TerraGraphics
Environmental Engineering, Inc.
www.terragraphics.com

October 10, 2011

Jeffrey Jones
City of Moscow
206 East Third Street
Moscow, Idaho 83843

Dear Mr. Jones,

Please find enclosed the Phase I Environmental Site Assessment we have completed for Sharpe Oil. We appreciate this opportunity to serve you. Please contact me if you have any questions about the report.

Sincerely,

Robin Nimmer

Corporate
121 South Jackson Street
Moscow, Idaho 83843
208-882-7858
208-883-3785 (fax)

Offices also in:
Kellogg, ID
Boise, ID
Spokane, WA
Helena, MT
Las Vegas, NV

Phase I Environmental Site Assessment Report

Sharpe Oil
1102 South Main Street
Moscow, ID 83843

Prepared for

City of Moscow
206 East Third Street
Moscow, Idaho 83843

Prepared by

TerraGraphics Environmental Engineering
121 South Jackson Street
Moscow, ID 83843
Phone: 208.882.7858

Job Number: 11067
10/06/2011

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Acronyms and Abbreviations

AEC	Atomic Energy Commission
AIG	American International Group
AQCR	Air quality control regions
ARAR	Applicable or relevant and appropriate requirement ARP Accidental Release Program
AST	Aboveground storage tank
ASTM	American Society for Testing and Materials
BOD	Biochemical oxygen demand
BTU	British thermal unit
BTEX	Benzene-toluene-ethylbenzene-xylene
^{o}C	Degrees Celsius
CA	California
CAA	(Federal) Clean Air Act
CCME	Canadian Council of Ministers of the Environment
CDEP	Connecticut Department of Environmental Protection
CEPA	Canadian Environmental Protection Act
CERCLA	(Federal) Comprehensive Environmental Response Compensation and Liability Act of 1980
CFC	Chlorofluorocarbon
C.F.R.	Code of Federal Regulations
CLP	(EPA) Contract Laboratory Program
CMHC	Canada Mortgage and Housing Corporation
CO	Carbon monoxide
CZMA	(Federal) Coastal Zone Management Act
DDT	Dichloro diphenyl trichloro ethane
DEC	Department of Environmental Conversation (New York State)
DEP	Department for Environmental Protection (Florida; Massachusetts; New Jersey)
DEPE	Department of Environmental Protection and Energy (New Jersey)
DEQ	Department of Environmental Quality (Louisiana)
DER	Department of Environmental Resources (Pennsylvania)
DMR	Discharge Monitoring Report DI Deionized
DNR	Department of Natural Resources (Michigan)
DOE	(U.S.) Department of Energy
DOH	Department of Health (New York State)
DOI	(U.S.) Department of Interior
DOL	(U.S.) Department of Labor
DOT	(U.S.) Department of Transportation
EIS	Environmental Impact Statement
EM	Electromagnetic
EP	Extraction procedure
EPA	(U.S.) Environmental Protection Agency
^{o}F	Degrees Fahrenheit
f/cc	fibers per cubic centimeter
Fed.Reg.	Federal Register
FID	Flame ionization detector
FOIA	(Federal) Freedom of Information Act
FWPCA	Federal Water Pollution Control Act
GC	Gas chromatograph
GC/MS	Gas chromatography/mass spectrometry
gal	gallon

gph	gallons per hour
GPR	Ground-penetrating radar
H2S	Hydrogen sulfide
HA	Halogenated aromatics
HAP	Hazardous air pollutant
HCFC	Hydrochlorofluorocarbons
HCS	(OHSA) Hazard Communication Standard
HREC	Historical Recognized Environmental Condition
HRS	Hazard Ranking System
HSWA	(Federal) Hazardous and Solid Waste Amendments of 1984
HWM	Hazardous waste management (facilities)
kPa	kilopascal
L	liter
LAER	Lowest achievable emission rate
LEL	Lower explosive limit
LNG	Liquid natural gas
LSP	Licensed site professionals (Massachusetts)
LUST	Fund Leaking underground storage tank (petroleum)
m3	cubic meter
MCL	Maximum contaminant level
MCLG	Maximum contaminant level goal
MCP	Massachusetts Contingency Plan
MeV	Million electron volts
mg/l	miligrams per liter
ml	milliliter
MMS	Minerals Management Service
MS	Mass spectrometry
MSDS	Material safety data sheet
NFA	No Further Action (letter)
NGWA	National Ground Water Association
N02	Nitrogen dioxide
Nox	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRC	Nuclear Regulatory Commission
O2	Oxygen
O3	Ozone
O&M	Operating and maintenance
ODCs	Other direct costs
OSHA	Occupational Safety and Health Act
OVA	Organic vapor analyzer
PCB	Polychlorinated biphenyl
PCi/l	Picocuries per liter
PEL	Permissible airborne exposure level
PID	Photoionization detector
POTW	Publicly owned treatment works
ppb	parts per billion
ppm	parts per million
PRPs	Potentially responsible parties
PSD	Prevention of significant deterioration
psi	pounds per square inch

PVC	Polyvinyl chloride
QA	Quality assurance
QC	Quality control
R.A.	Regional Administrator
R&D	Research and development
RAP	Remedial Assessment Plan
RCP	Response Claims Procedure
RCRA	(Federal) Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
rem	Roentgen equivalent man [a measure of radiation]
RI/FS	Remedial Investigation & Feasibility Study
RMP	Risk management plan
RMPP	Risk Management and Prevention Programs
ROD	Record of Decision
RQ	Reportable quantity
RUST	Repair of Underground Storage Tank Program
SARA	(Federal) Superfund Amendments and Reauthorization Act of 1986
SDWA	(Federal) Safe Drinking Water Act
SEC	Securities and Exchange Commission
SOW	Scope of work
SPCC	Plan Spill Prevention Control and Countermeasure Plan
SPDES	State Pollutant Discharge Elimination System (New York)
SQG	Small quantity generator
SWDA	(Federal) Solid Waste Disposal Act of 1965
SWMA	Solid Waste Management Act (New Jersey)
SWMU	Solid waste management unit
T	Temperature
TAT	Turn-around time
TBC	To-be-considered (material)
TCLP	Toxicity characteristic leaching procedure
TOC	Total organic carbon
TSCA	(Federal) Toxic Substance Control Act
UEL	Upper explosive limit
USGS	United States Geological Survey
UST	Underground storage tank
UV	Ultraviolet
vs.	versus
VCP	Voluntary Cleanup
VOA	Volatile organic analyses
VOC	Volatile organic compound
WQA	(Federal) Water Quality Act

Glossary

Glossary

Action-specific ARARS	usually technology-or activity-based requirements or limitations on actions or conditions involving specific substances.
Alpha particle	a positively charged nuclear particle, consisting of two neutrons and two I protons, emitted with high energy (3 to 8 Me V) during some nuclear I transformations.
Annual aggregate financial ability	the amount of money that would be required to pay for accidental releases that may occur within 12 months.
Area of concern	a term defined in (New Jersey's) Industrial Site Reclamation Act referring to any location where hazardous substances or wastes are or may be present.
As-Is Site Plan	drawing of the existing site layout, shows property boundaries, streets bordering the site, and building locations and configurations, other site features, and includes an accurate scale and the north direction.
Barrier remediation	prevents radon from entering the enclosure.
Becquerel	international unit of measurement for the rate of nuclear transformations (per second).
Beta particle	an electrically-charged particle [either positive (positron) or negative (electron)], ejected from the nucleus of an atom during radioactive decay; has the mass of an electron, can penetrate skin, up to about 1/4 inch.
Caveat emptor	meaning "let the buyer beware;" without a warranty the buyer takes the risk of quality upon himsel£
Certification (laboratories)	granted by some states to certain laboratories; ensures that laboratories meet certain minimum standards.
Chemical-specific ARARs	usually health-or risk-based values or methodologies used to determine acceptable concentrations of chemicals that may be found in, or discharged to, the environment. Maximum contaminant levels (MCLs) or other water quality criteria are examples of chemical-specific ARARs.
Composite sample	a single composite sample is made up of a combination of samples.
Conventional pollutant	EP A has identified five; biochemical oxygen demand, total suspended solids, pH, fecal coliform, and grease.

Criterial pollutant	a pollutant for which EP A has established, under the Clean Air Act, a national standard.
Curie	unit of measurement of the rate of nuclear transformations (per second), approximately equal to the radiation from one gram of radium.
Dilution ventilation	a method of radon remediation; increases the frequency of air exchange in a enclosure.
Direct discharge	one that is released into the 'waters of the United States.'
Discharge of dredged material	generally means any addition of reintroduction of the material, either directly or indirectly, including 'runoff or overflow from a contained land or water disposal area.'
Discharge of a pollutant	CW A defines this as any addition of a pollutant to receiving waters. Dredged material material excavated or dredged from water bodies.
Due diligence	identifying and evaluating environmental liabilities and risks is also known as performing due diligence.
Duplicate samples	provide information about the precision of a laboratory's results by providing a check to determine if the correct sampling technique or method was used; may be a mandatory requirement of some regulatory agencies. Duplicate samples should be collected at locations where suspected contaminant levels are believed to be at their highest concentrations.
Eminent domain	the inherent right of the state or its designated agents to appropriate or take private property provided that the property owner receives just compensation for the taking and there has been a determination that a valid public necessity exists for the taking.
Environmental due diligence process	the process used to investigate a commercial or industrial property (usually prior to completion of a real estate transaction) for contamination by hazardous wastes or hazardous substances.
Environmental professional	ASTM standards terminology used to describe a person possessing the necessary training and experience to conduct all aspects of the ESA and also the ability to develop valid conclusions regarding the presence of recognized environmental conditions. The terms is typically interchangeable with consultant, assessor, environmental assessor, engineering consultant, geologist, hydrogeologist, or certified engineering geologist.

Existing source	is one, the construction of which commenced before publication of an applicable proposed regulation setting NSPSs for that category.
Exposed	(to radiation) the individual is subjected to airborne concentration of radio nuclides with no allowance for the use of protective clothing, equipment or particle size.
Exposure assessment	the defining of exposure pathways and the calculation of the potential magnitude of exposure.
Field blanks	extra field samples that help to ensure "quality control" (QC).
Field-constructed tanks	vertical cylinders with a capacity of greater than 50,000 gallons. Field duplicates
Fill material	any material used primarily for either 'replacing an aquatic area with dry land' or raising the bottom elevation of water body.
First encountered ground water	the most-shallow ground water aquifer. Such an aquifer is the one most likely to be affected if surface discharges of waste have occurred.
Friable asbestos material	any material that contains more than one percent asbestos by weight, and can be crumbled, pulverized, or reduced to powder by hand pressure.
Gamma rays	electromagnetic radiation (similar to X-rays but higher in frequency spectrum) emitted by a radioactive substance. This radiation has no charge and is the most penetrating of the radiation forms.
General permit	authorizes a type of activity as long as it meets certain standards or conditions described in the permit.
Geophysical techniques	tests (including magnetometer surveys, ground penetrating radar, electrical resistivity, and seismic refraction) used to locate buried metallic objects, such as USTs and to map groundwater pathways.
Giga	a billion
Grab samples	uncomposited samples (usually taken for water).
Harmful quantities of oil discharge	any discharge that violates a water quality standard, or causes a film or sheen upon the surface of the water.
Hazard assessment	helps to define the potential adverse health or environmental effects associated with chemicals onsite, the potential magnitude of exposure, and the frequency of exposure.

Hazard identification	the identification of those chemicals that may pose a threat to human health or the environment.
Highest and best use	the most profitable likely use to which a property can be put.
Indemnification agreement	a written promise by one party that it will not hold another party liable; also called a "hold harmless clause."
Indirect point source discharges	discharges by industries of pollutants indirectly into U.S. waters through publicly-owned treatment works (POTWs).
Individual permit	authorizes a specific individual or entity to conduct a specific activity.
Joint and several liability	imposed in cases where the harm caused is indivisible-where there are multiple parties who are potentially responsible for the harm, but it cannot be determined with any degree of certainty which parties or defendants are responsible for which aspects of the damage.
Just compensation	the market value of the property in its highest and best use in cash as of the
Laboratory blanks	laboratory-grade samples that re analyzed in the same way as field samples.
Laboratory duplicates	unmarked samples whose results help to ensure QC.
Location-specific ARARs	restrict actions or contaminant concentrations in certain environmentally sensitive areas. Examples of areas regulated under various federal and state laws include floodplains, wetlands, and locations where endangered species or historically significant cultural resources are present
Matrix spikes	duplicate field samples that are spiked in the laboratory with measured quantities of contaminant; the volume of contamination in a matrix spike can then be subtracted from the overall quantity of contaminant in the pure sample to determine the contamination level in the original soil sample.
Maximum holding times	the total time a sample can be retained under proper storage conditions before analytical results are considered legally invalid.
Method blank	used to calibrate the instrument chosen to test a sample. For example, in spectrometry, a method blank containing deionized water is used to obtain a base reading; this reading is then deducted from the readings obtained from the samples.
Micro	one millionth

Negative declaration	a term defined in (New Jersey's) Industrial Site Reclamation Act.
New source	one for which construction began after publication of an applicable proposed regulation settings NSPS for that category.
New underground storage tanks (New USTs)	tanks used to contain regulated substances, and installed after December 22, 1988.
No Further Action letter	a term defined in (New Jersey's) Industrial Site Reclamation Act.
Opportunity costs	those costs associated with the loss of use of the property due to remedial activies.
Per occurrence financial ability	refers to the amount of money that must be available to pay the cost of one accidental release.
Permeability	the ability of liquid or gas to pass through; in this case, defined as the ability of a rock formation to transmit water.
Pesticide	any substance or mixture of substances intended to prevent, destroy, repel, or mitigate pests.
Phase I (ESA)	non-intrusive research conducted to evaluate the potential for significant onsite impacts.
Phase II (investigation)	an intrusive study of at the site's soil and ground water to evaluate the location and extent of impacts from historical uses.
Phase III	a framework for identifying remediation approaches so that a cleanup strategy can be developed.
Pico	one trillionth
Pits	floor drains that may be used to discharge hazardous wastes; also called "trenches."
Point source discharges	any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feed operation, or vessel or other floating craft, from which pollutants are or may be discharged into waters.

Pollutant	according to CW A, dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heating wrecked or discharged equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. See a/so conventional, non-conventional and toxic pollutants.
Portable organic vapor analyzer	used to screen volatile organic compounds, the most common contaminant present on commercial and industrial properties.
Potential to emit	calculated using the major stationary source's maximum design capacity (continuous year-round operation) following application of pollution controls.
Primary standards (for airborne pollutants)	EPA's standards which are designed to protect human health with an adequate margin of safety.
Pristine sites	sites unaffected by any negative impact from man or nature
Profiling	defining the subsurface features. This is used t define the lateral extent of a feature, such as a waste site, with little or no data on depth.
Proportional allocation method	involves allocating liability according to the percentage of total wastes found at the site that is clearly attributable to each potentially responsible party (pRP).
Pumping and treatment	a man-made system for extracting contaminated ground water and ~ treating it to remove contaminants; typically there is no re-injection of the water.
Quad map	a topographic map with an approximate scale of one inch to 2,000 feet; shows physical features such as wetlands, water bodies, roadways, mines, and buildings.
Quality assurance (QA)	a firm-wide program that establishes project policies, procedures, standards, and guidelines designed to produce an acceptable level of professional quality.
Quality control (QC) programs	establish project activities that apply the policies, procedures, standards, and guidelines designed to produce an acceptable level of professional quality.
Radioactive material	any material which emits, by spontaneous nuclear distergr4ation, corpuscle or electromagnetic emanations.
Radiation	includes alpha rays, beta rays, and gamma rays. Alpha and beta rays are corpuscle (particle) emanations; gamma rays are electromagnetic emanations.

Radiation area	any area accessible to personnel, in which radiation exposure could exceed 5 millirems in one hour, or 100 millirems in any five consecutive days.
Radon	a chemical element fomled by the disintegration of radium, is a heavy, colorless, odorless, and radioactive gas.
Real estate value	cost approach to value involves the estimation of the replacement cost of the utility of the improvements, from which is subtracted the estimated depreciation, to which is added to the value of the land. The land value is nomlally obtained from the market approach to value. income approach is applicable in estimating the value of real estate that is purchased primarily for its income-producing potential. Market data approach is an appraisal process in which the estimated market value of a property is based upon prices paid in actual market transactions, or upon current offering prices for similar real estate. Selected properties are compared to that under appraisal in order to arrive at an indicated value of the subject. The various features of the comparables are considered with respect to their absence, presence, and quality in the subject and adjustments are made to the unit sale price of the comparable property for these major differences.
Recharge	water management systems designed to inject water collected by surface systems back into ground water aquifers.
Regulated substances	"The teml regulated substances means (1) any substance defined [as hazardous substance under CERCLA]...(but not including any substance regulated as hazardous waste under [RCRA]), and (2) petroleum."
Releases	defined by federal and most state laws as any spilling, leaking, pouring, dumping, emitting, discharging, injecting, escaping, leaching, or disposing of hazardous waste or hazardous waste constituents into the environment.
Rem	(roentgen equivalent man) a measure of ionizing radiation dosage with the same biological effect as a roentgen of X- or gamma rays.
Remedial action	a teml defined in (New Jersey's) Industrial Site Reclamation Act.
Restricted area	any area where access is controlled by the employer for the purpose of limiting employee exposure to radiation or radioactive materials.
Restricted-use pesticides	pesticides that must be applied under the supervision of a certified applicator.

Risk characterization	combines information on the potential magnitude of exposure to chemicals from the site with dose-response information derived from the "hazard assessment." The result is a description of the potential nature and magnitude of health or environmental risk associated with each chemical onsite.
Roentgen	the international unit of measurement for X-radiation or gamma radiation
Sample price	the total price for all samples including samples necessary to test for QA.
Sampling round	a consultant's visit to the site to gather samples.
Secondary standards (for airborne pollutants)	EPA's standards designed to protect against environmental damage, such as damage to soils, crops, wildlife, weather, climate, and personal comfort.
Small quantity generators (SQGs)	defined as facilities producing less than 1,000 kilograms of hazardous waste per calendar month (kilograms per month), which is the equivalent of about 300 gallons or about five 55-gallon drums; note, however, some states define SQGs more narrowly.
Soil and ground water analyses	tests used to determine the presence of surficial or subsurface contamination and concentration levels; may involve soil borings and installations of test pits and/or observation wells.
Soil vapor surveys	surveys using gas chromatography equipment to map potential soil and groundwater contamination.
Sophisticated surface water sampling program	consists of more samples taken at several different depths and tests of such physical parameters as pH, conductivity, presence of dissolved oxygen, and temperature.
Sounding	a radar technique used to determine the depth of a buried object at a specific location.
Spikes	samples that have been fixed with a preservative.
Strict liability	indicates that fault is not a prerequisite to determining responsibility under the statue. The purchaser may be liable for cleanup costs even if the property was contaminated prior to his or her purchase. The original owner may also be held accountable for all or part of a property's cleanup costs despite compliance with all regulations in effect att he time of property transfer.

Suction piping	piping which does not require leak detection if it has the following two main characteristics Below-grade piping is sloped so that the contents will drain back into the storage tank if the suction is released. Each suction line has only one check valve which is located directly below the suction pump.
Super lien law	provides states the authority to impose a lien on any property requiring cleanup that involves state expense. The super lien law takes precedence over all other encumbrances, including first mortgage.
Tank testing	used to identify leaks in USTs.
Tax Assessor's Map	provides legal description, property boundaries, locations, types of easement (if any), and the locations of properties bordering the subject site.
Technology-based limits	the minimum level of water pollution control technology that a discharger must apply, regardless of which water body receives the effluent discharge.
Thief	a long, hollow, outer tube with evenly-spaced openings along its length and an inner tube of the same configuration. It is used for collecting samples by aligning the openings after inserting it into the material to be samples.
Title search	a process used to confirm legal ownership (of property).
To-be-considered materials	defined by EP A as "non-promulgated advisories or guidance used by federal or state government that are not legally binding and do not have the status of potential ARARs. In many cleanups, TBCs will be considered along with ARARs in determining the necessary level of cleanup.
Transportation-related release	a release of a hazardous substance during transportation or storage if the stored substance is moved under manifest and has not reached its designated destination.
Transported (radioactive materials)	not defined in OSHA regulations, but these are interpreted to mean moved from one location to another on a property, or from a restricted area to an unrestricted area.
Travel blanks	containers filled with deionized (DI) water that should accompany each container or sample.
Trenches	floor drains which may be used to discharge hazardous wastes; also called "pits."
Trier	a hollow rod that will produce a core sample when thrust into unconsolidated, moist materials.

Underground storage tanks (USTs)	tanks that store regulated substances and have at least 10 percent of their volume, including the contents of connected pipes, underground.
User	ASTM terminology for the person [usually the client] responsible for providing this data to the environmental professional.
Vadose	unsaturated zone.
Warranty	a pledge that a certain matter is true. For example, a seller may warrant that the facility has obtained all federal and state environmental permits required for continued operation.
Waste management units	physical areas of the site where hazardous wastes are generated, used, stored, or treated.
Waters of the United States	(i) navigable waters; waters of the u.s. subject to tidal action shore-ward to the mean high water mark and are presently used or may be used to transport interstate or foreign transport. The term includes coastal and inland waters, lakes, rivers, and streams that are navigable and the oceans; (ii) tributaries of navigable waters (iii) wetlands, including those adjacent to waters of the United States.
Water quality-limited requirements	the pollution controls that dischargers in selected locations must apply to ensure their discharges do not cause violations of the water quality standards set for that receiving body.
Well-casing volume	determined by multiplying the total depth of the well from ground surface to the bottom of the water column by the cross-sectional area.
Wellhead protection areas	surface and sub-surface areas surroundIng water wells or well fields supplying public water systems
Wetlands	definition varies by state, generally one or more of the following criteria apply . Whether or not the area is permanently wet during most of the year. . Whether or not wetlands-related submergent and emergent plants are present. . Whether or not characteristic soil types are present.

Executive Summary

EXECUTIVE SUMMARY

Findings, Opinions & Recommendations

Findings

TerraGraphics has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E 1527-05 of the subject property located at 1102 South Main Street, Moscow, Idaho. The Phase I was conducted based on the agreement dated August 29, 2011 in accordance with the specifications set forth in the City of Moscow Task Order.

The Phase I ESA uncovered the following findings which identify known or suspect *recognized environmental conditions*, and historical *recognized environmental conditions*, and *de minimis conditions*:

Federal Facility Database Listings:
Eight sites, including the target property, were listed under the federal database for RCRA-CESQG, RCRA-NonGen, and FINDS.

State Facility Database Listings:
Seventeen (17) sites, including the target property, were listed under the state database for ALLSITES, UST, LUST, SPILLS, VCP, and FINANCIAL ASSURANCE.

Historical Use Information on the Property:
The site was formerly occupied by a bulk petroleum plant and a Mobil Service Station. It contained four 10,000-gallon aboveground storage tanks (ASTs), a 500-gallon underground storage tank (UST) near the loading dock of the warehouse building, a fuel truck, a 1,000-gallon UST, and a commercial dispensing island (between the service station and warehouse building) with underground piping in operation at the business. The USTs, piping, and dispensers removed in 1999. The ASTs were removed in the early 2000s.

In 2008, the warehouse building was demolished. Petroleum contaminated soil was discovered when the site warehouse was demolished. Soil and groundwater samples were collected and some constituents were above initial default target levels (IDTLs). Contaminated soil was excavated from the subject property and hauled away.

Historical Use on Adjoining Properties:
PURE GRO COMPANY (AKA, PUREGRO CO MOSCOW UNIT NO 100; BUSCH DISTRIBUTORS INC MOSCOW) - located northwest and across South Main Street from the subject property.
The adjacent rail road right-of-way was occupied by a Northern Pacific Railroad depot, water tower, and locomotive turntable; several bulk oil and gasoline distributors; a brick factory; a saw mill; cement and concrete bulk plants; automotive mechanic shops; and an agricultural chemical distributor.

Phase II sampling of the right-of-way in 1992 confirmed that pesticide/herbicide/fertilizer contamination was present in surface soils across the site. Additionally, gasoline and fuel oil contamination in the distributor areas was confirmed in soil and groundwater. State of Idaho cleanup standards for petroleum in soils were exceeded by as much as 13-18 times.

A substantial risk assessment and a comprehensive regulatory review were performed to identify human health risks and potential liability issues. TerraGraphics negotiated final remediation requirements with the tenants on behalf of the University of Idaho, and provided oversight and monitoring during remedial activities. TerraGraphics then oversaw interim streambank stabilization and final stream restoration efforts for Paradise Creek as the site was transformed into a beautiful greenbelt for the University of Idaho in 1997.

CHEVRON USA INC MOSCOW BULK PLT 1001209 (AKA, BUSCH DISTRIBUTORS INC MOSCOW) - located on the north adjoining property.

The site is the location of the former Camas Oil Company, Richfield Oil Corporation, and Busch Distributors operations. The site is located down gradient with respect to shallow groundwater from Southside Mini Mart's and Sharpe Oil's underground storage tanks. Petroleum constituents identified as gasoline in laboratory analysis (BTEXGasoline-EPA 8260/NWTPH-Gx EPA 8015Bmod) were found in two of the site's southernmost subsurface soil borings adjacent to Paradise Creek, at concentrations of 786 mg/kg and 231 mg/kg, respectively. Concentrations of 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene in subsurface soils exceeded the Idaho Department of Environmental Quality's (IDEQ) IDTLs.

Based on the above mentioned recognized environmental conditions, a Phase II ESA was completed in 2005 and generated the following conclusions:

- Contaminated soils exist on site. The contamination exists in close proximity to the former location of the Richfield Oil Corporation/Busch Distributors.
- Preliminary IDEQ Risk Evaluation Manual (REM) suggests that site soil concentrations of 1,2,4- and 1,3,5-trimethylbenzene may present a human health risk via an indoor inhalation vapor pathway. An increased level of effort applied to risk analysis (e.g., collection of soil vapor samples and REM RATL-2 analysis), adjustment of the footprint of the proposed structure and/or implementation of institutional controls may mitigate the human health risk associated with the indoor inhalation of vapor pathway.
- Contaminated groundwater exists on site. Site groundwater benzene concentrations exceed IDEQ IDTLs. However, the Paradise Creek shallow groundwater aquifer is not a source of drinking water and as such, preliminary IDEQ REM suggests that site benzene concentrations are within acceptable tolerances for such an aquifer.
- Contaminated groundwater and soils exist on site immediately adjacent to Paradise Creek. However, preliminary REM suggests that the concentration of benzene in groundwater is sufficiently protective of Paradise Creek as an environmental receptor.
- Excavation of soils on site or other disturbances associated with construction activities may require additional characterization, containment, and disposal of petroleum contaminated soils.

Note: since analysis took place at the *CHEVRON USA INC* site, the EPA has discontinued discussions regarding the toxicity of the chemicals 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene, therefore until there is more clarity about these chemicals of concern, DEQ will no longer consider 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene when applying REM to assess health risks at contaminated sites.

Aboveground Storage Tanks:
There were four 10,000-gallon ASTs that were removed in the early 2000s.

Underground Storage Tanks:
Both were installed in 1956; one held 1,000 gallons of diesel while the other held 550 gallons of diesel. The tanks and associated piping and dispensers were removed in the fall of 1999.

Soil Contamination:
In 2008, Mr. Sharpe, the owner of the subject property, demolished the onsite warehouse building and discovered contamination by the loading dock. At the time of excavation, soil analytical results were not above IDTLs.

Groundwater Contamination:
A groundwater sample collected in 2008 had benzene, ethylbenzene, and toluene concentrations above IDTLs .

Asbestos:
Based on the 1956 construction date of the subject property building, which is currently used as a Domino's Pizza, the presence of asbestos-containing materials appears likely.

Lead-based Paint:

Based on the 1956 construction date of the subject property building, which is currently being used as a Domino's Pizza, the presence of lead-based paint appears likely.

Opinions

The following includes TerraGraphics' opinions of the impact of the findings on the subject property:

Federal Facility Database Listings:
Because eight sites, including the target property, were listed under the federal database for RCRA-CESQG, RCRA-NonGen, and FINDS, there may be *a recognized environmental condition* at the sites.

State Facility Database Listings:
Because seventeen (17) sites, including the target property, were listed under the state database for ALLSITES, UST, LUST, SPILLS, VCP, and FINANCIAL ASSURANCE, there may be *a recognized environmental condition* at the sites.

Historical Use Information on the Property:
The site use history and documented soil and groundwater contamination are *recognized environmental conditions*.

Historical Use on Adjoining Properties:
Both adjoining historical-use properties, Pure Gro Co. (northwest and across S. Main Street) and Chevron (north adjoining), are located down-gradient from the subject property. Therefore, they are not *a recognized environmental condition*.

Aboveground Storage Tanks:
Spills could have occurred while filling and dispensing fuel from these tanks which may have caused the documented soil and groundwater contamination. This is *a recognized environmental condition*.

Underground Storage Tanks:
Spills could have occurred while filling and dispensing fuel from these tanks. Additionally, these tanks could have deteriorated prior to their removal which could have allowed fuel to leak into the ground. This is *a recognized environmental condition*.

Soil and Groundwater Contamination:
Groundwater analytical results from samples collected after the soil was excavated in 2008 were above IDTLs, which is *a recognized environmental condition*.

Asbestos:
This is not *a recognized environmental condition* unless renovation or demolition occurs.

Lead-based Paint:
This is not *a recognized environmental condition* unless renovation or demolition occurs.

Recommendations

TerraGraphics has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-05 of the property located at 1102 South Main Street in accordance with the agreement dated August 29, 2011. Any exceptions to, or deletions from, this practice are described in Sections 10.0 and 11.0 of this report. This assessment has revealed evidence of recognized environmental conditions in connection with the property. Therefore, TerraGraphics recommends a Phase II Environmental Site Assessment. In general TerraGraphics recommends the following site assessment activities:

*Soil sampling to delineate the vertical and lateral extent of petroleum impacted areas, particularly in the area of the excavated leaking underground storage tank (LUST). Gasoline, leaded gasoline, and diesel constituents are the likely chemicals of concern.
*Groundwater sampling to delineate the extent of the contamination. Again, gasoline, leaded gasoline, and diesel constituents are the likely chemicals of concern.

Environmental Report Summary

TerraGraphics has performed a Phase I Environmental Site Assessment of the above referenced property. Any exceptions to, or deletions from, this practice are described in Sections 1.4 and 1.5 of this report. A summary of the report is provided in the table below and further described in Sections 7.0 and 8.0 of this report.

Report Section		Results	Recommendations	Cost Estimate Range
5.2.1	**Hazardous Substances**	Not Applicable	None	
5.2.2	**Unidentified Containers**	Not Applicable	None	
5.2.3	**Staining**	Not Applicable	None	
5.2.4	**Stressed Vegetation**	Not Applicable	None	
5.2.5	**Aboveground Storage Tanks (ASTs)**	Not Applicable	None	
5.2.6	**Lack of Secondary Containment**	Not Applicable	None	
5.2.7	**Underground Storage Tanks (USTs)**	Significant Risk	Phase II	TBD
5.2.9	**PCB Containing Equipment**	Not Applicable	None	
5.2.10	**Solid Waste Disposal**	Not Applicable	None	
5.2.11	**Wetlands**	Not Applicable	None	
5.2.12	**Septic System with On-Site Drainfield**	Not Applicable	None	
5.2.13	**Oil/Water Separator**	Not Applicable	None	
5.2.14	**Dry Wells or Injection Wells**	Not Applicable	None	
5.2.15	**Contamination of Soil**	Significant Risk	Phase II	TBD
5.2.16	**Contamination of Groundwater**	Significant Risk	Phase II	TBD
5.2.17	**Vapor Intrusion**	Potentially Sig. Risk	Phase II	
5.2.18	**Use of Pesticides on Site**	Not Applicable	None	
5.19.1	**Asbestos**	Not Applicable	None	
5.19.2	**Lead**	Not Applicable	None	
5.19.3	**Radon**	Low-Risk	None	
5.19.4	**Lead in Drinking Water**	Not Applicable	None	
5.19.5	**Mold**	Not Applicable	None	
5.3	**Exterior Observations**	No Risk	None	
5.4	**Interior Observations**	No Risk	None	

Detail Report

GENERAL INFORMATION

Project Information:
Sharpe Oil
Project Number:
11067

Consultant Information:
TerraGraphics Environmental Engineering
121 South Jackson Street
Moscow, ID 83843
Phone: 208.882.7858
Fax:
E-mail Address:
Inspection Date: 09/08/2011
Report Date: 10/03/2011

Site Information:
Sharpe Oil
1102 South Main Street
Moscow, ID 83843
County: Latah
Latitude, Longitude: 46.724800, -117.001300
Site Access Contact: Ted Sharpe

Client Information:
City of Moscow
Jeffrey Jones
206 East Third Street
Moscow, Idaho 83843

Site Assessor: Robin E. Nimmer
Dr. Robin Elizabeth . Nimmer
Hydrogeologist

Senior Reviewer:
Jon Munkers
Boise General Manager

1.0 INTRODUCTION

The site is Sharpe Oil (hereinafter referred to as the: "subject property," "target property," or "site") located at 1102 South Main Street in Moscow, Latah County, Idaho. Currently, there are two buildings located on the site. One building was constructed in 1954. It is a concrete masonry unit building constructed on a conventional slab on grade foundation and is approximately 1,215 square feet. It is currently being used as a Domino's Pizza. The other building is a trailer that is being used as an espresso stand.

1.1 Purpose

The following conditions apply to the completion of this Phase I Environmental Site Assessment:

- The purpose of this report is to identify *recognized environmental conditions* associated with the subject property and/or potential for impact from adjacent sites in conjunction with the ASTM E 1527-05 Standard Practice for Environmental Site Assessments.

- A *recognized environmental condition* is defined under the ASTM Standard as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

- The ASTM E 1527-05 standard practice is designed to define good commercial and customary practice in the United States of America for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products.

- This ASTM standard practice is intended to constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" (42 USC § 9601 (35)(B)).

1.2 Detailed Scope of Services

The scope of services used in the completion of this report is specified under the Task Order developed with the City of Moscow dated August 29, 2011. The Phase I ESA conducted at the subject property was in general accordance with ASTM Standard E 1527-05 and included the following:

- Review of previous environmental site assessments;
- Records review;
- Interviews with regulatory officials and personnel associated with the subject and adjoining properties;
- A site visit; and
- Evaluation of information and preparation of the report provided herein.

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required. For this Phase I ESA, no additions to the ASTM E 1527-05 standard were made with the exception of the following: None.

1.3 Significant Assumptions

During the course of this Phase I ESA, no significant assumptions were made.

1.4 Limitations and Exceptions

Along with all of the limitations set forth in various sections of the ASTM E 1527-05 protocol, the accuracy and completeness of this report may be limited by the following:

Access Limitations - The roof of the building was not accessed during the site reconnaissance.
Physical Obstructions to Observations - None
Outstanding Information Requests - None
Historical Data Source Failure - None
Other - None

It should be noted that this assessment did not include a review or audit of operational environmental compliance issues, or of any environmental management systems that may exist on the property. Where required, the documents listed in Appendices A through F were used as reference material for the completion of the Phase I ESA. Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, in certain instances TerraGraphics has been required to assume that the information provided is accurate.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgment of TerraGraphics based on the data obtained from the work. Due to the nature of investigation and the limited data available, TerraGraphics cannot warrant against undiscovered environmental liabilities that are beyond the scope of a Phase I ESA. A Phase I ESA is not an all encompassing investigation. It a professional investigation with a limited scope based on reasonably obtainable information that an experienced professional practicing due care could be expected to obtain or observe and evaluate. Conclusions and recommendations presented in this report should not be construed as legal advice.

Should additional information become available which differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.

1.5 Special Terms and Conditions

No special terms and conditions were defined.

1.6 User Reliance

The information in this report was accurate to the best of TerraGraphics' knowledge on September 19, 2011. This report has been prepared for the sole benefit of the client. The report may not be relied upon by any other person or entity without the express written consent of TerraGraphics Environmental Engineering, Inc.

2.0 SITE DESCRIPTION

2.1 Location and Site Description

The subject property is located at latitude 46.724800 North and longitude 117.001300 West in the northwest 1/4 of Township 39 N, Range 5 W, Section 18. Parcel RPM00000173910A is approximately 0.57 acres according to the Plat Map (Appendix A) or 24,524 square feet according to the Latah County Assessor. The property can be accessed from South Main Street, which runs north-south.

2.2 Site and Vicinity General Characteristics

Topography of the site has been determined from United States Geological Survey 7.5' Digital Elevation Models. The elevation of the subject property is approximately 2,557 feet above mean sea level (amsl). The subject property and surrounding properties slope generally to the north-northwest. One mile north of the site, the elevation slightly raises to 2,573 feet amsl. The elevation slightly raises to 2,609 feet amsl about one-quarter of a mile south of the site. The elevation then lowers to 2,551 feet amsl approximately one-half of a mile south from the site and remains relatively flat, at 2,554 feet amsl, approximately one mile south from the site. The elevation slightly raises to 2,588 feet amsl approximately one mile east of the site and the elevation raises to 2,698 feet amsl about one mile west. The site is not reported to be in the Federal Emergency Management Agency Flood Zone. The target property is listed to be within a 1-mile radius of National Wetland Inventory site (http://www.fws.gov/wetlands/Data/Mapper.html, accessed September 12, 2011). A freshwater emergent wetland is approximately 1 mile south-southwest of the site and a freshwater pond wetland is approximately 1 mile north-northwest of the site. Additionally, Paradise Creek is located just north of the site. Specific groundwater flow direction for this site is best determined using site-specific information; however, the EDR Radius Map Report (see Appendix C) did not provide such information. Mr. Sharpe, owner of the subject property, is familiar with groundwater flow based on groundwater sampling activities; he states that groundwater flows northwest.
The dominant soil composition at the site is named Westlake and described as a silt loam. The soil is listed as Class D, which has a very slow infiltration rate. Two layers compose the dominant soil composition at the site. Both layer 1 (0-33 inches) and layer 2 (33-59 inches) have a soil texture of silt loam. Additional information regarding the soils surrounding the subject property can be seen in the EDR Radius Map Report in Appendix C.
The EDR Radius Map Report revealed that Latah County is designated by the Environmental Protection Agency Map of Radon Zones as "Zone 1" which is defined as having a radon measurement greater than 4 pico Curies per liter of air (pCi/L). Zone designation reflects the average short-term radon measurement that can be expected to be measured in a building without the implementation of radon control methods. If more details concerning radon are desired, site-specific radon monitoring should be conducted at the site.
Sixty-eight (68) wells were identified on the EDR physical setting source map within a 1-mile radius of the target property. A more detailed list of wells in the vicinity of the site can be found in the EDR Radius Map Report provided in Appendix C.

2.3 Current Use of the Property

The site structure is currently used as a Domino's Pizza. The Domino's Pizza building was constructed in 1956, according to the Latah County Assessor. There is a trailer style drive-up espresso stand operating on the north end of the property.

2.4 Description of Structures, Roads, Other Improvements on the Site

The subject property is located in the industrial and former railroad corridor of the city of Moscow. The subject property contains a slab on grade building reportedly constructed in 1956 with approximately 1,215 square foot of floor space; the building sits on the south portion of the property and is used as a Domino's Pizza. A trailer that sits on the north-northeastern portion of the property is used as an espresso stand. The lot is flat with the exception of the east side where there is a sunken area approximately 100 feet long by 20 feet wide with four octagon shaped concrete pads, which was likely the former AST containment area. The current tenant is planning to eventually improve this area into a patio space. The remainder of the property is covered by asphalt or gravel.

See Appendix A for site figures and Appendix E for site photographs.

2.5 Current Uses of the Adjoining Properties

The subject property exists east of the intersection of South Main Street and Sweet Avenue. The subject property is bordered to the east by a mobile home park; the park is separated from the subject property by a chain-link fence. An access driveway to a mobile home park borders the subject property to the south with a private residence south of the driveway. A diversion of the Latah Trail separates the property to the north from an open field; farther north is Latah Trail and Paradise Creek. Northwest of and across South Main Street from the subject property are two University of Idaho welcoming fountains on either side of Sweet Avenue. Further northwest is University of Idaho greenbelt area and a parking lot. Slightly southwest of the property are University of Idaho buildings.

3.0 USER PROVIDED INFORMATION

3.1 Title Records

A copy of the title can be found in Appendix B.

3.2 Environmental Liens or Activity and Use Limitations

No environmental liens were reported for the subject property.

The Latah County Recorder's Office has several liens listed for Theodore Sharpe, the owner of the site. One is a judgment from 1986 that has expired (been released), as there is no follow up on it. Another is a 1991 UCC (‘uniform commercial code'-in which a mortgage is taken on items attached to the property), which was amended in 1994 and released.

3.3 Specialized Knowledge

The user reported that the site has been used as a bulk petroleum distribution center and had USTs and ASTs. Additionally, several sites adjacent to and nearby the subject property also have had reported contamination and remediation activities (see Sections 4, 5, and 6 for further information).

3.4 Commonly Known or Reasonably Ascertainable Information

A Public Records Request (PRR) was submitted to IDEQ on September 7, 2011 for the site located at 1102 South Main Street. IDEQ responded on September 12, 2011 and provided records pertaining to the address listed in the PRR. Further discussion of the information is located in Sections 4 and 5. The documents provided by IDEQ are located in Appendix F.

Additionally, the site owner provided analytical soil and groundwater data linked with the subject property. The results of the data are discussed in Section 5. The data can be found in Appendix F.

3.5 Valuation Reduction for Environmental Issues

According to the Latah County Assessor's office, the value of the property has not significantly lowered or raised in the past 10 years due to environmental issues.

3.6 Reason For Performing Phase I

In August 2010, the City of Moscow was awarded an Environmental Protection Agency Brownfields Assessment Coalition Grant. The City of Moscow is using the grant funds to conduct ESAs and cleanup planning for multiple Brownfield properties along a former railroad/industrial corridor and future industrial park property. The primary goal of this project is to expedite redevelopment of critically distressed properties to improve environmental, economic, and social conditions for the greater Moscow community. The purpose of this Phase I ESA was to determine the likely presence of *recognized environmental concerns* associated with the property and/or potential for impact from adjacent properties.

3.7 Owner, Property Manager, and Occupant Information

The subject property is currently owned and managed by Ted Sharpe. There are no occupants living at the site.

3.8 Other

No other information was provided.

4.0 RECORDS REVIEW

4.1 Standard Environmental Records Sources

An ASTM-compliant government records radial database report was obtained for this assessment from Environmental Data Resources (EDR). The following standard Federal database listings were searched if available: National Priorities List (NPL), Proposed National Priority List (Proposed NPL), National Priority List Deletions (Delisted NPL), Federal Superfund Liens (NPL Recovery),Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS and CERCLIS-NFRAP), Resource Conservation and Recovery Information System/Treatment, Storage, and Disposal Facilities (RCRIS-TSD), RCRIS/Large and Small Quantity Generators (RCRIS-Generator), RCRIS Corrective Action Data (CORRACTS), RCRIS Notifiers (NOTIFIERS) and Emergency Response Notification System (ERNS), RCRA Information (RCRAInfo), Hazardous Materials Information Reporting System (HMIRS), US Engineering and Institutional Controls Lists, Department of Defense Sites (DOD), Formerly Used Defense Sites (FUDS), US Brownfields Sites, Superfund Consent Decrees (CONSENT), Records of Decision (ROD), Uranium Mill Tailings Sites (UMTRA), Open Dump Inventory (ODI), Toxic Chemical Release Inventory System (TRIS) Toxic Substances Control Act (TSCA), Federal Insecticide, Fungicide, & Rodenticide Act/Toxic Substances Control Act Tracking System (FTTS), Section 7 Tracking Systems (SSTS), Integrated Compliance Information System (ICIS), PCB Activity Database System (PADS), Material Licensing Tracking System (MLTS), Mines Master Index File (MINES), Facility Index System/Facility Registration System (FINDS), RCRA Administrative Action Tracking System (RAATS). Criteria for being listed on each database and specific facility information are reviewed within the database report (see Appendix C).
The following Federal facility listings of significance were noted in the regulatory review:

RCRA-CESQG:
- US DA FS MOSCOW
- JIFFY LUBE 1020

RCRA-NonGen
- CHEVRON USA INC MOSCOW BULK PLT 1001209
- BUSCH DISTRIBUTORS INC MOSCOW
- PURE GRO COMPANY (AKA, PUREGRO, PUREGRO CO MOSCOW UNIT NO 100)
- CRITES MOSCOW GROWERS INC
- EMPIRE INC

FINDS:
- SHARPE OIL CORP
- BUSCH DISTRIBUTORS INC MOSCOW
- US DA FS MOSCOW
- JIFFY LUBE 1020
- PURE GRO COMPANY (AKA, PUREGRO, PUREGRO CO MOSCOW UNIT NO 100)
- CRITES MOSCOW GROWERS INC
- EMPIRE INC

The following standard State databases were searched if available: State Priorities List (SPL), State Hazardous Waste Site Voluntary Cleanup Program (VCP), Confirmed or Suspected Contaminated Site List (CSCSL and CSCSL-NFA), Permitted Solid Waste Facilities/Landfill (SWF/LF) List, Remediation Database (ALLSITES), Aboveground Storage Tanks (AST), Leaking Underground Storage Tank (LUST) List, and the Registered Underground Storage Tank (UST) List, Reported Spills (SPILLS), Drycleaner List (DRYCLEANERS), Inactive Drycleaners, Brownfields Sites (BROWNFIELDS), Clandestine Drug Lab Contaminated Site List (CDL), Water Quality Permit Data System (NPDES), Emissions Data System (EMI), Hazardous Sites List (HSL), Solid Waste Tire Facilities (SWTIRE), Hazardous waste manifest information (MANIFEST), Institutional Controls Lists (INST CONTROL), Independent Cleanup Reports list (ICR), Underground Injection Wells Database Listing (UIC). Criteria for

being listed on each database and specific facility information are reviewed within the database report (see Appendix C).
The following Federal facility listing of significance was noted in the regulatory review:

ALLSITES:
- SHARPE OIL CORP
- PURE GRO COMPANY (AKA, PUREGRO, PUREGRO CO MOSCOW UNIT NO 100)
- SOUTHSIDE MINI MART
- MOSCOW SCHOOL DIST #281
- CITY NORTH AMERICAN
- EMPIRE INC
- CITY NORTH AMERICAN ROGER
- KNOKE CONSTRUCTION CO
- GRITMAN MEDICAL CENTER
- GRITMAN HOSPITAL ANNEX
- THE VOX
- AMBASSADOR AUTO SERVICE
- LATAH COUNTY GRAIN GROWER (1)
- A F & A M LODGE
- UNIVERSITY OF IDAHO PLANT SCIENCE FARM
- WIDMANS SPORT CENTER

UST:
- SHARPE OIL CORP
- PURE GRO COMPANY (AKA, PUREGRO, PUREGRO CO MOSCOW UNIT NO 100)
- SOUTHSIDE MINI MART
- SUNSET MART
- MOSCOW SCHOOL DIST #281
- CITY NORTH AMERICAN
- EMPIRE INC
- CITY NORTH AMERICAN ROGER
- GRITMAN MEDICAL CENTER
- THE VOX
- AMBASSADOR AUTO SERVICE
- LATAH COUNTY GRAIN GROWER (1)

LUST:
- SHARPE OIL CORP
- GRITMAN MEDICAL CENTER
- THE VOX
- AMBASSADOR AUTO SERVICE
- LATAH COUNTY GRAIN GROWER (1)

SPILLS:
- PURE GRO COMPANY (AKA, PUREGRO, PUREGRO CO MOSCOW UNIT NO 100)
- GRITMAN HOSPITAL ANNEX
- AMBASSADOR AUTO SERVICE
- UNIVERSITY OF IDAHO PLANT SCIENCE FARM

VCP:
- JACKSON ST SILOS 625 JACKSON STREET

FINANCIAL ASSURANCE:
- SOUTHSIDE MINI MART
- SUNSET MART

Eleven (11) orphan sites, or those with inadequate address information to map, were identified. These orphan sites had inadequate address information to identify if they were within one mile of the site or were clearly marked as outside of the one-mile search radius requirements.

Please see below for details regarding the target property and surrounding properties that were identified.

Site Name: SHARPE OIL CORP
Databases: LUST, UST, ALLSITES, FINDS
Address: 1102 S MAIN
Distance: TARGET PROPERTY
Direction:
Elevation:
Comments: In the 1950s, Mobil Oil had a bulk petroleum plant, warehouse, and office at the site. In the years to follow, several owners bought and sold the site and used it for the same purpose. In the 1970s, the property owners and operators of the bulk plant were Handel-Langley. There was a Mobil Service Station operating onsite, but the exact years of operation are unknown.

In the early 1980s, Mr. Sharpe's father bought the property and renamed the site Sharpe Oil. At that time there were four 10,000-gallon ASTs, a 500-gallon UST near the loading dock of the warehouse building, a fuel truck, and a commercial dispensing island (between the service station and warehouse building) with underground piping in operation at the business. When his father bought the property, the service station was no longer in operation, and an office supply/copier service business occupied the now the Domino's Pizza building. In 1999 his father sold the business to Busch Distributing. Mr. Sharpe also had the UST, piping, and dispensers removed in 1999 by Kennedy Equipment, and did a Tier 1 remediation with the assistance of the Idaho Department of Environmental Quality (IDEQ). Soil samples were collected and there was no evidence of soil contamination, and the area was backfilled. A few years later, the ASTs were removed.

In 2008, Mr. Sharpe demolished the warehouse building and discovered contamination by the loading dock (he believes possibly from the piping or from trucks filling up there, although there were no documented large spills there). Mr. Sharpe paid to haul the contaminated soil to the Roach landfill near Lewiston, Idaho. The site was excavated to clean soil at approximately seven feet below ground surface and sampling was conducted for soil and groundwater. The soil samples indicated the contaminated soil had been excavated, but water samples taken from a nearby well had Benzene, Ethylbenzene, and Toluene contamination that exceeded the IDTLs.

Site Name: CHEVRON USA INC MOSCOW BULK PLT 1001209 (AKA, BUSCH DISTRIBUTORS INC MOSCOW)
Databases: RCRA-NonGen
Address: SWEET AVE & MAIN ST
Distance: 24 FEET
Direction: NNW
Elevation: Lower
Comments: This site is a non generator, or a site that does not currently generate hazardous wastes. There are no RCRA violations recorded for this site.

Based on its lower elevation, this site is unlikely to impact the subject property.

Section 4.4 contains a more detailed history of this site.

Site Name: PURE GRO COMPANY (AKA, PUREGRO CO MOSCOW UNIT NO 100)
Databases: UST, ALLSITES, FINDS, RCRA-NonGen, SPILLS, ALLSITES
Address: SWEET AVE
Distance: 51 FEET
Direction: Northwest
Elevation: Lower
Comments: There was a reported pesticides release on 1/1/2002 that was reportedly cleaned up on 6/1/2004.

Comments: There was also one 2,000-gallon regular gasoline tank installed in 1988 and removed the same year.

According to EDR, the site is listed as a non-generator and does not presently generate hazardous waste; however, the following hazardous waste codes are listed in association with this site: D001 (ignitable hazardous wastes), D002 (corrosive hazardous waste), D003 (reactive hazardous waste). This site received a records/reporting violation on 12/14/1992 and achieved compliance on 12/28/1992. Another records/reporting violation was issued on 3/15/1993; compliance was achieved on 3/16/1993.

There is a low probability this site could impact the project site due to its lower elevation from the project site.

Section 4.4 contains a more detailed history of this site.

Site Name: US DA FS MOSCOW
Databases: FINDS, RCRA-CESQG
Address: 1221 S MAIN ST
Distance: 408 FEET
Direction: South
Elevation: Higher
Comments: This site is a conditionally exempt small quantity generator associated with a USFS research center that has the following waste codes: U002 (acetone), U012 (aniline), U044 (chloroform), U057 (cyclohexanone), U108 (1,4-diethyleneoxide), U112 (acetic acid ethyl ester), U122 (formaldehyde), U123 (formic acid), U 134 (hydrofluoric acid), U140 (isobutyl alcohol), U144 (acetic acid, lead(+2) salt), U154 (methanol), U159 (2-butanone), U188 (phenol), U219 (thiourea), U239 (benzene, dimethyl-), U240 (acetic acid, (2,4-dichlorophenoxy)-, salts and esters). There are no recorded RCRA violations.

Based on the lack of reported incidences and violations, this site is unlikely to impact the subject property.

Site Name: SOUTHSIDE MINI MART
Databases: UST, FINANCIAL ASSURANCE 1, ALLSITES
Address: 202 SPOTSWOOD
Distance: 612 FEET
Direction: Northeast
Elevation: Higher
Comments: There are three USTs that were installed in 1987 and are currently in use at this site. One hold 10,000 gallons of regular E10, one holds 10,000 gallons of premium E10, and one holds 6,000 gallons of diesel.

Based on the lack of reported incidences for this site, it is unlikely to impact the subject property.

Site Name: JIFFY LUBE 1020
Databases: FINDS, RCRA-CESQG
Address: 326 TROY RD
Distance: 711 FEET
Direction: East
Elevation: Higher
Comments: This site is a small quantity generator of the following hazardous waste codes: D008 (lead) and D018 (benzene). A records/reporting violation was issued to the site in 1992; compliance was reached the same year. A compliance visit occurred in 2007 with no issued violations.

Based on the lack of reported incidences, this site is unlikely to impact the subject property.

Site Name: SUNSET MART
Databases: ALLSITES, UST, FINANCIAL ASSURANCE 1
Address: 1311 S MAIN
Distance: 841 FEET
Direction: South
Elevation: Higher
Comments: This site currently has three USTs in use. All USTs were installed in 1997. One holds 15,000 gallons of regular gasoline, one holds 6,000 gallons of premium gasoline, and one hold 10,000 gallons of diesel.

Based on the lack of reported incidences for this site, it is unlikely to impact the subject property.

Site Name: MOSCOW SCHOOL DIST #281
Databases: ALLSITES, UST
Address: ADAMS & VEATCH ST
Distance: 1,074 FEET
Direction: East
Elevation: Higher
Comments: The Moscow School District site is located at 306 Veatch Street in Moscow, Idaho. The site and adjoining properties were visually inspected on July 20, 2000, for a Phase I ESA. At this time, one onsite building was occupied by the Moscow School District and served as a bus maintenance facility and grounds office. The following are TerraGraphics' findings and opinions generated for the following recognized environmental conditions.

The Moscow School District used this facility to conduct repairs and routine maintenance on the school bus fleet that serves the District. Waste engine oil was reportedly generated, and was collected at least once a year either by a professional disposal company or by the Latah County Highway Department for use in their used oil furnace. The waste oil collection point has the potential to have negatively impacted the subject property. Due to the nature and extent of staining observed on the floor surrounding the area, a crack or seam in the concrete foundation may provide an adequate access route for contaminates to the soil under the site.

Chemical waste was also generated on site. Waste solvent generated by the parts cleaning tank was professionally removed by Safety Clean Corporation approximately once a quarter. The cleaning system was designed to recirculate the solvent for repeated use until replacement. General office wastes are discarded in the dumpster located onsite. The facility should maintain records of waste disposal.

A small portion of the site was occupied by the grounds office. Pesticides, petroleum products, and fertilizers were observed; however, no evidence of waste was noted. According to the head grounds keeper, all products were consumed during use.

The onsite hydraulic lift was working and there was no indication of hydraulic fluid leakage. However, in general these type of lifts have a history of leaking. Due to the age of this lift, it was recommended that the garage be further evaluated for this potential problem.

Site Name: CITY NORTH AMERICAN
Databases: UST, ALLSITES
Address: 234 1/2 W 8TH ST
Distance: 1,207 FEET
Direction: NNW
Elevation: Lower
Comments: TerraGraphics Environmental Engineering completed a Phase II Environmental Site Assessment on the property located at 234 ï¿½ West 8th Street in Moscow, Idaho. The City North American Property is located on the historic east-west

Comments: railroad corridor in Moscow, Idaho. It is also situated adjacent to Paradise Creek (TerraGraphics, 2004a).

A wood loading dock covered the former UST location. The UST once served as the source of heating oil for the City North American Building.

Five borings drilled to evaluate possible environmental impacts to the property associated with the UST encountered shallow groundwater at a depth of 13 feet below ground surface. Some soil staining typical of a petroleum release was observed near the soil water interface. There was very little odor associated with the stained soils.

The Phase II ESA generated the following conclusions:
1) Visual staining suggests there may have been a petroleum release associated with the use of the former underground heating oil storage tank. Soil and shallow groundwater samples were collected and analyzed for Poly Aromatic Hydrocarbons (PAH's) and Benzene Toluene Ethylbenzene and Xylene (BTEX). Soil and shallow groundwater samples were below laboratory instrument detection limits for petroleum constituent contamination (non-detect). Data suggests after 20 plus years, potential contamination from any historical release has naturally attenuated.
2) Clinkers found along the railroad corridor were run for TCLP and were non-detect for RCRA-8 metals excepting barium which was below Risk Based Corrective Action (RBCA) Tier 0 action levels as well as Latah County background concentrations.

Due to its lower elevation, this site is unlikely to impact the subject property.

Site Name: CRITES-MOSCOW GROWERS INC
Databases: FINDS, RCRA-NonGen
Address: 212 W 8TH ST
Distance: 1,221 FEET
Direction: NNW
Elevation: Lower
Comments: According to EDR, it is classified as a non-generator and does not presently produce hazardous waste; however, the following hazardous waste codes are recorded for the site: U060 (1,1'-(2,2-dichloroethylidene)bis[4-chloro-benzene]). No violations were found.

This location is unlikely to impact the project site due to its lower elevation to the project site.

Site Name: EMPIRE INC
Databases: UST, FINDS, RCRA-NonGen, ALLSITES
Address: 427 TROY RD
Distance: 1,232 FEET
Direction: East
Elevation: Higher
Comments: This site had three 500-gallon regular gasoline USTs installed in 1971 and removed in 1991.

This facility is also listed as a non-generator, which do not generate hazardous wastes. However, several waste codes are associated with this in connection to farm chemicals: P020 (dinoseb), P035 (not defined), P048 (2,4-dinitrophenol), P059 (heptachlor), P089 (parathion), and P096 (hydrogen phosphide). There are no recorded RCRA violations.

Based on the lack of reported incidences for this site, it is unlikely to impact the subject property.

Site Name: CITY NORTH AMERICAN ROGER
Databases: UST, ALLSITES
Address: 1420 S MAIN ST
Distance: 1,312 FEET
Direction: South
Elevation: Higher
Comments: This site had one 1,000-gallon regular gasoline UST installed in 1969 and removed in 1988.

Based on the lack of reported incidences for this site, it is unlikely to impact the subject property.

Site Name: KNOKE CONSTRUCTION CO
Databases: ALLSITES
Address: 301 COLLEGE AVE
Distance: 1,438 FEET
Direction: Northwest
Elevation: Higher
Comments: There was one 1,000-gallon regular gasoline tank reported to be installed in 1988 and removed in 1992. There are no records of leaks and/or spills associated with the UST.

Due to the lack of reported incidences, this site is unlikely to impact the project site.

Site Name: GRITMAN MEDICAL CENTER
Databases: LUST, UST, ALLSITES
Address: 728 S MAIN ST
Distance: 1,466 FEET
Direction: North
Elevation: Lower
Comments: There was a reported gasoline release on 5/15/1993; it was reported as cleaned up on 7/1/2002.

There were also four USTs at this site: one 500-gallon used oil tank installed in 1968, one 6,000-gallon regular gasoline tank installed in 1974, and two 8,000-gallon regular gasoline tanks installed in 1974. All four USTs were removed in 1988.

This site is unlikely to impact the subject property due to its lower elevation.

Section 4.4 contains a more detailed history of this site.

Site Name: GRITMAN HOSPITAL ANNEX
Databases: SPILLS, ALLSITES
Address: 700 S MAIN ST
Distance: 1,563 FEET
Direction: North
Elevation: Equal
Comments: There was a reported petroleum release at the site on 6/1/2001. It was reported as cleaned up under a general remediation on 5/1/2003.

There is a low probability this site could impact the project site due to the distance from the site.

Site Name: JACKSON ST SILOS
Databases: VCP
Address: 625 JACKSON STREET
Distance: 1,797 FEET
Direction: NNW
Elevation: Higher

Comments: Participant in the IDEQ's Voluntary Cleanup Program.

There is a low probability this site could impact the project site due to the distance from the site.

Site Name: THE VOX
Databases: LUST, UST, ALLSITES
Address: S MAIN
Distance: 1,906 FEET
Direction: North
Elevation: Higher
Comments: There was a gasoline release reported at this site on 8/4/1998; it was reported as cleaned up on 8/21/1998. There was also one 500-gallon regular gasoline tank installed at this site in 1988 and removed the same year.

There is a low probability this site could impact the project site due to the distance from the site and topographic relationship with the site.

Site Name: AMBASSADOR AUTO SERVICE
Databases: LUST, SPILLS, UST, ALLSITES
Address: 115 W 6TH
Distance: 1,926 FEET
Direction: North
Elevation: Equal
Comments: There was a petroleum release at the site on 6/30/1992. It was reportedly cleaned up on 3/1/1993.

There are also three USTs reported in association with this site: one 1,000-gallon regular gasoline tank installed in 1966 and removed in 1990, one 1,000-gallon used oil tank installed in 1966 and removed in 1990, and one 550-gallon used oil tank installed in 1988 and removed in 1998.

This location is unlikely to impact the project site due to the distance from the project site.

Site Name: LATAH COUNTY GRAIN GROWER (1)
Databases: LUST, UST, ALLSITES
Address: 317 W 6TH ST
Distance: 2,042 FEET
Direction: NNW
Elevation: Higher
Comments: There was a reported release at the site on 6/9/1998. Cleanup was initiated on 7/9/1998 and cleanup was reported as complete on 3/14/2001.

There are also three USTs reported for this site: two 500-gallon regular gasoline tanks installed in 1971 and removed in 1998 and one 1,000-gallon regular gasoline tank installed in 1998 and removed in 2002.

There is a low probability this site could impact the project site due to the distance from the site.

Site Name: A F & A M LODGE
Databases: ALLSITES
Address: 531 S MAIN
Distance: 2,165 FEET
Direction: North
Elevation: Equal
Comments: There was a reported petroleum release from an unregulated tank in the ally at the rear of the building.

This location is unlikely to impact the project site due to its distance from the project site.

Site Name: UNIVERSITY OF IDAHO
Databases: SPILLS, ALLSITES
Address: 415 W 6TH ST, PLANT SCIENCE FARM
Distance: 2,221 FEET
Direction: NNW
Elevation: Higher
Comments: There were three USTs installed in 1988: one 400-gallon diesel tank removed in 1993, one 1,000-gallon regular gasoline tank removed in 1993, and one 750-gallon mixture tank removed in 1991. A petroleum release on 9/1/1991 is reported for this site. There is no reported cleanup date for the release.

This site is listed as a conditionally exempt small quantity generator with hazardous materials associated with it, including ignitable hazardous waste, waste which has a pH of less than 2.0 or greater than 12.5, arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, endrin, lindane, methoxychlor, toxaphene, and other chemical and biological agents, and solvents. There are no violations associated with these hazardous wastes.

Due to the lower elevation and distance to the subject property, it is unlikely to impact the project site.

Site Name: WIDMANS SPORT CENTER
Databases: ALLSITES
Address: 1906 S MAIN ST
Distance: 2,420 FEET
Direction: South
Elevation: Equal
Comments: This site had a 300-gallon regular gasoline UST installed in 1979 and removed from the site in 1988.

Based on the lack of reported incidences for this site, it is unlikely to impact the subject property.

4.2 Additional Environmental Record Sources

A review of historic aerial photos, the Polk's City Directory, and topographical maps shows the subject property and surrounding properties. Details describing these environmental record sources are described in sections 4.2.1 through 4.2.4 and the environmental records can be found in Appendix B.

4.2.1 City Directories

A review of city directories was conducted by EDR. The information below describes the status of the subject property as well as the surrounding properties. A copy of the EDR city directory review is presented in Appendix B.

Polk's City Directory
Target Property
1966: Fred Handel Mobil Products
1972, 1977: Handel-Langley Inc (fuel oil distr)
1983: Campus Link Inc; Sharpe Oil
1994: C & M Distributing; Sharpe Oil Corp

Adjoining Properties
1010 South Main Street
1994: Wood Trucking Co

1020 South Main Street
1972: Larson Distributing Co (beer)
1994: Idaho Forge & Fabrication; Pete's Main Street Auto Body

2001: Idaho Forge & Fabrication

1045 South Main Street
2001: Residential

1100 South Main Street
1966: Larson Distributing Co (beer)

1104 South Main Street
1966: Bennetts Mobil Gas Station
1972: Handel-Langley Mobil Gas Station
1977: Vacant
1983, 1994: R & R Office Equipment
2011: Dominos Pizza

1106 South Main Street
1966, 1972, 1977, 1983: Caldwell Trailer Court
1994, 2001, 2011: Trailer Park

1108 South Main Street
1972, 1977, 1983, 1994, 2001: Residential
2011: No current listing

4.2.2 Physical Setting Source(s)

Topographical Maps
A review of topographical maps was conducted by EDR. Available maps were from are from 1910, 1960, 1961, 1964, and 1975.
Subject Property
1910: The scale of the map prevents an accurate analysis.
1960-1975: The subject property has been developed and appears to have two buildings.
Adjacent Properties
1910: The scale of the map prevents an accurate analysis.
1960-1975: The topographical maps have been split at the subject property, so accurate analysis is difficult. However, it appears that directly to the east of the subject property is undeveloped land; the railroad and some buildings are located to the north, developed land directly to the west, and undeveloped land directly to the south.

Sanborn Fire Insurance Maps
Sanborn Fire Insurance maps were provided by EDR. The available years for these maps include 1904, 1909, 1928, 1950 and 1955.
Subject Property
On the 1904 and 1909 maps, the land is undeveloped. On the 1928 map, the land has been parceled and there is a residence located on the south side of the property. On the 1950 map, the residence is gone and the parcel does not contain any structures or improvements on it. On the 1955 map, the property is labeled as "General Petroleum Co." and has three structures: an oil warehouse, another unmarked building, and a loading shed. There is also a concrete pad surrounded by a three-foot high concrete wall that houses four steel gasoline tanks.
Adjacent Properties
North
1904, 1909: The property has a residence with a detached shed. The NPRR main track is located further north.
1928: The residences are gone and a railroad spur now divides the subject property and the north adjacent property.
1950, 1955: There are two small buildings: one is labeled as a beer warehouse/cold storage, and the other is labeled as sawdust storage.
South
1928, 1950, 1955: There is a residential building with two sheds.
East
1904, 1909: The property is undeveloped.

1928, 1950, 1955: There is one residential building with one shed.
West
1904, 1909, 1928, 1950, 1955: South Main Street is immediately adjacent to the subject property. West across South Main Street, the property is undeveloped.

The EDR topographical maps and Sanborn Fire Insurance maps are presented in Appendix B.

4.2.3 Aerial Photographs

A review of historical aerial photographs was conducted by EDR. The dates of the maps are 1948, 1975, 1981, 1991, 1992/1996, 1998, and 2006. Most of the maps, except 2006, are in poor resolution; however, it appears the subject property has been developed since 1975. It is also evident that adjoining properties to the north, south, east, and west of the subject property have been developed since 1948.

Subject Property
1948: The subject property appears to be undeveloped.
1975, 1981: The property appears to be developed; however, the resolution is poor so details of the development are not clear.
1991, 1992/1996, 1998: There are two large buildings on the subject property; one is located on the south side of the property and the other is located on the north side of the property. Four round tanks are visible on the east side of the property.
2006: The two large buildings remain but the round tanks are gone.

Adjacent Properties
North
1948: The property appears to be undeveloped.
1975, 1981: The property appears to be developed; however, the resolution is poor so details of the development are not clear.
1991, 1992/1996, 1998: There appears to be a large building.
2006: The property appears to be empty.
South
1948 - 2006: The area appears to be developed with small buildings that are most likely residential.
East
1948: The property appears to be undeveloped.
1975, 1981: The property appears to be developed; however, the resolution is poor so details of the development are not clear.
1991, 1992/1996, 1998, 2006: The property appears to be developed with several small buildings.
West
1948, 1975, 1981: The property appears to be undeveloped.
1991, 1992/1996, 1998, 2006: There appears to be a large building and a parking lot.

The EDR aerial photographs are presented in Appendix B.

4.2.4 Previous Environmental Assessment Reports

A PRR was submitted to IDEQ on September 7, 2011 for the site located at 1102 South Main Street. IDEQ responded on September 12, 2011 and provided records pertaining to the address listed in the PRR. The documents provided by IDEQ are located in Appendix F.

According to records, there were previously two USTs on site. Both tanks were installed in 1956; one held 1,000 gallons of diesel while the other held 550 gallons of diesel. The tanks were removed in the fall of 1999. At the time of the removal, both tanks were reported to be in good condition and there was no sign of leakage.

The following information on soil and groundwater characterization is based on letter correspondence between Mr. Ted Sharpe and IDEQ.

All buildings on the north parcel were removed in April 2008 and the former UST site was excavated in early July 2008 to investigate for residual petroleum contamination. Contamination was found in the former UST where the fuel delivery trucks parked while filling the tanks, and around the former fuel pump mounted on the loading doc. On July 9, 2008 an initial soil sample was collected from a pile of greenish/gray silty clay excavated about 2 feet below ground surface (bgs). The sample was analyzed for VOCs and PAHs. Certain analytes exceeded the IDTLs. Contamination was detected at approximately 4-5 feet bgs. Soil was excavated until there was no visible or odor detected in the side walls or bottom of the pit. The soil was excavated to about 30 feet long, 16-18 feet wide, and a depth of approximately 5-6 feet bgs. Soil samples were collected on September 4, 2008 from three locations within the excavated pit, mostly near the bottom. All contaminations of concern were below IDTLs. Groundwater was not sampled at this time.

Shallow groundwater was sampled in 2009 from two monitoring wells located north of the subject property. Monitoring well MW15 is located north of the former office/warehouse and south of the Latah Trail diversion. Monitoring well MW14 is located north of the former ASTs, just north of the Latah Trail diversion. MW15 was sampled for VOCs on May 28, 2009. This well was sampled on August 11, 2009 and analyzed for PAHs. Monitoring well MW14 was also sampled on August 11, 2009 and analyzed for VOCs and PAHs. Results for MW15 indicate certain VOCs (benzene, ethylbenzene, toluene) exceeded the IDTLs; PAH concentrations were below the IDTLs. Samples from MW14 did not have concentrations of VOCs or PAHs that exceeded the IDTLs. IDEQ requested a groundwater characterization to determine the extent of the contamination and a cleanup plan, but this has not been conducted.

4.3 Historical Use Information on the Property

On Sanborn maps from 1904 and 1909, the subject property is undeveloped. On a1928 Sanborn map, the land has been parceled and there is a residence located on the south side of the property. A 1950 Sanborn map indicates that the residence is gone and the parcel does not contain any structures or improvements on it.

In the 1950s, Mobil Oil had a bulk petroleum plant, warehouse, and office at the site. In the years to follow, several owners bought and sold the site and used it for the same purpose. In the 1970s, the property owners and operators of the bulk plant were Handel-Langley. There was a Mobil Service Station operating onsite, but the exact years of operation are unknown.

In the early 1980s, Mr. Sharpe's father bought the property and renamed the site Sharpe Oil. At that time there were four 10,000-gallon ASTs, a 500-gallon UST near the loading dock of the warehouse building, a fuel truck, and a commercial dispensing island (between the service station and warehouse building) with underground piping in operation at the business. When his father bought the property, the service station was no longer in operation, and an office supply/copier service business occupied the now the Domino's Pizza building. In 1999 his father sold the business to Busch. Mr. Sharpe also had the UST, piping, and dispensers removed in 1999 by Kennedy Equipment, and did a Tier 1 remediation with the assistance of the IDEQ. Soil samples were collected and there was no evidence of soil contamination, and the area was backfilled. A few years later, the ASTs were removed.

In 2008, Mr. Sharpe demolished the warehouse building and discovered contamination by the loading dock (he believes possibly from the piping or from trucks filling up there, although there were no documented large spills there). Mr. Sharpe paid to haul the contaminated soil to the Roach landfill near Lewiston, Idaho. The site was excavated to clean soil at approximately seven feet below ground surface and sampling was conducted for soil and groundwater. The soil samples indicated the contaminated soil had been excavated, but water samples taken from a nearby well had Benzene contamination.

4.4 Historical Use Information on Adjoining Properties

The subject property is located at the address of 1102 South Main Street. Based on historical records reviews (described in Section 4.0) and interviews with persons familiar with the site (described in Section 6.0), it appears the surrounding the properties were historically used for industrial purposes associated with petroleum distributing, railroad depots, and warehouses.

Adjacent Properties of Interest
PURE GRO COMPANY (AKA, PUREGRO CO MOSCOW UNIT NO 100; BUSCH DISTRIBUTORS INC MOSCOW) - located northwest and across South Main Street from the subject property.
In 1989, TerraGraphics completed a Phase I Site Audit of the 10 acre railroad ROW south of College Street. According to the Phase I Site Audit, the ROW (a.k.a. Sweet Avenue Property), was occupied by a Northern Pacific Railroad depot, water tower, and locomotive turntable; several bulk oil and gasoline distributors; a brick factory; a saw mill; cement and concrete bulk plants; automotive mechanic shops; and an agricultural chemical distributor (TerraGraphics, 1992).
In the spring of 1992, TerraGraphics completed a Phase II Site Audit for the Sweet Avenue Property. The Phase II sampling confirmed that pesticide/herbicide/fertilizer contamination was present in surface soils across the site. However, outside of the PureGro parcel within the 10 acre site, the concentrations were low and were considered to be representative of background concentrations for agricultural/industrial areas. Further human health risk assessments of pesticide/herbicide levels in soils showed that much the PureGro area presented unacceptable carcinogenic and non-carcinogenic risk. Additionally, gasoline and fuel oil contamination in the distributor areas was confirmed in soil and groundwater. State of Idaho cleanup standards for petroleum in soils were exceeded by as much as 13-18 times (TerraGraphics, 1992).
A substantial risk assessment and a comprehensive regulatory review were performed to identify human health risks and potential liability issues. TerraGraphics negotiated final remediation requirements with the tenants on behalf of the University of Idaho, and provided oversight and monitoring during remedial activities. TerraGraphics then oversaw interim streambank stabilization and final stream restoration efforts for Paradise Creek as the site was transformed into a beautiful greenbelt for the University of Idaho in 1997.

CHEVRON USA INC MOSCOW BULK PLT 1001209 (AKA, BUSCH DISTRIBUTORS INC MOSCOW) - located on the north adjoining property, but separated by the former railroad right-of-way.

TerraGraphics completed an "extended" Phase I ESA for the property located between old Main Street and the modern route of Highway 95 in Moscow, Idaho,
which identified the following recognized environmental conditions concerning the property (TerraGraphics, 2005):

- The site is the location of the former Camas Oil Company, Richfield Oil Corporation, and Busch Distributors operations.
- The site is located down gradient with respect to shallow groundwater from Southside Mini Mart's and Sharpe Oil's underground storage tanks (USTs).
- Petroleum constituents identified as gasoline in laboratory analysis (BTEXGasoline-EPA 8260/NWTPH-Gx EPA 8015Bmod) were found in two of the site's southernmost subsurface soil borings adjacent to Paradise Creek, at concentrations of 786 mg/kg and 231 mg/kg, respectively.
- Concentrations of 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene in subsurface soils exceeded IDEQ's Initial Default Target Levels (IDTLs).

Based on the above mentioned recognized environmental conditions, a Phase II ESA was completed and generated the following conclusions (TerraGraphics, 2005):

- Contaminated soils exist on site. The contamination exists in close proximity to the former location of the Richfield Oil Corporation/Busch Distributors.
- Preliminary IDEQ Risk Evaluation Manual (REM) suggests that site soil concentrations of 1,2,4- and 1,3,5-trimethylbenzene may present a human health

risk via an indoor inhalation vapor pathway (per DEQ, these are presently suspended chemicals of interest). An increased level of effort applied to risk analysis (e.g., collection of soil vapor samples and REM RATL-2 analysis), adjustment of the footprint of the proposed structure and/or implementation of institutional controls may mitigate the human health risk associated with the indoor inhalation of vapor pathway.

- Contaminated groundwater exists on site. Site groundwater benzene concentrations exceed IDEQ IDTLs. However, the Paradise Creek shallow groundwater aquifer is not a source of drinking water and as such, preliminary IDEQ REM suggests that site benzene concentrations are within acceptable tolerances for such an aquifer.
- Contaminated groundwater and soils exist on site immediately adjacent to Paradise Creek. However, preliminary REM suggests that the concentration of benzene in groundwater is sufficiently protective of Paradise Creek as an environmental receptor.
- Excavation of soils on site or other disturbances associated with construction activities may require additional characterization, containment, and disposal of petroleum contaminated soils.

Nearby Properties of Interest *MOSCOW SCHOOL DISTRICT #281 - located east of the subject property.*
The Moscow School District site is located at 306 Veatch Street in Moscow, Idaho. The site and adjoining properties were visually inspected on July 20, 2000, for a Phase I ESA. At this time, one onsite building was occupied by the Moscow School District and served as a bus maintenance facility and grounds office. The following are TerraGraphics' findings and opinions generated for the following recognized environmental conditions (TerraGraphics, 2000b):

- The Moscow School District used this facility to conduct repairs and routine maintenance on the school bus fleet that serves the District. Waste engine oil was reportedly generated, and was collected at least once a year either by a professional disposal company or by the Latah County Highway Department for use in their used oil furnace. The waste oil collection point has the potential to have negatively impacted the subject property. Due to the nature and extent of staining observed on the floor surrounding the area, a crack or seam in the concrete foundation may provide an adequate access route for contaminates to the soil under the site.
- Chemical waste was also generated on site. Waste solvent generated by the parts cleaning tank was professionally removed by Safety Clean Corporation approximately once a quarter. The cleaning system was designed to recirculate the solvent for repeated use until replacement. General office wastes are discarded in the dumpster located onsite. The facility should maintain records of waste disposal.
- A small portion of the site was occupied by the grounds office. Pesticides, petroleum products, and fertilizers were observed; however, no evidence of waste was noted. According to the head grounds keeper, all products were consumed during use.
- The onsite hydraulic lift was working and there was no indication of hydraulic fluid leakage. However, in general these type of lifts have a history of leaking. Due to the age of this lift, it was recommended that the garage be further evaluated for this potential problem.

GRITMAN MEDICAL CENTER - located north of the subject property.
Groundwater monitoring for Volatile Organic Compounds (VOCs) was initiated in the 1990s after petroleum contaminated soils were removed from the property. IDEQ required Gritman to continue monitoring the groundwater to track concentration trends over time. TerraGraphics was hired by Gritman to collect quarterly water samples, which continued until last year. In June of 2002, TerraGraphics submitted a data summary and request to IDEQ to discontinue groundwater monitoring and obtain a letter of "No Further Action". A letter from Mr. Hudson Mann (IDEQ), dated July 1, 2002, concurred with our evaluation and stated that "... no further action is required and associated groundwater monitoring can be discontinued" (TerraGraphics, 2003).

ELECTRICAL SPECIALISTS - located east-southeast from the subject property.
The property located at 301 Troy Road in Moscow, Latah County, Idaho is known as

Electrical Specialists. TerraGraphics completed an ESA February 2004 for this site; at the time the site was used by Electrical Specialists as an automotive repair shop. Mechanical repairs of automobiles were performed at the property. The property was also used for storage of equipment, equipment fueling, and materials storage by Nichols Excavation. The remainder of the property provided parking for automobiles awaiting repair or having been repaired, awaiting retrieval by their respective owners. The lot also served as customer and employee parking. According to personal interviews, the site was previously known as the Moscow Scrap facility. All or a portion of the site was used for recycling of metals. In addition, the site was also used as a bulk oil plant known as American Oil. The site was also used for the loading and unloading of livestock and other materials from the adjacent railroad (TerraGraphics, 2004a). Phase I findings and recommendations included:

- TerraGraphics recommended sampling of soils at a sufficient number of locations on the property to address the possibility of contamination from historical use on and adjacent to the property.
- Borings should also have been conducted to visually inspect soils surrounding the AST and UST located at the west end of the Nichols Excavation building to confirm those tanks have not impacted the surrounding soils.
- Shallow monitoring wells should have been installed as part of the Phase II activities to allow for additional sampling of groundwater, should any contamination be uncovered.

On March 30, 2004 TerraGraphics conducted two soil borings to address possible historic petroleum contamination on Railroad property adjacent to Electrical Specialists. Boring One was located near the foundation of the former American Oil bulk plant Above Ground Storage Tanks. Boring Two was located to address down shallow groundwater gradient impacts form the American Oil ASTs as well as the location of an Underground Storage Tank associated with Nichol's Excavation. Both samples were taken from the soil/groundwater interface approximately 9 feet below ground surface, where soil staining and odor typical of subsurface petroleum contamination was evident. Laboratory results from the two soil samples were all below RBCA Tier 0 Soil Cleanup levels suggesting any historic release in the area of the two boring locations had naturally attenuated (TerraGraphics, 2004a).

PARCEL SIX RAILROAD CORRIDOR - located northwest of the subject property. The site is located along the railroad corridor between West Eighth (aka College) and Main Street in Moscow, Idaho. The elevators and associated storage buildings lie to the north and east of Paradise Creek, between the former Union Pacific/Burlington Northern Railroad main lines on the southeast and northwest sides of the buildings respectively, and a spur line on the northeast side of the buildings. Jackson Street, which also comprises southbound Highway 95 borders the property to the northeast, as it turns south and east to intersect with Main Street (north/south Highway 95) immediately south of the target property. The on site buildings consist of two tall multistory grain elevators separated by long warehouse/storage buildings, that occupy the property between the two railroad lines. A brick constructed shop associated with a high pressure gas meter and a steam boiler used to generate steam to split peas is also located on site (TerraGraphics, 2004c).

Gasoline was found in one of the property's southeast subsurface soil borings (B-10) at a concentration of 620 mg/kg. The absence of lead in the soil suggests that the gasoline was released after 1980. However, the absence or low concentrations of MTBE (a modern gasoline additive), Benzene, Ethylbenzene, Toluene and Xylene indicate that the release is older because those constituents advance at the front of the contamination plume. Moreover, the contamination was limited to a thin layer in the soil horizon, 12-13 feet below ground surface. This suggests a more recent petroleum release because the contamination has not "smeared" vertically through the soil horizon with the seasonal fluctuation of groundwater. Given this limited data, it is difficult to determine the time of the release of gasoline into the environment or a contaminant source. A Phase II ESA was recommended to determine the horizontal extent of the contamination, the presence or absence of those constituents of concern regulated by State and Federal agencies and the source of the contamination on the property (TerraGraphics, 2004c).

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

The site reconnaissance was conducted on September 8 and 13, 2011 by Robin Nimmer, Ph.D., P.G. with TerraGraphics.

The visual reconnaissance consisted of observing the boundaries of the property and systematically traversing the site to provide an overlapping field of view, wherever possible. The exterior of the property was observed from the ground and the accessible interior portions of the buildings were also observed. Photographs of pertinent site features identified during the site reconnaissance are included in Appendix E.

It must be noted that a property assessment functions as a screening tool for use in assessing actual or potential environmental risks. It includes limited research, a review of specified and reasonably ascertainable listings, and a site reconnaissance to identify "recognized environmental conditions" in general accordance with industry standards. "Recognized environmental conditions" are defined under the ASTM standard as "the presence or likely presence of any hazardous substances or petroleum products on a site under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous or petroleum products into structures on the property or into the ground, groundwater or surface water of the property." It is not intended to be conducted as a final site investigation and/or risk assessment. Additional information may affect the conclusions of this report.

5.2 General Site Setting

The area surrounding the site is located within a former railroad and industrial use corridor.

Topography of the site and surrounding properties slope generally to the north-northwest. The site is not reported to be in a FEMA 500-year or 100-year flood zone. The site is listed to be within a 1-mile radius of National Wetland Inventory sites according to the US Fish and Wildlife (USFW) Services National Wetlands Inventory website. These wetlands are located approximately 1 mile south-southwest of the site approximately 1 mile north-northwest of the site. Additionally, Paradise Creek is located just north of the site..

Specific groundwater flow direction for this site is best determined using site-specific information; however, the EDR radius map report (see Appendix C) did not provide such information. Mr. Sharpe, owner of the subject property, is familiar with groundwater flow based on groundwater sampling activities; he states that groundwater flows northwest.

The dominant soil composition at and near the site is Westlake, which is a silt loam with very slow infiltration rates and somewhat poorly drained soils.

The EDR radius report revealed that Latah County is designated by the EPA Map of Radon Zones as "Zone 1," which is defined as having a radon measurement greater than 4 pCi/L.

Sixty-eight (68) water wells were identified on the EDR physical setting source map. A more detailed list of wells in the vicinity of the site can be found in the EDR radius report provided in Appendix C.

5.2.1 Hazardous Substances

No hazardous substances that constitute evidence of a *recognized environmental condition* were observed at the subject property at the time of the site reconnaissance.

There are general cleaning supplies located in both the espresso stand and the Dominos Pizza businesses located onsite. All cleaners are in small quantities, are properly labeled, and are kept in segregated cleaning supply rooms. There was no evidence of leaking or spilling and all containers appeared to be in good condition.

5.2.2 Unidentified Containers

No unidentified containers that constitute evidence of a *recognized environmental condition* were observed at the subject property at the time of the site reconnaissance.

5.2.3 Staining

No unidentified staining that constitutes evidence of a *recognized environmental condition* was observed at the subject property at the time of the site reconnaissance.

5.2.4 Stressed Vegetation

No unidentified stressed vegetation that constitutes evidence of a *recognized environmental condition* was observed at the subject property at the time of the site reconnaissance.

5.2.5 Aboveground Storage Tanks (ASTs)

No aboveground storage tanks were observed on the subject property at the time of the site reconnaissance.

In the 1970s, the property owners and operators of the bulk plant were Handel-Langley and there were four 10,000-gallon ASTs. The ASTs were removed in the early 2000s.

5.2.6 Lack of Secondary Containment

At the time of the site reconnaissance, there was no evidence of above ground storage tanks or drums of materials in need of secondary containment constituting a *recognized environmental condition*.

5.2.7 Underground Storage Tanks (USTs)

Mr. Sharpe, owner of the subject property, stated to the best of his knowledge, that the subject property does not contain USTs.

However, the site has historically had two USTs. Both were installed in 1956; one held 1,000 gallons of diesel while the other held 550 gallons of diesel. The tanks and associated piping and dispensers were removed in the fall of 1999. At the time of the removal, both tanks were reported to be in good condition.

5.2.8 Pits, Ponds, And Lagoons

No ponds or lagoons associated with onsite processes were observed at the subject property at the time of the site reconnaissance.

5.2.9 PCB Containing Equipment

No PCB-containing equipment was identified during the site reconnaissance.

5.2.10 Solid Waste Disposal

No indications of improper disposal of solid waste or burial activities were noted within the scope of this investigation. All solid waste is collected by the City's waste management system.

5.2.11 Wetlands

A wetlands map for the subject property prepared by the United States Fish and Wildlife Service was reviewed online. No designated wetlands were identified on the subject property. In addition, no natural standing bodies of water or typically hydrophytic vegetation were observed on the subject property during the site reconnaissance.

5.2.12 Septic System with On-Site Drainfield

The subject property is connected to the City of Moscow water and waste water system. There were no obvious indications of an on-site drainfield or septic system at the time of the site reconnaissance.

5.2.13 Oil/Water Separator

No oil/water separators were observed on the subject property.

5.2.14 Dry Wells or Injection Wells

No evidence of water supply or groundwater monitoring wells was observed on the subject property during the site reconnaissance.

5.2.15 Contamination of Soil

No staining or other visual indications of soil contamination were observed during the site reconnaissance.

In 2008, Mr. Sharpe, the owner of the subject property, demolished the onsite warehouse building and discovered contamination by the loading dock (he believes possibly from the piping or from trucks filling up there, although there were no documented large spills there). Mr. Sharpe paid to haul the contaminated soil to the Roach landfill near Lewiston, Idaho. The site was excavated to clean soil at approximately seven feet below ground surface and sampling was conducted for soil and groundwater.

Site soil analytical results can be found in Appendix F.

5.2.16 Contamination of Groundwater

Mr. Sharpe stated that there are wells on an adjoining property to the north owned by the railroad, which he used to test groundwater. He believes the wells were put in by the Idaho Transportation Department in the late 1980s.

Site groundwater analytical results can be found in Appendix F.

5.2.17 Vapor Intrusion

Although there were no olfactory indications of vapor intrusion during the site reconnaissance, historic soil and groundwater contamination suggest the potential for harmful vapors.

5.2.18 Use of Pesticides on Site

There were no obvious signs of pesticide use, mixing, or synthesis on the subject property at the time of the site reconnaissance.

5.2.19 Other Concerns

5.19.1 Asbestos

A visual screening for suspect asbestos-containing materials was conducted at the time of the site reconnaissance. All of the materials observed appeared to be in good condition. Based on the 1956 construction date of the subject property building, which is currently used as a Domino's Pizza, the presence of asbestos-containing materials appears likely.

5.19.2 Lead

A visual screening for lead-based paint was conducted at the time of the site reconnaissance. All of the painted surfaces observed appeared to be in good condition. Based on the 1956 construction date of the subject property building, which is currently being used as a Domino's Pizza, the presence of lead-based paint appears likely.

5.19.3 Radon

The EPA has designated three zones of classification indicating the predicted average indoor screening level of radon per county. Latah County, Idaho is classified in Zone 1 (high potential), which indicates a predicted level greater than 4 pCi/L. The EPA "Action Level" is 4 pCi/L. Based on the commercial nature of the property and the lack of subsurface areas, radon does not appear to be a concern. However, testing is required to determine site-specific radon levels.

5.19.4 Lead in Drinking Water

Lead containing materials were banned from use in public water systems, including plumbing connection, in 1986. Potable water testing and assessment was not performed on the subject property.

5.19.5 Mold

The site reconnaissance included a visual inspection for indications of water intrusions or the presence of active mold growth on readily accessible interior and exterior surfaces. However, confirmation sampling is not included in the scope of work for the Phase I ESA. Readily accessible areas of the building were observed for visual or olfactory indications of mold, and for areas of water damage. No obvious evidence of mold in any of the buildings located on the subject property was observed during the site reconnaissance.

5.3 Exterior Observations

The exterior of the property was explored for vent pipes and other indications of potential environmental concerns.

The lot is flat with the exception of the east side where there is a sunken area approximately 100 feet long by 20 feet wide with four octagon shaped concrete pads, which was likely the containment site for the ASTs. This will eventually be turned into a patio area. The espresso stand is located on the north-northeast side of the property. The Dominos Pizza building is located on the south side of the property. The roof was not accessed during the site reconnaissance. The remainder of the property is covered by asphalt or gravel.

Photographs of the exterior of the buildings can be viewed in Appendix E.

5.4 Interior Observations

The interior of the Domino's Pizza building was in good condition. All rooms of the building were clean. There is a floor drain in the laundry room. The heating and cooling system for the building is gas powered.

Photographs of the interior of the buildings can be viewed in Appendix E.

6.0 INTERVIEWS

6.1 Interview with Owner and Site Manager

Ted Sharpe was interviewed via telephone by TerraGraphics employee Jon Munkers. Mr. Sharpe discussed the history of the property. In the 1950s, Mobil Oil had a bulk petroleum plant, warehouse, and office at the site. In the years to follow, several owners bought and sold the site and used it for the same purpose. In the 1970s, the property owners and operators of the bulk plant were Handel-Langley. There was a Mobil Service Station operating onsite, but the exact years of operation are unknown.

In the early 1980s, his father bought the property and renamed the site Sharpe Oil. At that time there were four 10,000-gallon ASTs, a 500-gallon UST near the loading dock of the warehouse building, a fuel truck, and a commercial dispensing island (between the service station and warehouse building) with underground piping in operation at the business. When his father bought the property, the service station was no longer in operation, and an office supply/copier service business occupied the now the Domino's Pizza building. In 1999 his father sold the business to Busch Distributing. Mr. Sharpe also had the UST, piping, and dispensers removed in 1999 by Kennedy Equipment, and did a Tier 1 remediation with the assistance of the Idaho Department of Environmental Quality (IDEQ). Soil samples were collected and there was no evidence of soil contamination, and the area was backfilled. A few years later, the ASTs were removed.

In 2008, Mr. Sharpe demolished the warehouse building and discovered contamination by the loading dock (he believes possibly from the piping or from trucks filling up there, although there were no documented large spills there). Mr. Sharpe paid to haul the contaminated soil to the Roach landfill near Lewiston, Idaho. The site was excavated to clean soil at approximately seven feet below ground surface and sampling was conducted for soil and groundwater. The soil samples indicated the contaminated soil had been excavated, but water samples taken from a nearby well had Benzene contamination.

Mr. Sharpe stated that there are wells on an adjoining property to the north owned by the railroad, which he used to test groundwater. He believes the wells were put in by the Idaho Transportation Department in the late 1980s. Shelley Bennett is the site contact for the railroad property.

Mr. Sharpe stated that Sharpe Oil didn't have any waste oil tanks onsite. He would like to get a "no further action" statement from IDEQ for the site, and possibly sell part of the property at some point in the future.

He informed TerraGraphics that Chuck Bond owns the mobile home park to the east of his property, and that groundwater flows are to the northwest. Mr. Sharpe stated that he will send TerraGraphics title information and any well and/or sampling information he has.

6.2 Interview with Occupants

Verbal interviews with the local owner of Domino's Pizza and the owner of the espresso stand were conducted. They did not have anything to add and referred us to the property owner.

6.3 Interview with State Government Officials

6.3.1 Interview with IDEQ

Gayle Osborne, of IDEQ, was interviewed via phone by TerraGraphics employee Jon Munkers. Ms. Osborne stated that there are groundwater wells nearby in which she believes some recent monitoring has taken place. She stated that the TerraGraphics PRR will return some data regarding these wells (see the report Appendix F for this data), and further information could be gained by contacting Jerry Shaffer, another IDEQ employee. Ms. Osborne stated that contaminants are a concern at this site. Ms. Osborne stated that she believes an original parcel at this property had been split, and there is another section in the rear of the property that housed ASTs.

Jerry Shaffer, of IDEQ, was also interviewed via telephone by Robin Nimmer, an employee of TerraGraphics. Mr. Shaffer informed Ms. Nimmer that there were USTs and ASTs at the site in the past. Mr. Shaffer stated that Ted Sharpe collected a groundwater sample (by the footpath) and found it was contaminated.

6.4 Interview with Local Government Officials

6.4.1 Interview with Latah County Assessor

Cammie Villabol, a Latah County Assessor employee, was interviewed via telephone by Annie Stuckey, an employee of TerraGraphics. She stated that the parcel number for the subject property is RPM00000173910A, according to the Latah County Assessor records. Assessor records stated that the property is 24,524 sq. ft. According to Ms. Villabol, there is a 1,510 sq. ft. warehouse that was built in 1952 on the property. There is also a 1,215 sq. ft. commercial store built in 1954, which is currently a Domino's Pizza. Ms. Villabol confirmed that the property is located on the Sheet 18 Plat (which is included as a figure in Appendix A of this report). Ms. Villabol stated that the property value for this parcel increased from 2009 to 2010. She believes that the buildings on the property were leased in 2009, and the individual leasing the buildings paid the property tax that year. She thinks that in 2010 the buildings were added back into the taxes. Upon checking her records, she stated that she is not aware of any environmental issues causing a reduction in property values at this site.

6.4.2 Interview with Latah County Recorder

Stacey Chapman, of the Latah County Recorder's Office, was interviewed by TerraGraphics employee Annie Stuckey. Ms. Chapman stated that there were several records listed under the liens for Theodore Sharpe. One is a judgment from 1986 that has expired (been released), as there is no follow up on it. Another is a 1991 UCC ('uniform commercial code'-in which a mortgage is taken on items attached to the property), which was amended in 1994 and released.

6.4.3 Interview with City of Moscow Planning and Zoning

Pat Mink, of the City of Moscow Planning and Zoning Engineering Division, was interviewed via telephone by TerraGraphics employee Annie Stuckey. Ms. Mink stated that 1102 S. Main St. is zoned as motor business.

6.4.4 Interview with City of Moscow Utility Billing

Cassie, an employee of the City of Moscow, informed Annie Stuckey of TerraGraphics that the subject property is connected to the City of Moscow's water and waste water systems.

6.5 Interview with Others

Shelley Bennett was interviewed by STRATA employee Shawn Ringo. Ms. Bennett owns the former Stubbs Seed warehouse located north, across Paradise Creek from the site. She recalls nearby historic facility locations. Ms. Bennett indicated she is aware that Mr. Ted Sharpe has been trying to assess and/or cleanup his family's historic bulk petroleum distributorship property. She recalled Mr. Mark Solomon used to operate the industrial area to the north of the site; further north was the former Burlington Northern railroad line, Busch Distributors (bulk petroleum), the former Union Pacific Railroad (UPRR) line, Paradise Creek, and then Ms. Bennett's former Stubb's Seed property. Ms. Bennett indicated a trucking company used to operate around the railroad right-of-way just south of Paradise Creek. She indicated that it is on the former industrial property where Mr. Sharpe continues to detect petroleum concentrations exceeding Idaho Default Target Levels/Remedial Action Target Levels (RATLs). She also recalled that the Busch Distributors facility was assessed and a "No Further Action" issued while Mr. Hudson Mann was with IDEQ's Lewiston Regional Office.

7.0 FINDINGS

TerraGraphics has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E 1527-05 of the subject property located at 1102 South Main Street, Moscow, Idaho. The Phase I was conducted based on the agreement dated August 29, 2011 in accordance with the specifications set forth in the City of Moscow Task Order.

The Phase I ESA uncovered the following **findings** which identifies known or suspect *recognized environmental conditions*, and *historical recognized environmental conditions*, and de minimis conditions:

Federal Facility Database Listings:
Eight sites, including the target property, were listed under the federal database for RCRA-CESQG, RCRA-NonGen, and FINDS.

State Facility Database Listings:
Seventeen (17) sites, including the target property, were listed under the state database for ALLSITES, UST, LUST, SPILLS, VCP, and FINANCIAL ASSURANCE.

Historical Use Information on the Property:
The site was formerly occupied by a bulk petroleum plant and a Mobil Service Station. It contained four 10,000-gallon ASTs, a 500-gallon UST near the loading dock of the warehouse building, a fuel truck, a 1,000-gallon UST, and a commercial dispensing island (between the service station and warehouse building) with underground piping in operation at the business. The USTs, piping, and dispensers removed in 1999. The ASTs were removed in the early 2000s.

In 2008, the warehouse building was demolished. Petroleum contaminated soil was discovered when the site warehouse was demolished. Soil and groundwater samples were collected and some constituents were above IDTLs. Contaminated soil was excavated from the subject property and hauled away.

Historical Use on Adjoining Properties:
PURE GRO COMPANY (AKA, PUREGRO CO MOSCOW UNIT NO 100; BUSCH DISTRIBUTORS INC MOSCOW) - located northwest and across South Main Street from the subject property.
The adjacent rail road right-of-way was occupied by a Northern Pacific Railroad depot, water tower, and locomotive turntable; several bulk oil and gasoline distributors; a brick factory; a saw mill; cement and concrete bulk plants; automotive mechanic shops; and an agricultural chemical distributor.
Phase II sampling of the right-of-way in 1992 confirmed that pesticide/herbicide/fertilizer contamination was present in surface soils across the site. Additionally, gasoline and fuel oil contamination in the distributor areas was confirmed in soil and groundwater. State of Idaho cleanup standards for petroleum in soils were exceeded by as much as 13-18 times.
A substantial risk assessment and a comprehensive regulatory review were performed to identify human health risks and potential liability issues. TerraGraphics negotiated final remediation requirements with the tenants on behalf of the University of Idaho, and provided oversight and monitoring during remedial activities. TerraGraphics then oversaw interim streambank stabilization and final stream restoration efforts for Paradise Creek as the site was transformed into a beautiful greenbelt for the University of Idaho in 1997.

CHEVRON USA INC MOSCOW BULK PLT 1001209 (AKA, BUSCH DISTRIBUTORS INC MOSCOW) - located on the north adjoining property.
The site is the location of the former Camas Oil Company, Richfield Oil Corporation, and Busch Distributors operations. The site is located down gradient with respect to shallow groundwater from Southside Mini Mart's and Sharpe Oil's underground storage tanks. Petroleum constituents identified as gasoline in laboratory analysis (BTEXGasoline-EPA 8260/NWTPH-Gx EPA 8015Bmod) were found in two of the site's southernmost subsurface soil borings adjacent to Paradise Creek, at concentrations of

786 mg/kg and 231 mg/kg, respectively. Concentrations of 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene in subsurface soils exceeded IDEQ's IDTLs.

Based on the above mentioned recognized environmental conditions, a Phase II ESA was completed in 2005 and generated the following conclusions:

- Contaminated soils exist on site. The contamination exists in close proximity to the former location of the Richfield Oil Corporation/Busch Distributors.
- Preliminary IDEQ REM suggests that site soil concentrations of 1,2,4- and 1,3,5-trimethylbenzene may present a human health risk via an indoor inhalation vapor pathway. An increased level of effort applied to risk analysis (e.g., collection of soil vapor samples and REM RATL-2 analysis), adjustment of the footprint of the proposed structure and/or implementation of institutional controls may mitigate the human health risk associated with the indoor inhalation of vapor pathway.
- Contaminated groundwater exists on site. Site groundwater benzene concentrations exceed IDEQ IDTLs. However, the Paradise Creek shallow groundwater aquifer is not a source of drinking water and as such, preliminary IDEQ REM suggests that site benzene concentrations are within acceptable tolerances for such an aquifer.
- Contaminated groundwater and soils exist on site immediately adjacent to Paradise Creek. However, preliminary REM suggests that the concentration of benzene in groundwater is sufficiently protective of Paradise Creek as an environmental receptor.
- Excavation of soils on site or other disturbances associated with construction activities may require additional characterization, containment, and disposal of petroleum contaminated soils.

Note: since analysis took place at this site, the EPA has discontinued discussions regarding the toxicity of the chemicals 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene, therefore until there is more clarity about these chemicals of concern, DEQ will no longer consider 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene when applying REM to assess health risks at contaminated sites.

Aboveground Storage Tanks:
There were four 10,000-gallon ASTs that were removed in the early 2000s.

Underground Storage Tanks:
Both were installed in 1956; one held 1,000 gallons of diesel while the other held 550 gallons of diesel. The tanks and associated piping and dispensers were removed in the fall of 1999.

Soil Contamination:
In 2008, Mr. Sharpe, the owner of the subject property, demolished the onsite warehouse building and discovered contamination by the loading dock. At the time of excavation, soil analytical results were not above IDTLs.

Groundwater Contamination:
A groundwater sample collected in 2008 had benzene, ethylbenzene, and toluene concentrations above IDTLs.

Asbestos:
Based on the 1956 construction date of the subject property building, which is currently used as a Domino's Pizza, the presence of asbestos-containing materials appears likely.

Lead-based Paint:
Based on the 1956 construction date of the subject property building, which is currently being used as a Domino's Pizza, the presence of lead-based paint appears likely.

8.0 OPINIONS

The following includes TerraGraphics' **opinions** of the impact of the findings on the subject property:

Federal Facility Database Listings:
Because eight sites, including the target property, were listed under the federal database for RCRA-CESQG, RCRA-NonGen, and FINDS, there may be a *recognized environmental condition* at the sites.

State Facility Database Listings:
Because seventeen (17) sites, including the target property, were listed under the state database for ALLSITES, UST, LUST, SPILLS, VCP, and FINANCIAL ASSURANCE, there may be a *recognized environmental condition* at the sites.

Historical Use Information on the Property:
The site use history and documented soil and groundwater contamination are *recognized environmental conditions.*

Historical Use on Adjoining Properties:
Both adjoining properties described in Section 7.0 under Historical Use, Pure Gro Co. and Chevron, are located down-gradient from the subject property. Therefore, they are not a *recognized environmental condition.*

Aboveground Storage Tanks:

Spills could have occurred while filling and dispensing fuel from these tanks which may have caused the documented soil and groundwater contamination. This is a *recognized environmental condition.*

Underground Storage Tanks:
Spills could have occurred while filling and dispensing fuel from these tanks. Additionally, these tanks could have deteriorated prior to their removal which could have allowed fuel to leak into the ground. This is a *recognized environmental condition.*

Soil and Groundwater Contamination:
Groundwater analytical results from samples collected in 2008 after the contaminated soil was excavated were above IDTLs, which is a *recognized environmental condition.*

Asbestos:
This is not a *recognized environmental condition* unless renovation or demolition occurs.

Lead-based Paint:
This is not a *recognized environmental condition* unless renovation or demolition occurs.

9.0 RECOMMENDATIONS

TerraGraphics has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-05 of the property located at 1102 South Main Street in accordance with the agreement dated August 29, 2011. Any exceptions to, or deletions from, this practice are described in Sections 10.0 and 11.0 of this report. This assessment has revealed evidence of *recognized environmental conditions* in connection with the property. Therefore, TerraGraphics recommends a Phase II Environmental Site Assessment. In general TerraGraphics recommends the following site assessment activities:

* Soil samples to delineate the vertical and lateral extent of petroleum impacted areas, particularly in the area of the excavated LUST. Gasoline, leaded gasoline, and diesel constituents are the likely chemicals of concern.
* Groundwater sampling to delineate the extent of the contamination. Again, gasoline, leaded gasoline, and diesel constituents are the likely chemicals of concern.

10.0 DEVIATIONS

No deviations from the recommended scope of ASTM Standard E 1527-05 were performed as part of this Phase I ESA with the exception of any additions noted in Detailed Scope of Services.

11.0 ADDITIONAL SERVICES

TerraGraphics also completed a Quality Assurance Project Plan (QAPP) for the area wide investigation as part of the City of Moscow Brownfields Project.

12.0 REFERENCES / INFORMATION SOURCES

American Society for Testing and Materials (ASTM) E1527-05, Phase I Environmental Site Assessments.

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Mink, Pat (City of Moscow Planning and Zoning, Engineering Division), telephone interview with Annie Stuckey (TerraGraphics), September 7, 2011.

Osborne, Gail (DEQ), telephone interview with Jon Munkers (TerraGraphics), September 12, 2011.

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TerraGraphics, 2004a. Multiple Properties Phase I Environmental Site Assessment Moscow Railroad Corridor Moscow, Idaho, "Electrical Specialists." Prepared for Bennett and Associates Moscow, Idaho. February 2004.

TerraGraphics, 2004b. Phase II Environmental Site Assessment (ESA) University of Idaho Railroad Parcels, Moscow, Idaho. Prepared for the University of Idaho, May 24, 2004.

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