2021, and *City Weekly* on March 25, 2021, stating that there was an FYR and inviting the public to submit any comments to the EPA. No comments were received in response to the public notice.

Upon completion of the Five-Year Review report, UDEQ will make the report available to the public in the administrative record located at the UDEQ Superfund Records Center in Salt Lake City, Utah. The EPA will make the report available on its website at http://www.epa.gov/superfund/petrochem.

The primary property owner and occupant of the Site was interviewed to document any perceived problems or successes with the remedy that has been implemented to date. A report summarizing the interview can be found in Appendix E. The property owner did not express any health or environmental concerns and commented that, in their opinion, the remedy remains protective. Other than the addition of roadbase cover, there were no land-use changes or construction on the Site since the last FYR.

Document Review

This FYR included a review of relevant Site documents including the RA Report and FCOR. A list of documents reviewed for this FYR is provided in Appendix A.

Data Review

No samples have been collected since the deletion of the Site from the NPL in 2003. The data reviewed included the confirmation sample results from the RA Report and groundwater sampling results presented in the 2002 Groundwater Compliance Monitoring Data Summary Report.

During the 1999 Remedial Action, confirmation samples were collected from the bottom and sidewalls of the Site excavations. The Site was divided into 13 excavation grids, which were divided into a total of 197 sample locations. At least one confirmation sample was collected from each location (see Figure 2). Specific excavation and sample depths were not reported in any of the documents; however, all confirmation samples were subsurface samples. All confirmation soil samples were below the ROD Performance Standards with the exception of results from four sample locations. The following sample results did not meet the Performance Standards:

- The sidewall sample location from the L Grid, located in the southeast corner of the Site, had a benzo(a)pyrene result of 1.25 mg/kg, above the 0.780 mg/kg Performance Standard;
- Sample location H41 located on the west sidewall of the LNAPL excavation, had a PCB result of 3.2 mg/kg, above the Performance Standard of 2.7 mg/kg;
- Sample location H7, located on the north wall of the LNAPL excavation, had a dibenz(a,h)anthracene result of 0.969 mg/kg, above the Performance Standard of 0.780 mg/kg; and,
- Sample location J10, located in the center of the J Grid, with a dioxin result of 4.9E-05 mg/kg, above the Performance Standard of 3.7E-05 mg/kg.

The L Grid sidewall sample exceedance is thought to be associated with fill soils brought onto the Site (primarily recycled asphalt), and therefore, the grid was considered acceptable and closed. The H7, H41, and J10 sample exceedances were considered acceptable because only one of the nine ROD-listed constituents was detected above the soil Performance Standard, and according to the RA Report, they were not detected significantly above the Performance Standard.

A review of the monthly and weekly Progress Reports during construction noted that portions of the rail spur on-Site were removed, and contaminated soil was excavated in those areas. The rail spur soil excavations are not discussed in the RA Report or the FCOR. It is unclear which portions of the rail spurs were removed and where the soil excavations took place. It is also unclear if soil confirmation samples were collected in these areas and if soil was excavated to Performance Standards. However, if any contaminated soil was left in place, it is below grade and the remedy is functioning as intended.

As part of the FYR, Applicable and Relevant and Appropriate Requirements (ARARs) were reviewed. The primary purpose of this ARARs review was to determine if any newly promulgated or modified requirements of federal and state environmental laws have changed the protectiveness of the remedies implemented at the Site. The ARARs reviewed were those included in the Site's decision documents.

Overall, the ARARs review does not indicate any substantive changes to regulations that would affect the remedy or its protectiveness. The EPA and UDEQ will continue to monitor this Site and any changes in ARARs will be reported.

Site Inspection

The inspection of the Site was conducted on March 25, 2021. In attendance were Maureen Petit, UDEQ Project Manager for the Site, Dave Allison, UDEQ Community Involvement, and the property owner. The purpose of the Site inspection was to assess the protectiveness of the remedy. The Site is currently being used for industrial purposes, and no issues were noted during the Site inspection.

V. TECHNICAL ASSESSMENT

Question A: Is the remedy functioning as intended by the decision documents?

Question A Summary:

The review of documents, ARARs, risk assumptions, and the results of the inspection indicate the remedy is functioning as intended by the 1996 ROD, 1997 ESD and 1999 ESD. The remedy removed all soil that exceeded the Performance Standards as specified in the above-mentioned decision documents.

After reviewing the RA Report, it was determined that all confirmation soil samples were below the ROD Performance Standards with the exception of results from four sample locations. While the excavations and confirmation sample depths are unclear in the documents, all sample locations were collected below grade and were subsequently filled with clean site backfill and off-Site soil. Therefore, it is concluded that the four sample locations that exceeded the Performance Standards were subsurface samples. Based on the visit to the Site and interviews, no digging below grade has been conducted on-Site since the remedy was completed, and therefore, the remedy is still considered protective and functioning as intended by the decision documents.

All soil above the Performance Standards described in the decision documents were removed off-Site (with the exception of the four sample locations mentioned above). Water-use restrictions at the Site were not necessary because there are no supply wells within the area of impacted groundwater. However, in 2008, an EC limiting the Site to industrial use only was recorded and signed by Salt Lake County, the property owner, and UDEQ. The visit confirmed that the Site is currently being used for industrial purposes.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid?

Question B Summary:

The cleanup levels and RAOs used at the time of remedy selection are still valid. However, the exposure assumptions for inhalation and some of the toxicity data have changed since the Performance Standards were established in the ROD and modified by subsequent ESDs. These changes do not impact the protectiveness of the remedy based on the observations described below.

Performance Standards established for the Site were presented in the September 1996 ROD and modified by two ESDs for the ROD in 1997 and 1999. Because these documents were developed prior to the EPA Risk Assessment Guidance for Superfund (RAGS) Part F (2009), the exposure assumptions for the inhalation exposure pathway were conducted differently than the methods presented in RAGS Part F. The exposure metric used in the ROD used inhalation concentrations based on ingestion rate and body weight (milligram per kilogram per day (mg/kg-day)). Inhalation intake on a mg/kg-day is no longer estimated during the exposure assessment step of baseline risk assessments. The updated methodology found in EPA RAGS Part F uses the concentration of chemical in the air, with the exposure metric of micrograms per meter cubed (µg/m3). While this does not significantly change clean-up levels (i.e. still within the acceptable risk range), it is important to present the most current methodology that is used for the inhalation pathway.

The toxicity reference dose (RfD) for thallium changed from 8E-05 mg/kg-day to 6.00E-06 mg/kg-day; however, based on the Remedial Action confirmation samples, no soil containing thallium above the current industrial screening levels (12 mg/kg) was identified at the Site. Therefore, the change in the thallium RfD does not affect the protectiveness of the remedy. The slope factor (SF) for 2,3,7,8-TCDD has decreased from 1.5E+05 mg/kg-day to 1.3E+03 mg/kg-day; however, due to a change in the absorption (ABS) factor, the Performance Standard is still considered protective. The toxicity values for Polycyclic aromatic hydrocarbons (PAHs) have not changed.

Groundwater Performance Standards developed for the Site were based on MCLs. Two MCLs have changed since the Performance Standards were established.

The MCL for arsenic has changed from 0.05 mg/L to 0.01 mg/L. The arsenic observed in monitoring well W-7, located north of the Site, was not considered to be in exceedance of the Performance Standard since it was determined to be due to naturally-occurring minerals influenced by local geochemical conditions and not from Petrochem/Ekotek Site activities. No other wells exceeded the arsenic MCL of 0.01 mg/L during the last four Site sampling events before well abandonment and Site closure.

The MCL for chloroform has changed from 0.1 mg/L to 0.08 mg/L; however, no sample results reported in the 2002 Groundwater Compliance Monitoring Data Summary Report exceeded the Performance Standard or the current MCL.

Additionally, in analytical data reported in the 2002 Groundwater Compliance Monitoring Data Summary Report, there were exceedances of Performance Standards/MCLs for antimony, nickel and thallium. Because antimony, nickel and thallium are naturally-occurring elements that are expected in background levels, and the levels detected were only slightly over the performance standards/MCLs, the exceedances in groundwater do not affect the protectiveness of the remedy.

Nickel and silver groundwater COCs do not have MCLs. The toxicity values used to create the nickel and silver PRGs have not changed.

Additionally, there are no groundwater wells within approximately a quarter of a mile of the Site; the closest well is up-gradient from the Site and not used for drinking water. The closest cross-gradient wells are approximately 0.7 miles from the Site and the closest down-gradient well is approximately a mile and a half northwest of the Site. The closest potential drinking water well is approximately a half mile cross gradient, to the northeast of the Site. The exposure pathway to groundwater is considered incomplete, and the protectiveness of the remedy is not affected by any of the 2000 – 2001 groundwater exceedances discussed above.

Question C: Has any **other** information come to light that could call into question the protectiveness of the remedy?

No additional information has come to light during this FYR that could call into question the protectiveness of the remedy.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the Five-Year Review:
None

OTHER FINDINGS

In addition, the following are recommendations that were identified during the FYR and may assist with any future redevelopment considerations, but do not affect current and/or future protectiveness:

- Review the existing site information to determine if there would be a vapor intrusion concern if a future owner wanted to construct buildings on site.
- Review the existing site information to determine if there would be a concern if a future owner wanted to install process water wells.
- Review the existing information to see if further information is available about the rail spur soil excavations conducted as a component of the remedy.

VII. PROTECTIVENESS STATEMENT

Sitewide Protectiveness Statement
Protectiveness Determination: Protective
Protectiveness Statement: Because the remedial actions at the Site are protective, the Site is protective of human health and the environment.

VIII. NEXT REVIEW

The next FYR report for the Site is required five years from the completion date of this review. The completion date is the date shown on the signature page of this report.

FIGURES

FIGURE 1

Overview Map
Petrochem/Ekotek Site
Salt Lake City, Utah

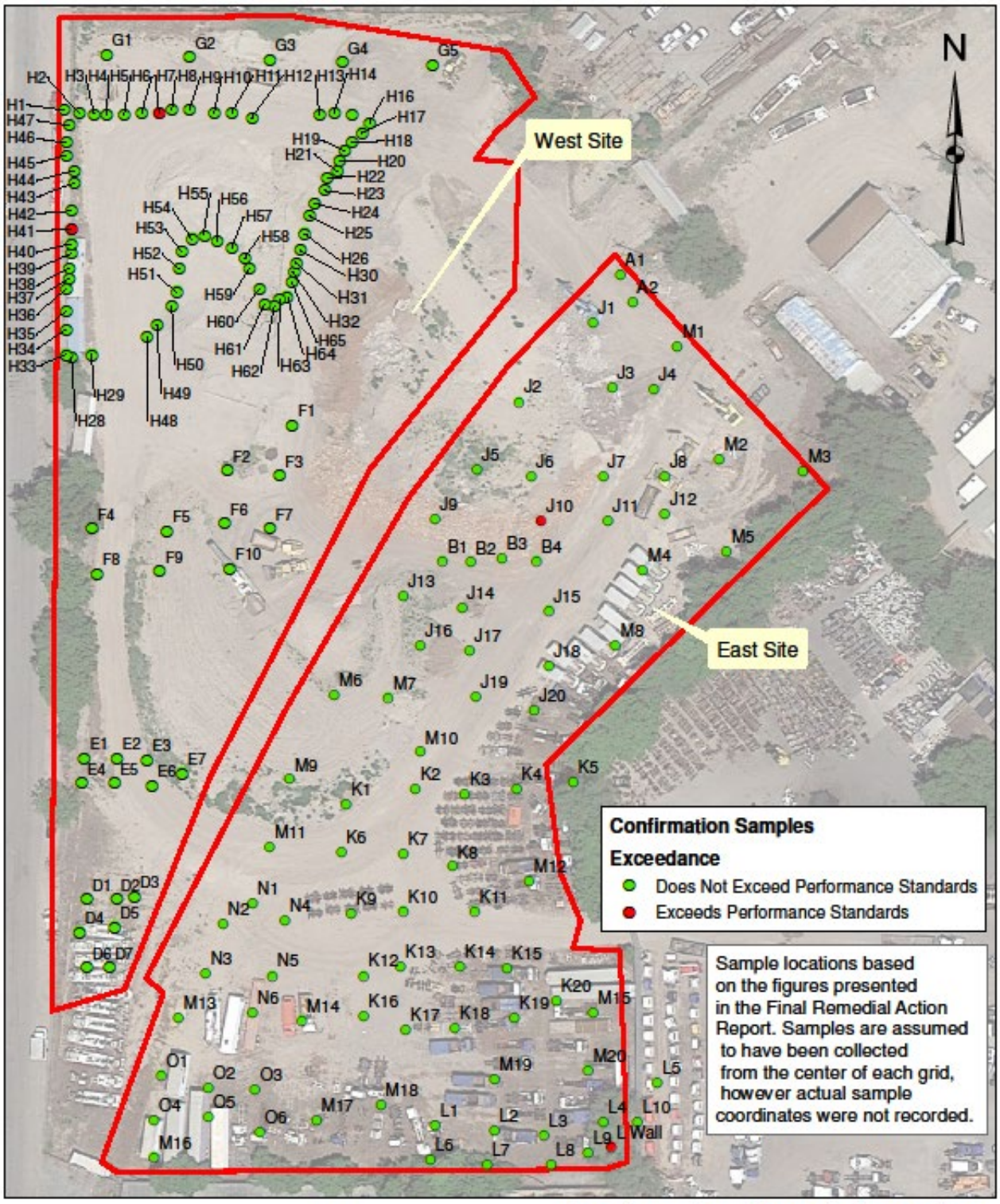

FIGURE 2

Confirmation Sample Locations
Petrochem/Ekotek Site
Salt Lake City, Utah

APPENDIX A - REFERENCE LIST/DOCUMENTS REVIEWED

Environmental Covenant, Petrochem/Ekotek Site. September 2008.

EPA Superfund Record of Decision: Petrochem Recycling Corp./Ekotek Plant. September 1996.

EPA Superfund Explanation of Significant Differences: Petrochem Recycling Corp./Ekotek Plant. December 1997.

EPA Superfund Explanation of Significant Differences: Petrochem Recycling Corp./Ekotek Plant. May 1999.

Final Baseline Human Health Risk Assessment, Petrochem/Ekotek Site. August 1994.

Final Design Submittal for the Soil & LNAPL Remediation. December 1998.

Final Remedial Action Report, Petrochem/Ekotek Site. September 2002.

Final Remediation Action Confirmation Sampling and Performance Standard Verification Plan, Petrochem/Ekotek Site. May 1999.

Final Remedial Action Groundwater Monitoring Plan, Petrochem/Ekotek Site. June 1999.

Final Remediation Action Work Plan, Petrochem/Ekotek Site. May 1999.

Final Remedial Design Work Plan, Petrochem/Ekotek Site. April 1998.

Well Abandonment Plan, Petrochem/Ekotek Site. June 2002.

Preliminary Site Close Out Report, Petrochem/Ekotek Site. April 2000.

Revision to the Ground-Water Compliance Monitoring and Data Summary Report, Petrochem/Ekotek Site. May 2002.

First Five-Year Review Report, Petrochem/Ekotek Superfund Site. September 2016.

APPENDIX B – EXPANDED SITE BACKGROUND

Physical Characteristics
The Site encompasses approximately seven acres and includes one operable unit (OU), OU1. Operable Unit 1 was divided into two parts: the East Site and the West Site, which were delineated by a railroad right-of-way that split the property at the time of performed work (See Figure 1).

There are no wetlands or surface water located on the Site. Groundwater was reported at a depth ranging from 15 to 20 feet below ground surface (bgs) in the 2002 Groundwater Compliance Monitoring and Data Summary Report. Currently there are no wells on-Site and groundwater depth has not been measured since the wells were abandoned in 2002. The groundwater flow direction is to the northwest and the gradient was reported in the ROD as being relatively flat. The groundwater in the shallow unconfined aquifer (mostly sands and gravels) flows west and northwest. Groundwater in deeper on-Site wells was found to be warmer and higher in electrical conductance than shallow groundwater, indicating that the aquifer is potentially recharged, in part, by the deeper geothermal water from the Warm Springs fault zone.

Land and Resource Use
The Site is located in a predominantly industrial area of northern Salt Lake City, Utah, with Interstate 15 to the west and the Wasatch Mountains to the east. The Site is bordered by auto salvage yards to the north, and southeast, storage units and residential properties to the south, and commercial properties to the west.

No groundwater wells are located on Site. The closest well is located, up-gradient, approximately a quarter of a mile northeast of the Site and is not used for drinking water. The closest cross-gradient wells are approximately 0.7 miles from the Site, and the closest down-gradient well is approximately a mile and a half northwest of the Site. The closest potential drinking water well is approximately 0.5 miles cross-gradient, and is 65 feet in depth.

History of Contamination
The Site originally operated as a heavy equipment maintenance and repair facility from 1949 to 1975. During that time period, the facility began oil recycling on the west side of the Site from 1953 to 1975. In 1975 through 1988 the entire Site was used as an oil refinery and oil reclaiming/recycling facility. From 1980 to 1987 the facility operated under RCRA interim status and received a hazardous waste storage permit in July 1984 for a limited number of activities.

When operations at the Site ceased in February 1988, approximately 60 ASTs (ranging in size from less than 1,000 – 90,000 gallons) were located on the northern portion of the Site. This included: 1) 3,200 drums and 1,500 smaller containers stored in five warehouse buildings and elsewhere on the Site; 2) approximately 1,100 tons of spent filter cake and sugar beet wastes contained on the east side of the Site; and 3) numerous large USTs located throughout the Site. Additionally, three retention basin/bermed areas used to contain contaminated runoff were present on the Site.

Contaminants associated with the on-Site sources included several organic substances such as chlorinated solvents, other volatile organic compounds, polynuclear aromatic hydrocarbons, phthalates, pesticides, polychlorinated byphenyls (PCBs; Aroclor 1260), dioxin and furans. Heavy metals were also present in the source areas.

APPENDIX C – SITE CHRONOLOGY

Event	Date
Heavy equipment maintenance and repair conducted at the Site.	1945-1975
Oil refinery and oil reclaiming/recycling facility operated on the west side of the Site.	1953-1975
Oil refinery and oil reclaiming/recycling facility operated on the entire Site property.	1975-1988
Ekotek, Inc. received a RCRA Part B permit, for hazardous waste storage and a limited number of activities.	1984
Property leased to Petrochem Recycling, Inc. (Petrochem).	November 1987
Legal action was filed by the State of Utah and the facility was closed due to Petrochem failing to comply with the Order for Compliance.	February 1988
Utah Bureau of Solid and Hazardous Waste requested the US EPA Emergency Response Branch initiate a removal action to stabilize wastes and to inventory potentially hazardous material.	November 1988
Various potentially responsible parties (PRPs) that had wastes stored or processed at the Site joined to form the Ekotek Site Remediation Committee (ESRC).	1988
Preliminary Site investigations began.	1989
EPA entered into an Administrative Orders on Consent (AOC) with ESRC to complete Emergency Surface Removal activities. In the Emergency Surface action ESRC removed surface and USTs, containers, contaminated sludges, pooled liquids, and processing equipment from the Site.	August 1989
The Site was placed on the NPL.	October 14, 1992
EPA entered into an AOC with ESRC to conduct the remedial investigation (RI) and feasibility study (FS) under the CERCLA.	July 1992
The FS was completed and included development and evaluation of ten Site-wide remedial alternatives.	January 1995
EPA issued the ROD for the Site, identifying Alternative 10 as the selected remedy for implementation.	September 1996
EPA entered into an AOC with ESRC for the removal of the sludge and drummed wastes.	December 1997
An ESD was issued by EPA to update some of the Performance Standards listed in the ROD.	December 1997
The ESRC completed the removal of the sludge and drummed wastes.	1998
The ESRC and EPA Region 8 signed a Consent Decree which defined the requirements for the RD/RA phases of the remedy implantation.	February 1998
The Consent Decree was entered.	April 27, 1998
An ESD was issued by EPA to delete manganese as a contaminant of concern in groundwater and to increase the volume of contaminated soil destined for off-Site disposal.	May 1999
Preliminary Close Out Report.	April 12, 2000
FCOR.	September 30, 2002
Deletion of Site from the NPL.	June 30, 2003
EC recorded for Site.	September 2008
First Five Year Review.	September 23, 2016

APPENDIX D- PUBLIC NOTICE

ENVIRONMENTAL RESPONSE & REMEDIATION

PUBLIC NOTICE
Petrochem Recycling Corp./Ekotek
Superfund Site Five-Year Review
Salt Lake County, Utah

EPA United States Environmental Protection Agency

The Utah Department of Environmental Quality (UDEQ), Division of Environmental Response and Remediation (DERR), in cooperation with the U.S. Environmental Protection Agency (EPA), is conducting a Five-Year Review of the Petrochem Recycling Corp./Ekotek Superfund Site located at 1628 North Chicago Street, Salt Lake City, Salt Lake County, Utah. The site was placed on the National Priorities List (NPL) in 1992 as the area was used for oil refining from 1953 to 1978, and later converted into a hazardous waste storage/treatment and petroleum recycling facility from 1980 to 1988.

Cleanup activities included the removal of above-ground and underground storage tanks, containers, contaminated sludge, pooled liquids, and processing equipment from the site. Wastes and solvents from used petroleum products had contaminated surface and subsurface soils, as well as groundwater. The cleanup was completed in 2000 and the site was deleted from the National Priorities List in 2003. Soils were cleaned up to an industrial use standard and does not allow for unrestricted uses of the site.

What is a Five-Year Review? The purpose of a Five-Year Review is to determine whether or not cleanup and other actions taken at the site are protective of human health and the environment. The Five-Year Review will include a review of site documents, community interviews, and a site inspection to evaluate all remedy components as well as the status of land-use controls. Upon completion of the review, a report will be made available to the public by October 2021.

To review previous Five-Year Review reports and other site-related files: The Administrative Record for the Petrochem Recycling Corp./Ekotek Superfund site includes all reports and decision documents and is available for public review at:

Utah Department of Environmental Quality
Multi- Agency State Office Building
195 North 1950 West (First Floor)
Salt Lake City, Utah 84116
Phone: 801-536-4100

Project documents are available online at: eqedocs.utah.gov using the search phrase "American Barrel." You can also find information about the Utah Power and American Barrel Superfund site on the EPA Website at: https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0800680

If you would like more information on the Five-Year Review or participate in an interview, please contact:

Maureen Petit
UDEQ/DERR Project Manager
Phone: (801) 536-4172
Email: mpetit@utah.gov

Dave Allison
UDEQ/DERR Community Involvement
Phone: (801) 536-4479
Email: dallison@utah.gov

APPENDIX E – INTERVIEW SUMMARY REPORTS

Site Name: Petrochem/Ekotek EPA ID: UTD093119196	Date: March 25, 2021 Time: 11:00 AM
Type of Contact: □ Telephone □ Email X Visit	Contact made by: Maureen Petit and Dave Allison. Utah Department of Environmental Quality
Person Contacted	
Name: Jason Vriens	Organization: Site Property Owner
Address: Vriens Truck Parts 1575 North Beck Street Salt Lake City, Utah 84116	Telephone Number: (801) 521-2002 Email address: jfrotus@aol.com

1. Is your organization/department aware of the Petrochem/Ekotek Superfund Site and the actions taken/underway to address environmental contamination? Jason Vriens is the sole property owner and holds legal title of the former Petrochem/Ekotek Superfund Site.Vriens purchased the 6.6 Site on a tax selloff from Salt Lake County in 2007. Vriens' company offices at Truck Parts have been located adjacent to the cleanup site since 1995, and he was aware of the cleanup from beginning to end. Vriens Truck Parts is a dealership of pre-owned truck parts for Freightliner, Kenworth, and Peterbilt serving Salt Lake City, Utah.

2. What's your overall impression (your general sentiment) of the actions taken/underway at the Petrochem/Ekotek Superfund Site? Vriens said that, while he bought the property knowing the cleanup work was completed by EPA and at a considerable expense, he has never had any environmental issues with the protectiveness of the remedy. The entire Site was graded and Vriens stores some inventory on the former Site and leases some of the Site to Liberty Tire Recycling, which stages pallets of wrapped recycled tires for truck shipment.

Vriens' only issue with the Site is the EPA-compacted soil used to backfill the Site. The soil has softened over time so Vriens brought in six inches of road base to cover five acres to enable diesel trucks to load and unload items on the Site.

3. Are you aware of any community concerns regarding the Petrochem/Ekotek Superfund Site, as it pertains to actions taken or underway to address environmental contamination? If so, please give details. Vriens said his property has only been used to store items and does not impact the community. He said no one has ever expressed any issues with the Site being a former Superfund site and that his company is putting the Site to beneficial use when there was none before he bought the Site.

4. Over the past five years, have there been any complaints, violations, or other incidents (e.g., vandalism, trespassing, or emergency responses) at or related to the Petrochem/Ekotek Superfund Site requiring your office to respond? If so, please give details of the events and results of the response. Vriens said there have not been any incidents over the last five years. Vriens said there is some occasional flooding with strong rain storms, and the Site slopes to the southwest. While this has not contributed to erosion, Vriens built a small, two-foot-high berm near the fence line to keep water from leaving the Site.

5. Do you feel well informed about the activities and progress over the last five years at the Petrochem/Ekotek Superfund Site? Do you know how to contact the Environmental Protection Agency and/or UDEQ – DERR if you have questions or concerns about Petrochem/Ekotek Superfund Site? Vriens said he has not had a reason over the last five years to speak to regulators other than for FYRs. Vriens said if he had any questions or wanted more information he would reach out to UDEQ managers for assistance.

6. Over the past five years, have there been any changes in land use surrounding the Petrochem/Ekotek Superfund Site to your knowledge? Are you aware of potential future changes in land use? If so, please describe including any concerns you and/or your agency might have with land use changes. Vriens said he has no immediate plans to change the current land use, which is zoned for industrial use. Although Vriens uses the Site for staging purposes, he is always open to future considerations. Vriens understands the Site has certain requirements under the EC with Salt Lake County and UDEQ.

7. Do you have any comments, suggestions, or recommendations regarding the Petrochem/Ekotek Superfund Site Site management (for example, questions pertaining to institutional controls)? If you have questions or are aware of potential problems in the future, what problems might arise? What are your agency's concerns if such do arise? Vriens has not had any problems since purchasing the Site and does not anticipate any future issues. Vriens is interested in any information pertaining to the cleanup history and would like to be kept up to date on any regulatory requirements as necessary.

APPENDIX F – SITE INSPECTION CHECKLIST

I. SITE INFORMATION	
Site name: Petrochem/Ekotek	**Date of inspection:** March 25, 2021
Location and Region: Salt Lake City, UT/EPA Region 8	**EPA ID:** UTD093119196
Agency, office, or company leading the five-year review: UDEQ	**Weather/temperature:** Partly cloudy, 70 degrees. No rain.

Remedy Includes: (Check all that apply)

☐ Landfill cover/containment
☐ Access controls
x Institutional controls
☐ Groundwater pump and treatment
☐ Surface water collection and treatment
☐ Other_____
_____

☐ Monitored natural attenuation
☐ Groundwater containment
☐ Vertical barrier walls

Attachments: ☐ Inspection team roster attached x Site map attached as appendix

II. INTERVIEWS (Check all that apply)

1. **O&M site manager** _____ _____ _____
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____
   Problems, suggestions; ☐ Report attached _____
   _____

2. **O&M staff** _____ _____ _____
   Name Title Date
   Interviewed ☐ at site ☐ at office ☐ by phone Phone no. _____
   Problems, suggestions; ☐ Report attached _____
   _____

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

Agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.
Problems; suggestions; ☐ Report attached _____
_____

4. **Other interviews** (optional) Jason Vriens Property Owner 3/25/2021
Name Title Date

Interviewed: x at site ☐ at office ☐ by phone Phone no. (801) 521-2002
Problems, suggestions; x Report attached as appendix

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. **O&M Documents**
   - ☐ O&M manual — ☐ Readily available — ☐ Up to date — x N/A
   - ☐ As-built drawings — ☐ Readily available — ☐ Up to date — x N/A
   - ☐ Maintenance logs — ☐ Readily available — ☐ Up to date — x N/A

   Remarks_____

2. **Site-Specific Health and Safety Plan** — ☐ Readily available — ☐ Up to date — x N/A
   - ☐ Contingency plan/emergency response plan — ☐ Readily available — ☐ Up to date — x N/A

   Remarks_____

3. **O&M and OSHA Training Records** — ☐ Readily available — ☐ Up to date — x N/A

   Remarks_____

4. **Permits and Service Agreements**
   - ☐ Air discharge permit — ☐ Readily available — ☐ Up to date — x N/A
   - ☐ Effluent discharge — ☐ Readily available — ☐ Up to date — x N/A
   - ☐ Waste disposal, POTW — ☐ Readily available — ☐ Up to date — x N/A
   - ☐ Other permits_____ — ☐ Readily available — ☐ Up to date — x N/A

   Remarks_____

5. **Gas Generation Records** — ☐ Readily available — ☐ Up to date — x N/A

   Remarks_____

6. **Settlement Monument Records** — ☐ Readily available — ☐ Up to date — x N/A

   Remarks_____

7. **Groundwater Monitoring Records** — ☐ Readily available — ☐ Up to date — x N/A

   Remarks_____

8. **Leachate Extraction Records** — ☐ Readily available — ☐ Up to date — x N/A

   Remarks_____

9. **Discharge Compliance Records**
   - ☐ Air — ☐ Readily available — ☐ Up to date — x N/A
   - ☐ Water (effluent) — ☐ Readily available — ☐ Up to date — x N/A

   Remarks_____

10. **Daily Access/Security Logs** — ☐ Readily available — ☐ Up to date — x N/A

    Remarks_____

IV. O&M COSTS

1. **O&M Organization N/A**

☐ State in-house ☐ Contractor for State
☐ PRP in-house ☐ Contractor for PRP
☐ Federal Facility in-house ☐ Contractor for Federal Facility
☐ Other_____
_____

2. **O&M Cost Records**

☐ Readily available ☐ Up to date
☐ Funding mechanism/agreement in place
Original O&M cost estimate_____ ☐ Breakdown attached

Total annual cost by year for review period if available

From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost
From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost
From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost
From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost
From_____ To_____ _____ ☐ Breakdown attached
Date Date Total cost

3. **Unanticipated or Unusually High O&M Costs During Review Period**

Describe costs and reasons: N/A_____
_____
_____
_____
_____
_____

V. ACCESS AND INSTITUTIONAL CONTROLS x Applicable ☐ N/A

A. Fencing

1. **Fencing damaged** ☐ Location shown on site map x Gates secured ☐ N/A

Remarks: No fence damage. Site secured with locked gate.
_____

B. Other Access Restrictions

1. **Signs and other security measures** x Location shown on site map ☐ N/A

Remarks_____
_____

C. Institutional Controls (ICs)

1. **Implementation and enforcement**

Site conditions imply ICs not properly implemented ☐ Yes x No ☐ N/A
Site conditions imply ICs not being fully enforced ☐ Yes x No ☐ N/A

Type of monitoring (*e.g.*, self-reporting, drive by) ___Site visit__
Frequency _____
Responsible party/agency UDEQ _____
Contact _____ _____ _____ _____
Name Title Date Phone no.

Reporting is up-to-date ☐ Yes ☐ No x N/A
Reports are verified by the lead agency ☐ Yes ☐ No x N/A

Specific requirements in deed or decision documents have been met ☐ Yes ☐ No ☐ N/A
Violations have been reported ☐ Yes ☐ No ☐ N/A
Other problems or suggestions: ☐ Report attached
Five year reviews are the only long term monitoring occurring on Site
_____
_____
_____

2. **Adequacy** ☐ ICs are adequate ☐ ICs are inadequate ☐ N/A
Remarks_____
_____
_____

D. General

1. **Vandalism/trespassing** ☐ Location shown on site map x No vandalism evident
Remarks: no vandalism evident/the property owner had no incidents of vandalism to report
_____

2. **Land use changes on site** x N/A
Remarks: The site is still used for truck part storage
_____

3. **Land use changes off site** x N/A
Remarks_____
_____

VI. GENERAL SITE CONDITIONS

A. Roads ☐ Applicable x N/A

1. **Roads damaged** ☐ Location shown on site map ☐ Roads adequate x N/A
Remarks_____
_____

B. Other Site Conditions

Remarks Conditions at the Site remain unchanged since the last FYR

_____

_____

_____

_____

VII. LANDFILL COVERS ☐ Applicable x N/A

A. Landfill Surface

1. **Settlement** (Low spots) ☐ Location shown on site map ☐ Settlement not evident
Areal extent_____ Depth_____
Remarks_____
_____

2. **Cracks** ☐ Location shown on site map ☐ Cracking not evident
Lengths_____ Widths_____ Depths_____
Remarks_____
_____

3. **Erosion** ☐ Location shown on site map ☐ Erosion not evident
Areal extent_____ Depth_____
Remarks_____
_____

4. **Holes** ☐ Location shown on site map ☐ Holes not evident
Areal extent_____ Depth_____
Remarks_____
_____

5. **Vegetative Cover** ☐ Grass ☐ Cover properly established ☐ No signs of stress
☐ Trees/Shrubs (indicate size and locations on a diagram)
Remarks_____
_____

6. **Alternative Cover (armored rock, concrete, etc.)** ☐ N/A
Remarks_____
_____

7. **Bulges** ☐ Location shown on site map ☐ Bulges not evident
Areal extent_____ Height_____
Remarks_____
_____

8. **Wet Areas/Water Damage** ☐ Wet areas/water damage not evident
☐ Wet areas ☐ Location shown on site map Areal extent_____
☐ Ponding ☐ Location shown on site map Areal extent_____
☐ Seeps ☐ Location shown on site map Areal extent_____
☐ Soft subgrade ☐ Location shown on site map Areal extent_____
Remarks_____
_____

9.	**Slope Instability** ☐ Slides ☐ Location shown on site map ☐ No evidence of slope instability Areal extent_____ Remarks_____ _____
B. Benches	☐ Applicable x N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)
1.	**Flows Bypass Bench** ☐ Location shown on site map ☐ N/A or okay Remarks_____ _____
2.	**Bench Breached** ☐ Location shown on site map ☐ N/A or okay Remarks_____ _____
3.	**Bench Overtopped** ☐ Location shown on site map ☐ N/A or okay Remarks_____ _____
C. Letdown Channels	☐ Applicable ☐ N/A (Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)
1.	**Settlement** ☐ Location shown on site map ☐ No evidence of settlement Areal extent_____ Depth_____ Remarks_____ _____
2.	**Material Degradation** ☐ Location shown on site map ☐ No evidence of degradation Material type_____ Areal extent_____ Remarks_____ _____
3.	**Erosion** ☐ Location shown on site map ☐ No evidence of erosion Areal extent_____ Depth_____ Remarks_____ _____

4. **Undercutting** ☐ Location shown on site map ☐ No evidence of undercutting
Areal extent_____ Depth_____
Remarks_____
_____

5. **Obstructions** Type_____ ☐ No obstructions
☐ Location shown on site map Areal extent_____
Size_____
Remarks_____
_____

6. **Excessive Vegetative Growth** Type_____
☐ No evidence of excessive growth
☐ Vegetation in channels does not obstruct flow
☐ Location shown on site map Areal extent_____
Remarks_____
_____

D. Cover Penetrations ☐ Applicable x N/A

1. **Gas Vents** ☐ Active ☐ Passive
☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
☐ Evidence of leakage at penetration ☐ Needs Maintenance
☐ N/A
Remarks_____
_____

2. **Gas Monitoring Probes**
☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
☐ Evidence of leakage at penetration ☐ Needs Maintenance ☐ N/A
Remarks_____
_____

3. **Monitoring Wells** (within surface area of landfill)
☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
☐ Evidence of leakage at penetration ☐ Needs Maintenance ☐ N/A
Remarks_____
_____

4. **Leachate Extraction Wells**
☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
☐ Evidence of leakage at penetration ☐ Needs Maintenance ☐ N/A
Remarks_____
_____

5. **Settlement Monuments** ☐ Located ☐ Routinely surveyed ☐ N/A
Remarks_____
_____

E. Gas Collection and Treatment ☐ Applicable x N/A

1. **Gas Treatment Facilities**
   ☐ Flaring ☐ Thermal destruction ☐ Collection for reuse
   ☐ Good condition ☐ Needs Maintenance
   Remarks_____
   _____

2. **Gas Collection Wells, Manifolds and Piping**
   ☐ Good condition ☐ Needs Maintenance
   Remarks_____
   _____

3. **Gas Monitoring Facilities** (*e.g.*, gas monitoring of adjacent homes or buildings)
   ☐ Good condition ☐ Needs Maintenance ☐ N/A
   Remarks_____
   _____

F. Cover Drainage Layer ☐ Applicable ☐ N/A

1. **Outlet Pipes Inspected** ☐ Functioning ☐ N/A
   Remarks_____
   _____

2. **Outlet Rock Inspected** ☐ Functioning ☐ N/A
   Remarks_____
   _____

G. Detention/Sedimentation Ponds ☐ Applicable ☐ N/A

1. **Siltation** Areal extent_____ Depth_____ ☐ N/A
   ☐ Siltation not evident
   Remarks_____
   _____

2. **Erosion** Areal extent_____ Depth_____
   ☐ Erosion not evident
   Remarks_____
   _____

3. **Outlet Works** ☐ Functioning ☐ N/A
   Remarks_____
   _____

4. **Dam** ☐ Functioning ☐ N/A
   Remarks_____
   _____

H. Retaining Walls ☐ Applicable x N/A

1. **Deformations** ☐ Location shown on site map ☐ Deformation not evident
   Horizontal displacement_____ Vertical displacement_____
   Rotational displacement_____
   Remarks_____
   _____

2. **Degradation** ☐ Location shown on site map ☐ Degradation not evident
   Remarks_____
   _____

I. Perimeter Ditches/Off-Site Discharge ☐ Applicable x N/A

1. **Siltation** ☐ Location shown on site map ☐ Siltation not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

2. **Vegetative Growth** ☐ Location shown on site map ☐ N/A
   ☐ Vegetation does not impede flow
   Areal extent_____ Type_____
   Remarks_____
   _____

3. **Erosion** ☐ Location shown on site map ☐ Erosion not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

4. **Discharge Structure** ☐ Functioning ☐ N/A
   Remarks_____
   _____

VIII. VERTICAL BARRIER WALLS ☐ Applicable x N/A

1. **Settlement** ☐ Location shown on site map ☐ Settlement not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

2. **Performance Monitoring** Type of monitoring_____
   ☐ Performance not monitored
   Frequency_____ ☐ Evidence of breaching
   Head differential_____
   Remarks_____
   _____

IX. GROUNDWATER/SURFACE WATER REMEDIES ☐ Applicable x N/A

A. Groundwater Extraction Wells, Pumps, and Pipelines ☐ Applicable ☐ N/A

1. **Pumps, Wellhead Plumbing, and Electrical**
☐ Good condition☐ All required wells properly operating ☐ Needs Maintenance ☐ N/A
Remarks_____
_____
_____

2. **Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances**
☐ Good condition☐ Needs Maintenance
Remarks_____
_____

3. **Spare Parts and Equipment**
☐ Readily available ☐ Good condition☐ Requires upgrade ☐ Needs to be provided
Remarks_____
_____

B. Surface Water Collection Structures, Pumps, and Pipelines ☐ Applicable x N/A

1. **Collection Structures, Pumps, and Electrical**
☐ Good condition☐ Needs Maintenance
Remarks_____
_____

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances**
☐ Good condition☐ Needs Maintenance
Remarks_____
_____

3. **Spare Parts and Equipment**
☐ Readily available ☐ Good condition☐ Requires upgrade ☐ Needs to be provided
Remarks_____
_____

C. Treatment System ☐ Applicable x N/A

1. **Treatment Train** (Check components that apply)
   ☐ Metals removal ☐ Oil/water separation ☐ Bioremediation
   ☐ Air stripping ☐ Carbon adsorbers
   ☐ Filters_____
   ☐ Additive (*e.g.*, chelation agent, flocculent)_____
   ☐ Others_____
   ☐ Good condition ☐ Needs Maintenance
   ☐ Sampling ports properly marked and functional
   ☐ Sampling/maintenance log displayed and up to date
   ☐ Equipment properly identified
   ☐ Quantity of groundwater treated annually_____
   ☐ Quantity of surface water treated annually_____
   Remarks_____
   _____

2. **Electrical Enclosures and Panels** (properly rated and functional)
   ☐ N/A ☐ Good condition☐ Needs Maintenance
   Remarks_____
   _____

3. **Tanks, Vaults, Storage Vessels**
   ☐ N/A ☐ Good condition☐ Proper secondary containment ☐ Needs Maintenance
   Remarks_____
   _____

4. **Discharge Structure and Appurtenances**
   ☐ N/A ☐ Good condition☐ Needs Maintenance
   Remarks_____
   _____

5. **Treatment Building(s)**
   ☐ N/A ☐ Good condition (esp. roof and doorways) ☐ Needs repair
   ☐ Chemicals and equipment properly stored
   Remarks_____
   _____

6. **Monitoring Wells** (pump and treatment remedy)
   ☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
   ☐ All required wells located ☐ Needs Maintenance ☐ N/A
   Remarks_____
   _____

D. Monitoring Data N/A

1. Monitoring Data
   ☐ Is routinely submitted on time ☐ Is of acceptable quality

2. Monitoring data suggests:
   ☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining

D. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)
☐ Properly secured/locked ☐ Functioning ☐ Routinely sampled ☐ Good condition
☐ All required wells located ☐ Needs Maintenance x N/A
Remarks_____
_____

X. OTHER REMEDIES

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

_____
_____
_____
_____
_____
_____
_____
_____
_____

C.	Early Indicators of Potential Remedy Problems
	Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.

D.	Opportunities for Optimization
	Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

IV. O&M COSTS

1. **O&M Organization**
   - State in-house • Contractor for State X N/A
   - PRP in-house • Contractor for PRP X N/A
   - Federal Facility in-house • Contractor for Federal Facility X N/A
   - Other_____

2. **O&M Cost Records**
   - Readily available • Up to date
   - Funding mechanism/agreement in place

   Original O&M cost estimate_____ • Breakdown attached

   Total annual cost by year for review period if available

   From_____ To_____ _____ • Breakdown attached
   Date Date Total cost

   From_____ To_____ _____ • Breakdown attached
   Date Date Total cost

   From_____ To_____ _____ • Breakdown attached
   Date Date Total cost

   From_____ To_____ _____ • Breakdown attached
   Date Date Total cost

   From_____ To_____ _____ • Breakdown attached
   Date Date Total cost

3. **Unanticipated or Unusually High O&M Costs During Review Period**
   Describe costs and reasons: _____

V. ACCESS AND INSTITUTIONAL CONTROLS X Applicable • N/A

A. Fencing

1. **Fencing damaged** • Location shown on Site map • Gates secured X N/A
   Remarks_____

B. Other Access Restrictions

1. **Signs and other security measures** • Location shown on Site map X N/A
   Remarks_____

C. Institutional Controls (ICs)

1. **Implementation and enforcement**

Site conditions imply ICs not properly implemented • Yes X No • N/A
Site conditions imply ICs not being fully enforced • Yes X No • N/A

Type of monitoring (*e.g.*, self-reporting, drive by) Site Visit
Frequency _____
Responsible party/agency UDEQ
Contact _____ _____ _____ _____
Name Title Date Phone no.

Reporting is up-to-date • Yes • No X N/A
Reports are verified by the lead agency • Yes • No X N/A

Specific requirements in deed or decision documents have been met • Yes • No X N/A
Violations have been reported • Yes • No X N/A
Other problems or suggestions: • Report attached

_____
_____
_____
_____

2. **Adequacy** • ICs are adequate • ICs are inadequate X N/A
Remarks _____
_____
_____

D. General

1. **Vandalism/trespassing** • Location shown on Site map X No vandalism evident
Remarks _____
_____

2. **Land use changes on Site** X N/A
Remarks _____
_____

3. **Land use changes off-site** X N/A
Remarks _____
_____

VI. GENERAL SITE CONDITIONS

A. Roads • Applicable X N/A

1. **Roads damaged** • Location shown on Site map • Roads adequate X N/A
Remarks _____
_____

B. Other Site Conditions

Remarks _____

_____

_____

_____

_____

_____

VII. LANDFILL COVERS • Applicable X N/A

A. Landfill Surface

1. **Settlement** (Low spots) • Location shown on Site map • Settlement not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

2. **Cracks** • Location shown on Site map • Cracking not evident
   Lengths_____ Widths_____ Depths_____
   Remarks_____
   _____

3. **Erosion** • Location shown on Site map • Erosion not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

4. **Holes** • Location shown on Site map • Holes not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

5. **Vegetative Cover** • Grass • Cover properly established • No signs of stress
   • Trees/Shrubs (indicate size and locations on a diagram)
   Remarks_____
   _____

6. **Alternative Cover (armored rock, concrete, etc.)** • N/A
   Remarks_____
   _____

7. **Bulges** • Location shown on Site map • Bulges not evident
   Areal extent_____ Height_____
   Remarks_____
   _____

8. **Wet Areas/Water Damage** • Wet areas/water damage not evident
   • Wet areas • Location shown on Site map Areal extent_____
   • Ponding • Location shown on Site map Areal extent_____
   • Seeps • Location shown on Site map Areal extent_____
   • Soft subgrade • Location shown on Site map Areal extent_____
   Remarks_____
   _____

9. **Slope Instability** • Slides • Location shown on Site map • No evidence of slope instability
Areal extent_____
Remarks_____
_____

B. Benches • Applicable • N/A
(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

1. **Flows Bypass Bench** • Location shown on Site map • N/A or okay
Remarks_____
_____

2. **Bench Breached** • Location shown on Site map • N/A or okay
Remarks_____
_____

3. **Bench Overtopped** • Location shown on Site map • N/A or okay
Remarks_____
_____

C. Letdown Channels Applicable •X N/A
(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** • Location shown on Site map • No evidence of settlement
Areal extent_____ Depth_____
Remarks_____
_____

2. **Material Degradation** • Location shown on Site map • No evidence of degradation
Material type_____ Areal extent_____
Remarks_____
_____

3. **Erosion** • Location shown on Site map • No evidence of erosion
Areal extent_____ Depth_____
Remarks_____
_____

4. **Undercutting** • Location shown on Site map • No evidence of undercutting
Areal extent_____ Depth_____
Remarks_____
_____

5. **Obstructions** Type_____ • No obstructions
• Location shown on Site map Areal extent_____
Size_____
Remarks_____
_____

6. **Excessive Vegetative Growth** Type_____
• No evidence of excessive growth
• Vegetation in channels does not obstruct flow
• Location shown on Site map Areal extent_____
Remarks_____
_____

D. Cover Penetrations • Applicable X N/A

1. **Gas Vents** • Active • Passive
• Properly secured/locked • Functioning • Routinely sampled • Good condition
• Evidence of leakage at penetration • Needs Maintenance
• N/A
Remarks_____
_____

2. **Gas Monitoring Probes**
• Properly secured/locked • Functioning • Routinely sampled • Good condition
• Evidence of leakage at penetration • Needs Maintenance • N/A
Remarks_____
_____

3. **Monitoring Wells** (within surface area of landfill)
• Properly secured/locked • Functioning • Routinely sampled • Good condition
• Evidence of leakage at penetration • Needs Maintenance • N/A
Remarks_____
_____

4. **Leachate Extraction Wells**
• Properly secured/locked • Functioning • Routinely sampled • Good condition
• Evidence of leakage at penetration • Needs Maintenance • N/A
Remarks_____
_____

5. **Settlement Monuments** • Located • Routinely surveyed • N/A
Remarks_____
_____

E. Gas Collection and Treatment • Applicable X N/A

1. **Gas Treatment Facilities**
   - • Flaring • Thermal destruction • Collection for reuse
   - • Good condition • Needs Maintenance

   Remarks_____
   _____

2. **Gas Collection Wells, Manifolds and Piping**
   - • Good condition • Needs Maintenance

   Remarks_____
   _____

3. **Gas Monitoring Facilities** (*e.g.*, gas monitoring of adjacent homes or buildings)
   - • Good condition • Needs Maintenance • N/A

   Remarks_____
   _____

F. Cover Drainage Layer • Applicable X N/A

1. **Outlet Pipes Inspected** • Functioning • N/A

   Remarks_____
   _____

2. **Outlet Rock Inspected** • Functioning • N/A

   Remarks_____
   _____

G. Detention/Sedimentation Ponds • Applicable X N/A

1. **Siltation** Areal extent_____ Depth_____ • N/A
   - • Siltation not evident

   Remarks_____
   _____

2. **Erosion** Areal extent_____ Depth_____
   - • Erosion not evident

   Remarks_____
   _____

3. **Outlet Works** • Functioning • N/A

   Remarks_____
   _____

4. **Dam** • Functioning • N/A

   Remarks_____
   _____

H. Retaining Walls • Applicable X N/A

1. **Deformations** • Location shown on Site map • Deformation not evident
   Horizontal displacement_____ Vertical displacement_____
   Rotational displacement_____
   Remarks_____
   _____

2. **Degradation** • Location shown on Site map • Degradation not evident
   Remarks_____
   _____

I. Perimeter Ditches/Off-site Discharge • Applicable X N/A

1. **Siltation** • Location shown on Site map • Siltation not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

2. **Vegetative Growth** • Location shown on Site map • N/A
   • Vegetation does not impede flow
   Areal extent_____ Type_____
   Remarks_____
   _____

3. **Erosion** • Location shown on Site map • Erosion not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

4. **Discharge Structure** • Functioning • N/A
   Remarks_____
   _____

VIII. VERTICAL BARRIER WALLS • Applicable X N/A

1. **Settlement** • Location shown on Site map • Settlement not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

2. **Performance Monitoring** Type of monitoring_____
   • Performance not monitored
   Frequency_____ • Evidence of breaching
   Head differential_____
   Remarks_____
   _____

C. Treatment System • Applicable X N/A

1. **Treatment Train** (Check components that apply)
   - • Metals removal • Oil/water separation • Bioremediation
   - • Air stripping • Carbon adsorbers
   - • Filters_____
   - • Additive (*e.g.*, chelation agent, flocculent)_____
   - • Others_____
   - • Good condition • Needs Maintenance
   - • Sampling ports properly marked and functional
   - • Sampling/maintenance log displayed and up to date
   - • Equipment properly identified
   - • Quantity of groundwater treated annually_____
   - • Quantity of surface water treated annually_____

   Remarks_____
   _____

2. **Electrical Enclosures and Panels** (properly rated and functional)
   - • N/A • Good condition • Needs Maintenance

   Remarks_____
   _____

3. **Tanks, Vaults, Storage Vessels**
   - • N/A • Good condition • Proper secondary containment • Needs Maintenance

   Remarks_____
   _____

4. **Discharge Structure and Appurtenances**
   - • N/A • Good condition • Needs Maintenance

   Remarks_____
   _____

5. **Treatment Building(s)**
   - • N/A • Good condition (esp. roof and doorways) • Needs repair
   - • Chemicals and equipment properly stored

   Remarks_____
   _____

6. **Monitoring Wells** (pump and treatment remedy)
   - • Properly secured/locked • Functioning • Routinely sampled • Good condition
   - • All required wells located • Needs Maintenance • N/A

   Remarks_____
   _____

D. Monitoring Data X NA

1. Monitoring Data
   - • Is routinely submitted on time • Is of acceptable quality

2. Monitoring data suggests:
   - • Groundwater plume is effectively contained • Contaminant concentrations are declining

D. Monitored Natural Attenuation X NA

1. **Monitoring Wells** (natural attenuation remedy)
   - Properly secured/locked
   - Functioning
   - Routinely sampled
   - Good condition
   - All required wells located
   - Needs Maintenance
   - N/A

   Remarks_____

X. OTHER REMEDIES

No remedies are currently applied at the Site.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

_See Narrative_____

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

C.	Early Indicators of Potential Remedy Problems
	Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future.
D.	Opportunities for Optimization
	Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

APPENDIX G – SITE PHOTOS

Photo No. 1 – Tire storage by Liberty Tire Recycling LLC on the north side of the Site.

Photo No. 2 – Truck parts and garbage trucks stored on the southeast side of the Site.

Photo No. 3 – Truck parts stored on the southeast and central portions of the Site.

APPENDIX H - ENVIRONMENTAL COVENANT

RE3192

10525428
09/22/2008 03:30 PM $0.00
Book - 9644 Pg - 6790-6796 A-F
GARY W. OTT
RECORDER, SALT LAKE COUNTY, UTAH
SL CO REAL ESTATE
BY: ZJM, DEPUTY - WI 7 P.
13

When Recorded Return To:

Jason Vriens
850 West 1600 North
Salt Lake City, Utah 84116

With Copies to:

Mary Ellen Sloan
Deputy District Attorney
Civil Division
2001 South State Street, S-3600
Salt Lake City, Utah 84190-1210

Brad T Johnson
Utah Department of Environmental Quality
DERR
168 North 1950 West
Box 144840
Salt Lake City, Utah 84114-4840

ENVIRONMENTAL COVENANT

This Environmental Covenant is entered into by FROTUS BROTHERS, II, a Utah LLC, of the State of Utah ("Owner"), Salt Lake County, a body corporate and politic of the State of Utah ("County"), and the Utah Department of Environmental Quality ("DEQ") pursuant to Utah Code Ann., Sections 57-25-101 *et seq.*, for the purpose of subjecting the real Property described in paragraph 2 below to the activity and use limitations set forth herein. Owner, County and DEQ are sometimes jointly referred to hereinafter as the "Parties."

The Property includes the location of the former Petrochem Recycling Corp./Ekotek, Inc. Superfund Site located at 1600-1642 North Chicago Street (Township 1 N Range 1 W) in Salt Lake City. The site was operated as a hazardous waste storage, treatment and petroleum recycling facility. Site operations were shut down in February 1988, after a notice of violation was issued by DEQ to the Petrochem Recycling Corporation. In November 1988, the U.S. Environmental Protection Agency's ("EPA") Region VIII Emergency Response Branch initiated an emergency surface removal action at the site. Following an assessment, the site was listed on the National Priorities List ("NPL") on October 14, 1992.

Following a remedial investigation and feasibility study, EPA selected a remedy for the site contained in a final Record of Decision ("ROD") dated September 27, 1996. An agreement

in the form of a Consent Decree was negotiated to implement the remedy selected in the ROD (Docket No. CERCLA (106) VIII-98-05). The Consent Decree was entered on April 27, 1998 in the U.S. District Court for Utah. The remedial action, including building demolition, soil excavation and off site disposal, removal and disposal of surface storage tanks and drums, underground tank removals and off site disposal, excavation and off site incineration of recovered LNAPL, treatment and discharge of remediation derived water, and backfilling of excavations with clean soil was completed in compliance with the ROD and a final inspection was conducted on September 10, 2002. Hazardous substances above health-based levels were removed from the site. Confirmatory sampling verified that the site achieved the ROD cleanup objectives for soil and groundwater. The final site close out report determined that the site can be returned to an industrial type use. The site was subsequently deleted from the NPL effective June 30, 2003. A complete copy of the administrative record for the site is available for review at:

U.S. Environmental Protection Agency Region 8 Superfund Records Center
1595 Wynkoop Street
Denver, Colorado 80202

The Parties have determined that because some potentially contaminated soils may remain on site, the following Institutional Controls are appropriate.

NOW, THEREORE, the Parties agree to the following:

1. Environmental Covenant. This instrument is an environmental covenant developed and executed pursuant to Utah Code Ann., Sections 57-25-101 *et seq.*

2. Property. This Environmental Covenant concerns a seven acre parcel of real property located at 1600-1642 North Chicago Street in Salt Lake City, Salt Lake County, Utah, comprising parcel numbers: 08-23-407-001-0000; 08-23-407-002-0000; 08-23-407-003-0000; 08-23-407-004-0000; 08-23-407-006-0000; and 08-23-452-001-0000.

3. Former Owner. Ekotek, Incorporated, aka Self Refining Co, the former owner of the property, abandoned the property in bankruptcy proceedings. Delinquent property taxes were not paid and the property went to a final tax sale on May 22, 2008. Owner, submitted a bid on the Property pursuant to Section 59-2-1351.1, Utah Code Ann., and received a tax deed from the County. Consistent with paragraph 6 herein, the obligations of the Owner are imposed on assigns and successors in interest, including any future owner of any interest in the Property or any portion thereof, including, but not limited to, owners of an interest in fee simple, mortgagees, easement holders, and/or lessees (all of whom are hereinafter referred to as "Transferee"). The term "Owner" or "Owners" includes the term "Transferee" or "Transferees" unless this instrument clearly indicates otherwise.

4. Holder. Owner, whose address is 850 West 1600 North, Salt Lake City, Utah

84116, is the "Holder" of this Environmental Covenant, as defined in Utah Code Ann., Section 57-25-102(6).

5. Activity and Use Limitations. As part of the removal action described in the administrative record, Owner hereby imposes and agrees to comply with the following activity and use limitations:

   a. Land Use
      i. The property is currently zoned "M2" by Salt Lake City for industrial use. Residual contamination may remain in the soil on the site but the levels are consistent with an industrial use.
      ii All future uses of the property must, therefore, be consistent with uses allowed in an industrial zone. Any change in land use may require additional remediation.
   b. Worker Health and Safety
      i. Owner shall develop worker protection and site safety & health plans for the excavation and removal of contaminated soils and comply with applicable worker health and safety laws.
   c. Handling, Transport and Disposal
      i. Excavated contaminated soils must be handled, transported and disposed of in accordance with applicable law.

6. Running with the Land. This Environmental Covenant shall be binding upon the Owner and all assigns and successors in interest, including any Transferee, and shall run with the land, pursuant to Utah Code Ann., Section 57-25-105, subject to amendment or termination as set forth herein.

7. Compliance Enforcement. Compliance with this Environmental Covenant may be enforced pursuant to Utah Code Ann., Section 57-25-111. Failure to timely enforce compliance with this Environmental Covenant or the activity and use limitations contained herein by any Party shall not bar subsequent enforcement by such Party and shall not be deemed a waiver of the Party's right to take action to enforce any non-compliance. Nothing in this Environmental Covenant shall restrict the DEQ from exercising authority under applicable law.

8. Rights of Access. Owner hereby grants to DEQ, their respective agents, contractors, and employees, a right of access to the Property for implementation and enforcement of this Environmental Covenant.

9. Notice upon Conveyance. Each instrument hereafter conveying any interest in the Property or any portion of the Property shall contain a notice of the activity and use limitations set forth in this Environmental Covenant, and provide the recorded location of this Environmental Covenant. The notice shall be substantially in the following form:

The interest conveyed hereby is subject to an Environmental Covenant, dated , 2008, recorded in the official records of the Salt Lake County Recorder on _____, 2008, Entry No._____, Book _____, Page _____. The Environmental Covenant contains the following activity and use limitations:

a. Land Use
   i. The property is currently zoned "M2" by Salt Lake City for industrial use. Residual contamination may remain in the soil on the site but the levels are consistent with an industrial use.
   ii All future uses of the property must, therefore, be consistent with uses allowed in an industrial zone. Any change in land use may require additional remediation.

b. Worker Health and Safety
   i. Owner shall develop worker protection and site safety & health plans for the excavation and removal of contaminated soils and comply with applicable worker health and safety laws.

c. Handling, Transport and Disposal
   i. Excavated contaminated soils must be handled, transported and disposed of in accordance with applicable law.

10. Representations and Warranties. Owner hereby represents and warrants to the other signatories hereto:
   a. That the Owner is the sole owner of the Property;
   b. That the Owner holds legal title to the Property;
   c. That the Owner has the power and authority to enter into this Environmental Covenant, to grant the rights and interests herein provided and to carry out all obligations hereunder;
   d. That the Owner has identified all other persons that own an interest in or hold an encumbrance on the Property and notified such persons of the Owner's intention to enter into this Environmental Covenant; and
   e. That this Environmental Covenant will not materially violate or contravene or constitute a material default under any other agreement, document or instrument to which Owner is a party or by which Owner may be bound or affected.

11. Amendment or Termination. This Environmental Covenant may be amended or terminated only by a written instrument duly executed by all of the following: The Owner or Transferee, County and DEQ, pursuant to Utah Code Ann., Section 57-25-110 and other applicable law. The term, "Amendment," as used in this Environmental Covenant, shall mean any changes to the Environmental Covenant, including the activity and use limitations set forth herein, or the elimination of one or more activity and use limitations when there is at least one limitation remaining. The term, "Termination," as used in this Environmental Covenant, shall mean the elimination of all activity and use limitations set forth herein and all other obligations under this Environmental Covenant. Within thirty (30) days of signature by all requisite parties on any amendment or termination of this Environmental

Covenant, the Owner shall file such instrument for recording with the Salt Lake County Recorder's Office, and shall provide a file and date-stamped copy for the recorded instrument to the County and DEQ.

12. Severability. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

13. Governing Law. This Environmental Covenant shall be governed by and interpreted in accordance with the laws of the State of Utah.

14. Recordation. Within (30) days after the date of the final required signatures on this Environmental Covenant, Owner shall file this Environmental Covenant for recording, in the same manner as a deed to the Property, with the Salt Lake County Recorder's Office.

15. Effective Date. The effective date of this Environmental Covenant shall be the date upon which the fully executed Environmental Covenant has been recorded as a document of record for the Property with the Salt Lake County Recorder.

16. Distribution of Environmental Covenant. The Owner shall distribute a file and date-stamped copy of the recorded Environmental Covenant to DEQ and Salt Lake County at the addresses listed herein below.

17. Notice. Unless otherwise notified in writing by Owner, County, or DEQ, any document or communication required by this Environmental Covenant shall be submitted to:

a. County:

David L. Beck
Auditor's Office
2001 South State Street, N-3300
Salt Lake City, Utah 84190

Mary Ellen Sloan
District Attorney's Office
2001 South State Street, S-3600
Salt Lake City, Utah 84190

b. DEQ:

Brad T Johnson, Director
Utah Dept. of Environmental Quality
Division of Environmental Response & Remediation
168 North 1950 West
Box 144840
Salt Lake City, Utah 84114-4840

c. Owner: Frotus Brothers, II
850 West 1600 North
Salt Lake City, Utah 84116

The undersigned representatives of the Parties represent and certify that he or she is authorized to execute this Environmental Covenant.

FROTUS BROTHERS, II, a Utah LLC:

JASON VRIENS, Its President

STATE OF UTAH)
: ss.
County of Salt Lake)

Before me, a notary public, in and for Salt Lake County, State of Utah, personally appeared before me Jason Vriens, who after being sworn, duly acknowledged to me that he did execute the foregoing instrument.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official Seal this 11 day of September 2008.

NOTARY PUBLIC
ALICIA A. REEVES
2609 S FOREST DALE CIR
SALT LAKE CITY, UT 84106
MY COMMISSION EXPIRES
AUGUST 7, 2009
STATE OF UTAH

NOTARY PUBLIC
Residing in Salt Lake County, Utah

[SEAL]

SALT LAKE COUNTY

By: _____
Mayor Peter Corroon or Designee

STATE OF UTAH)
: ss.
County of Salt Lake)

On the 30 day of July, 2008, personally appeared before me Doug Willmore, who being by me duly sworn did say, that s/he is the Chief Administrative Officer of Salt Lake County, Office of Mayor, and that said instrument was signed in behalf of Salt Lake County, by authority of law.

KAREN R. LOWE
NOTARY PUBLIC - STATE OF UTAH
2001 S. STATE STREET N-2100
SALT LAKE CITY, UT 84190
My Comm. Exp. 01/08/2010

[SEAL]

_____
NOTARY PUBLIC
Residing in Salt Lake County, Utah

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

The Utah Department of Environmental Quality authorized representative identified below hereby approves the foregoing Environmental Covenant pursuant to Utah Code Ann. Sections 57-25-102(2) and 57-25-104(1)(e).

By: _____
Name: Brad T Johnson
Title: Director, Division of Environmental Response and Remediation, Utah Department of Environmental Quality

STATE OF UTAH)
: ss.
County of Salt Lake)

Before me, a notary public, in and for said county and state, personally appeared Brad T Johnson, an authorized representative of the Utah Department of Environmental Quality, who acknowledged to me that he did execute the foregoing instrument this 14 day of July, 2008

NOTARY PUBLIC
JENNIFER BURGE
140 East 300 South
Salt Lake City, Utah 84111
My Commission Expires
September 11, 2008
STATE OF UTAH

_____
Notary Public
My Commission expires: 9-11-08