

June 19, 2017

Ms. Kim Shelley, Acting Director
Division of Water Quality
P.O. Box 144870
Salt Lake City, UT 84114-4870

Re: Corrective Action Plan Technical Details; Transwest Pick-A-Part, 3586 North 2000 West,
Farr West, UT 84404

To Ms. Shelley:

The following is submitted in compliance with a request from Mr. Wynn John of your office.

Discharger: Transwest Pick-A-Part
Company Contact: Mr. John Roberts
Company Address: 4651 North Digital Drive, Lehi, UT 84043
Telephone Number: 801.738.0200
Project Location: 3586 North 2000 West, Farr West, UT
Technical Contact: Mr. Mark T. Ellis, Ellis Environmental, 801.768.0675

Treatment Procedure

A corrective action plan (CAP) has been submitted to Division of Water Quality (DWQ) on behalf of Transwest Pick-A-Part. Technical details include the following:

The fence on the north end of the crusher yard will be removed. The fence straddles the excavation zone. Refer to figure 11, Appendix A.

Corrective action area is centered around MW6. An area estimated in the previous submittal shows an area of approximately 1,500 ft² that will excavate MW6 and take out soil north, south, east and west from MW6.

The soil around MW6 will be excavated to expose about 2 feet of groundwater. The excavation will be 7-8 feet deep. Total volume of soil to be excavated and stockpiled on site is estimated at about 500 yd³. This assumes none of the soil excavated will have excessive petroleum contamination.

Excavated soil is not expected to be uniformly contaminated. Uncontaminated or lightly contaminated soil will be stockpiled to the east where the crusher was found. Additional area will be used if needed, north of the excavation.

Excavated soil will be screened so that excessively greasy or oily soil will be disposed as a

petroleum contaminated soil through Republic Services.

Excavation sidewalls will be properly sloped to avoid caving. No entry to the excavation will be permitted as a safety precaution against side wall collapse and against accumulated vapors in the excavation.

With the groundwater exposed in the excavation, the sidewalls of the excavation will be sprayed with surfactant/co-solvent to move any soil-borne petroleum into the exposed water. The sidewalls will be treated only one time and this before the open water is treated.

Iron and copper will be placed into the open water excavation to work as Fenton's Reagent. There is a significant amount of metallic iron and copper in the lot surface soil.

The open water will be dosed with 10% hydrogen peroxide (H_2O_2). First dose of H_2O_2 will require about 10 gallons. A dosing hose will be connected to a 5 gallon container of the peroxide and dragged across the open water. Gravity flow will move the H_2O_2 into the water throughout the excavation. The dosing hose will be moved to different locations to assure the water all received H_2O_2 .

The H_2O_2 will degrade the DRO, the surfactant and the co-solvent butyl alcohol.

Mass of Contamination

Assuming a surface area of 1,500 ft² or 139 m², a depth of 0.2 m, the volume of excavation water is estimated at 83.4 m³. Assuming a worst case condition of 99.2 mg/L DRO in the excavation water, the mass of DRO is calculated at 8.27 kg or about 18.2 pounds of DRO. It is expected that additional DRO will be scavenged out of the soil sidewall of the excavation, maybe a pound or two. The mass of DRO expected to be treated is 20 pounds. The mass of surfactant and co-solvent butyl alcohol is expected to be another 5 pounds.

Mass of 10% H_2O_2 (specific gravity of 1.3) to be dosed into the excavation is expected to be 20 gallons or 218 pound of H_2O_2 .

Sampling

Samples will be collected in the manner described in the Standard Operating Procedures submitted to DWQ. Samplers are trained and experienced in a large variety of sampling methods and situations. If site conditions require modification of the sampling methods, those changes will be explained with the sample results submitted to DWQ.

Open water will be sampled 1 week after dosing, with either a bailer or with a peristaltic pump. This will be a progress sample. Open water will be sampled within 1 week of each dose of H_2O_2 . It is anticipated that the open water will require at least 4 doses.

The water will be collected into the 40 mil containers for analysis by the American West Analytical Laboratories. Ellis Environmental has been assured by the laboratory that the H_2O_2 in small

concentrations will not react aggressively with the fixative in the sample containers.

One confirmatory sample will be collected when a progress sample indicates that the treatment has degraded the diesel range organics (DRO) to less than 10 mg/L. The confirmatory sample will be collected the same as the progress sample.

All samples will be collected, preserved, possessed, transported and surrendered according to chain of custody procedures. All samples will receive first order (lowest) Quality Assurance/Quality Control.

Safety

Site workers need to have a minimum of 8 hours safety training. This project will require Level D personal protection. Attached is the Health and Safety Plan, Appendix B. This plan is modified from the site investigation plan.

Project Duration

Open water will be treated primarily through the dosing of H_2O_2 to the water. The effects of photolysis as an effective hydrocarbon degrader cannot be ignored, as well the effects of evaporation/volatilization. The treatment is estimated to take 4-6 weeks to complete.

As long as progress is made in degrading the DRO, the successive rounds of H_2O_2 dosing will continue until the target clean up is achieved of DRO less than 10 mg/L.

Sincerely,

Mark T. Ellis

Mark T. Ellis
Environmental Professional



David B. Johnson, P.E., PLS, MBA

Appendices

- A Maps and Drawings
- B Health and Safety Plan
- C Statements of Qualifications

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Appendix A

Maps

Appendix B

Health and Safety Plan

SITE HEALTH AND SAFETY PLAN

Job No. A17-1983

I. **Project Information**

Project Manager: Mark Ellis
Client: Transwest Pick-A-Part
Environmental Technician: Joseph Ellis
Site Name: Transwest Pick-A-Part
Site Location: 3586 North 2000 West, Farr West, UT
Site Supervisor: Mark T. Ellis
Safety Officer: Mark T. Ellis

II. **Objective of the Plan**

The purpose of this site safety plan is to protect our employees from health and safety hazards they might experience in the performance of this task of exposed groundwater treatment of diesel range organics (DRO).

III. **Objective of the Safety Plan**

Site Investigation looking for diesel fuel and gasoline contamination identified by Enercon, a consultant to Copart, a bona fide prospective purchaser of this property. Further site investigation led to the installation of 9 groundwater monitoring wells. MW6 was found to be excessively contaminated with DRO. This plan is designed to keep company employees, site workers and the general public safe.

IV. **Site Characterization**

- A. Site Description: Transwest Pick-A-Part owns and operates this property for vehicle salvage. The property has been used for this purpose since the 1960's. The area of concern is the crusher lot and the lot to the north of the crusher lot. The lots are both secured from public access with concrete and with steel walls.
- B. Site History: This property has been used for auto salvage since the 1960's. Recent site characterization has shown DRO contamination in the groundwater above the Tier 1 Screening Criteria (10 mg/L) at MW6 at 99.2 mg/L.
- C. Utilities: Two utilities are known in the crusher lot. An 8 inch diameter, high pressure, refined petroleum line owned by Tesoro runs the length of the crusher lot. The Tesoro line is east of the excavation. Excavators will operate more than 20 feet away from the Tesoro line.

Mark Ellis
 Joseph Ellis
 David Johnson
 John Roberts

Ellis Environmental Supervisor and Safety Officer
 Environmental Technician
 Engineer
 Buyer Representative

B. First Aid

Compound	Symptoms	Treatment
Benzene	Irritant to eyes, nose, respiratory system; giddy; headache; nausea; staggered gait; fatigue; anorexia; lassitude; dermatitis; depressant; abdominal pain; possible carcinogen	Eyes - irrigate immediately Skin - soap wash Breathe - artificial respiration Ingestion - Medical attention immediately
Ethyl benzene	Irritant to eyes, mucous membranes; headache; dermatitis; narcosis, coma	Eyes - irrigate immediately Skin - water flush promptly Breathe - artificial respiration Ingestion - Medical attention immediately
Toluene	Fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation (tears) nervousness, muscle fatigue, insomnia, paresthesia, dermatitis, photophobia	Eyes - irrigate immediately Skin - soap wash promptly Breathe - artificial respiration Ingestion - Medical attention immediately
Xylenes	hematuria, back pain, hematoma in arms, legs, epistaxis, bleeding lips, hemorrhaging of mucous membranes, abdominal pain, vomiting, fecal blood, petechial rash, abnormal hematology	Eyes - irrigate immediately Skin - soap wash promptly Breathe - artificial respiration Ingestion - Medical attention immediately

Naphthalene	Irritant to eyes, confusion, excitement, malaise, nausea, vomiting, abdominal pain, irritated bladder, profuse sweating, jaundice, hematuria, renal shutdown, dermatitis, optical neuritis, corneal damage	Eyes - irrigate immediately Skin - soap wash promptly Breathe - artificial respiration Ingestion - Medical attention immediately
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C. Safety Procedures

Proper Monitor of contaminated soil and water
Proper Safety Equipment Worn by Employees
"Tool Box" Meeting

D. Personal Protective Equipment List

This is a level D site: Hardhats, Respirators, Eye Protection, Steel-toed Boots, Hearing protection

E. Standard Operating Procedures

Review the Health and Safety Plan before commencing with the excavating and sampling.

F. Monitoring

Site Supervisor will observe on site conditions and personnel to assure that excess exposure is not experienced. If exposure is suspected, follow the directions of the Site Supervisor.

G. Site Security

The crusher lot and the adjoining north lot are both secured with steel on the north, east and south. The lots are secured with a concrete fence on the west. The fencing is kept locked by company procedures. Access to the clean up site is restricted and is considered adequate with current operations.

VIII. **Confined Space Procedures**

Confined space entry is not permissible under this plan.

XI. **Emergency Information**

Nearest Hospital: 2850 North 2000 West, Ste. 101, Farr West, UT. This clinic is directly south on 2000 West from Transwest Pick-A-Part

Poison Control Center: 911

Police: 911 (Desk Sergeant)

Fire: Station (non-emergency) 2023 West 1300 North, Farr West, UT

Ambulance: 911

Electric: Rocky Mountain Power, 801.629.8221 for non emergency contact

Questar Gas: 800.767.1689

City Water: 801.731.4187

Sewer: 801.731.4187

XII. **Plan Approval**

This site safety plan has been written for the use of Ellis Environmental and its employees. Ellis Environmental claims no responsibility for its use by others. The plan is written for the specific site conditions, tasks, dates and personnel specified and must be amended if these conditions change.

APPROVED BY:

Company Officer Mark T. Ellis

Appendix C

Statements of Qualifications

DAVID B. JOHNSON, PE, PLS, MBA

(801)-787-4569 / djohnson@johnsonenginc.com / 4436 S 1025 E Salt Lake City, Utah 84124

Education

MS

Brigham Young University Provo, Utah
• April 2005-Treatment Wetland Design for the Salton Sea, California

BS

Brigham Young University Provo, Utah
• April 2004-Civil Engineering

MBA

University of Utah SLC, Utah
• December 2010

Land Surveying

Salt Lake Community College SLC, Utah
• Satisfied the Utah PLS education requirements

Employment History

Johnson Engineering, Inc.

Salt Lake City, Utah (2014-Present)

Owner and Founder of Johnson Engineering, Inc. (www.johnsonengineeringinc.com)

- Responsible for grading and drainage design for residential and commercial land development projects.
- Responsible for the design of lead shot traps and lead dust suppression for national gun ranges.
- Responsible for construction staking, conducting topo surveys, boundary surveys, and HD scanning.
- Certified Underground Storage Tank Consultant with Utah Department of Environmental Response and Remediation (DERR).

Anderson Engineering Company, Inc.

Salt Lake City, Utah (2005-2014)

Professional Engineer and Land Surveyor

- Responsible for project design and the preparation of construction documents.
- Responsible for project management, including: the allocation of resources; the development and training of personnel; and, quality assurance.
- Responsible for construction staking, conducting topo surveys, boundary surveys, and HD scanning.

Agrarian Research and Management Co., Ltd.

Provo, Utah (2004-2005)

Project Engineer and Land Surveyor

- Responsible for project design, land surveying, and construction management for environmental projects throughout California.

Spanish Fork City Engineering Department

Spanish Fork City, Utah (2002-2004)

Geographic Information Systems (GIS) Intern

- Responsible for collecting and managing GIS data for city utilities.

BYU Materials Research Department

Provo, Utah. (2003)

Research Assistant

- Responsible for soil sample analysis of local road base material for frost heave research.
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Skills and Certifications

Computer Skills:

AutoCAD Civil 3D
ArcGIS Suite
Microsoft Office
Leica Cyclone
Microsoft Project

Survey Equipment:

Trimble S6 Total Station
Trimble GPS Systems
Leica C10 HD Scanner

Additional Skills:

Fluent in writing and speaking
Spanish.

Certifications:

Civil Engineer
• UT # 5338869-2203
• CA # 77583
• WY# 14049
MSHA Training
• 24 hr

Certifications Continued:

OSHA Hazwoper
• 40 hr
Professional Land Surveyor
• UT # 5338869-2201
• CA # 8876
Heavy Construction Contractor
• UT # 8940121-5551
Utah UST Consultant (DERR)

Personal

Brigham Young University Football Letterman (2002)

Provo, Utah (2000-2002)

BYU Student-Athlete Business Mentor

Provo, Utah (2011 to Present)

STATEMENT OF QUALIFICATIONS

Mark T. Ellis- President, The Vision Group, Inc.; including divisions Ellis Environmental and IntelliSolve (1991- present); Certified, Utah Solid and Hazardous Waste Control Board as Consultant (CC19) and Groundwater and Soil Sampler (GS-0081). Certified as Environmental Manager in Nevada, #EM-1191. Qualified, Arizona Consultant. Certified Contractor, South Carolina (UCC-0373). 40 hour hazardous materials management (29 CFR 1910.120). Trained in land appraisal principles with Basic Principles of Land Appraisal and USPAP classes. B.S. Zoology (emphasis on Limnology & Water Chemistry) from BYU in 1978.

Chief Science Officer, Pure Environmental Management, LLC, (2009 to 2015).

Inventor:

- Subsurface Metabolism Enhancement (SME) hydrocarbon bioremediation system, Patent # 6,464,005; Winner of Stoel-Rives Utah Innovator 2010 for Clean Technology and Energy.
- Fuel Vault™, Patent #5,037,239, interest sold to Olsen-Beal Associates.
- Release Detection and Remediation Response (RDR²), Patent #8,235,627.
- SME Sensor, Patent #7,705,312; Infrared sensor for hydrocarbons, oxygen, CO₂ and methane.
- Identity Theft Protection, pat. pending.
- SMECl, Aerobic, chlorinated solvent bioremediation system, pat. pending.

Vice-President of Environmental Services for Olsen-Beal Associates, Orem, Utah. Directed development of Fuel Vault™. Provided environmental services for the petroleum, real estate industries (1990-1991).

Director of Environmental Services, Westech Fuel Equipment, Murray, Utah. Provided environmental assessment and tank closure services to owners of underground storage tanks (1989-1990).

Utah Division of Environmental Quality:

- Manager of the Utah Underground Storage Tank Program, ST/LUST program (1987- 1989).
- Member of UST/LUST Task Force with ASTWMO, (1988- 1989).
- Acid Rain Coordinator for the State of Utah; chair of Utah ADTAC; member, WESTAR and WAD Task Force (1984-1987).
- Air Quality Compliance Officer for the Utah Bureau of Air Quality, (1980-1981, 1984-1987).
- Water Quality Specialist with the Utah Bureau of Water Pollution Control, (1981-1984).

Environmental experience and management includes:

- Citations from Utah Governor (1) and Utah Division of Environmental Health (2) for excellence
- UST closures, including the required site assessments for 347 tanks
- Phase I and II environmental audits/assessments, AAI, TSA at over 1,272 properties since 1989
- LUST abatement and remediation projects at over 130 projects
- Installation/design of Fuel Vault™ facilities at 6 sites
- Research and installation of closed and open loop fisheries at 4 projects
- Hazardous waste compliance at 55 sites
- Air Quality compliance at 15 sites
- Water quality projects at many sites including LUST projects and stormwater plans
- Projects in 16 States (AK, AZ, CA, CO, ID, IN, MT, NV, PA, RI, SC, TN, UT, WA, WI, WY)
- Qualified as Expert Witness in Utah and Arizona courts, 15 projects

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