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Incoming C0070045

HOLLAND&HART LLP
THE LAW OUT WEST®

Craig D. Galli
Phone (801) 799-5842
cgalli@hollandhart.com
46638.0004

November 15, 2006

Refer to Expandable 11 15 2006
file in C0070045. 2006 Incoming
for additional information

Steven F. Alder
Attorney General's Office
1594 West North Temple, Suite 300
Salt Lake City, UT 84116

Re: Transmittal of ERM Expert Witness Report

Dear Steve:

As promised, please find enclosed two copies of ERM's expert witness report entitled *Opinion Report: Environmental Compliance Assessment.* Please let me know if you have any questions regarding the same.

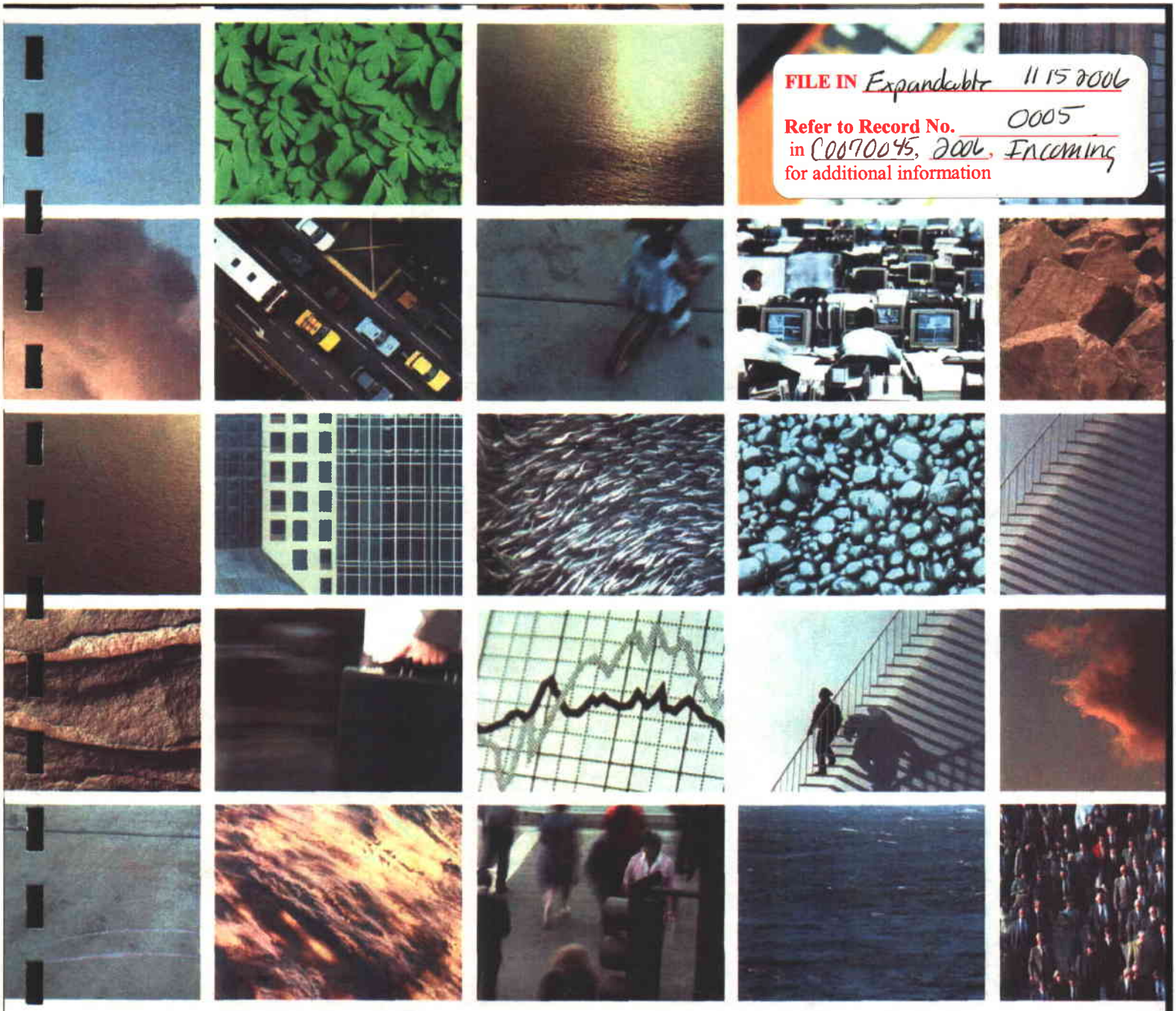
Sincerely,

Craig D. Galli
of Holland & Hart LLP

CDG:bwt
Enclosures
cc: Keith Thompson (w/enclosure)
Jason Day (w/o enclosure)

3633183_1.DOC

RECEIVED
NOV 16 2006
ATTORNEY GENERAL
Natural Resources Division



OPINION REPORT
Environmental Compliance Assessment

Prepared for:
Mr. Craig Galli
Holland and Hart
and
Headwaters Incorporated

1865 West Ridge Road
Wellington, Utah

November 9, 2006

Environmental Resources Management
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Salt Lake City, Utah 84101
(801) 595-8400
www.erm.com

ERM

Delivering sustainable solutions in a more competitive world

TABLE OF CONTENTS

LIST OF EXHIBITS

1.0 *INTRODUCTION*

Upon request of Mr. Craig Galli of Holland and Hart, I have reviewed available environmental compliance documents pertaining to the coal cleaning facility owned and operated by COVOL Engineered Fuels, LLC (COVOL). This facility is located at 1865 West Ridge Road in Wellington (Carbon County), Utah. I also visited the facility on June 27, 2006, to inspect environmental conditions and assess compliance with federal and state environmental regulations. Attending the site visit were representatives from Headwaters: Mr. Keith Thompson (Vice President); Mr. Jeff Hayden (Director of Operations - Coarse Coal Recovery); and Mr. Mike Gipson (Plant Manager - Wellington Plan). Mr. Galli was also present during the site visit.

A summary of my records review, inspection observations, and opinions regarding the compliance status of the COVOL facility is provided herein. This remainder of this report is organized in the following sections:

- Section 2 - Opinions to be Expressed, with Bases and Reasons
- Section 3 - Data and Other Information Considered in Forming Opinions
- Section 4 - Exhibits to be Used to Support Opinions
- Section 5 - Expert Qualifications
- Section 6 - Compensation Paid for Services
- Section 7 - Certification

This report presents Mr. Wilson's opinions regarding environmental compliance at this COVOL facility, and Headwaters overall approach toward managing its environmental program.

2.0 *OPINIONS TO BE EXPRESSED, WITH BASES AND REASONS*

The opinions expressed in this section are based on my review of the environmental compliance documents prepared and provided by others, observations during my facility visit, and my environmental compliance experience working with a variety of industrial companies operating in the State of Utah.

Opinion 1: COVOL has obtained all applicable regulatory permits and operates in a manner consistent with these permits and in accordance with Best Management Practices for its industry.

Bases and Reasons for Opinion

During my inspection of the COVOL facility, I reviewed records, interviewed management personnel, and observed operations at the facility relative to compliance with environmental regulations. Copies of relevant COVOL drawings and environmental permits for the facility are included as Exhibits 1 and 2, respectively, with this report. A selection of photographs taken during my facility visit are included as Exhibit 3.

Air Quality Compliance

COVOL began construction of its Wellington facility in July 2005. The work was begun after submitting a Notice of Intent for air emissions and obtaining an Approval Order (DAQE# AN2952001-05, June 30, 2005) from the Utah Department of Environmental Quality (DEQ), Division of Air Quality (DAQ). This permit identifies the facility as a minor source for emission of fugitive dust, and identifies the approved equipment, air pollution controls, process limitations, and allowable emissions for the facility. Based on my inspection, the facility is operating in accordance with the requirements of its air permit. There is no dust-generating equipment that is not accounted for in the AO, and fugitive dust controls are in place as prescribed in the AO, including a telescoping drop on the primary stacking conveyor, a cover on the shaker screens, and chute controls on some of the smaller stacking conveyers. While not required specifically by the AO, as a best management practice COVOL will install a chute or funnel controls (or equivalent) on the other stackers.

Although COVOL has been operating in trial mode since January 2006, the facility was not fully operational at the time of the visit. However, full-scale operation is expected to occur in Fall 2006. In the interim, COVOL has been operating in full compliance with its AO. The facility

notified the DAQ of its start of construction, and will have completed construction and startup within 18 months of receiving the AO. Furthermore, COVOL has maintained communication with the UDAQ regarding the status of construction and anticipated start of operations. In a letter dated February 16, 2006, COVOL specifically informed the agency that the facility was still under construction, and therefore an emission inventory for 2005 could not be provided. In accordance with the AO (Item 11), COVOL will inform the UDAQ when construction is complete and full-scale operations begin. It is expected that this will occur prior to the 18-month construction period provided in the AO. The inspection observations are based on trial operations, which were occurring at the time of the inspection.

Some visible dust was observed during the visit in the immediate vicinity of some of the conveyor drops, but the opacity limits in the AO appeared to be met for all sources, including process equipment, stacking piles, and haul roads. I observed the baghouse equipment associated with the separation tables, which is required per the AO for emissions control. I also observed the inspection records for the pressure gages used to monitor the drops across the baghouse filters. Other processing equipment also have dust covers, including the single roll crusher, screen, conveyors and radial stackers. The records observed show appropriate inspection intervals and operation of the equipment in accordance with the AO. Photographs taken during the visit are included as Exhibit 3, which show the air quality to be good, even at the equipment processing and drop points, and excellent overall around the facility boundary. Additionally, COVOL has improved the facility roads with a gravel surface and assures adequate water applications to achieve the AO requirements for fugitive dust control. COVOL will pave the road and parking lot in accordance with the AO prior to completing construction.

Storm Water Quality Compliance

COVOL has developed a storm water management program for the facility, which consists of a system for on-site drainage controls, a written Storm Water Pollution Prevention Plan (SWP3), and an employee training program appropriate for its operations. My inspection of the site and the relevant permit documents shows full compliance with the state storm water regulations, and general adherence to best management practices for storm water and erosion control.

The general topography of the site slopes gently from north to south, and storm water is collected from operating areas via excavated drainage channels and culverts. The channels transmit the storm water for

discharge and storage into two large retention ponds located in the southeast and southwest corners of the property. The basins are designed to provide complete retention of storm water for up to a 24-hour, 25-year storm event. Storm runoff from events larger than this design storm would be detained in the ponds and potentially overflow the ponds at their designed overflow points where water would run off via overland flow to the south into the fields beyond the southern perimeter of the property. This water would eventually percolate into the ground or evaporate prior to reaching the Price River and Miller Creek drainage system. Conditions were dry at the time of the site visit, but signs of storm water capture and retention within the channel and pond system were evident (e.g., visible high water marks, limited channel scour and erosion). Additionally, the facility uses straw bales as need to control the potential migration of sediment within the drainage channels, as well as along the facility perimeter fence.

The controls in place are as described in the SWP3 for the facility, which was prepared by EIS Environmental & Engineering Consulting (EIS), December 2004. This SWP3 addresses the erosion prevention and storm water protection requirements applicable to both construction and operational phases of the facility. During the construction and startup phases at the facility, COVOL has performed development activities under a UPDES Construction General Storm Water Permit (No. UTR101180), which was submitted to the Utah DEQ, Division of Water Quality (DWQ). COVOL and its consultant EIS also prepared a Notice of Intent (NOI) for a Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activities for COVOL and will operate under this General Permit (No. UTR000000) upon completion of construction activities. During construction activities, COVOL has maintained correspondence with the DWQ to advise them of the expected schedule for facility completion, and the expected time frame to begin quarterly discharge monitoring and submittal of the Storm Water Discharge Monitoring Reports (SWDMR) required by the permit (COVOL Letter - January 16, 2006). The first SWDMR is expected to be submitted to the DWQ by January 28, 2007.

Spill Prevention Control and Countermeasures

The COVOL facility maintains one above ground storage tank (AST) with a capacity for up to 8,500 gallons of diesel fuel, which is used for on-site vehicle fueling. The facility also stores other hydrocarbon liquids (e.g., lubricating and hydraulic oils) in containers and drums of various sizes, with an estimated total storage volume of 500 gallons. I observed that these petroleum liquids are stored in accordance with applicable local,

state and federal regulations, as well as best management practices to preclude environmental impacts.

A Spill Prevention Control and Countermeasures (SPCC) Plan has been prepared for the facility (December 2005), which appropriately describes the source of petroleum on site, potential sources of releases, and controls/countermeasures to minimize impacts to the environment should a release occur. The diesel storage tank and smaller hydrocarbon containers/drums are stored within concrete holding areas with sufficient secondary containment to contain a release in accordance with applicable regulations (40 CFR 112). Additional controls are provided for the transfer operations from trucks to the storage tanks via the drainage and retention system described above for the storm water system. The facility maintains a spill kit within the covered hydrocarbon storage area in the event that sorbent booms or other materials are needed for minor release cleanups. The SPCC Plan describes the facility training, inspection and reporting programs; and, I observed COVOL's inspection records. In my opinion, the facility has a sound program for identifying potential release risks and remedying them before impacts occur to the environment.

Waste Management

COVOL generates the following types of solid wastes, but does not generate any hazardous wastes:

- General office and industrial waste, which is placed in dumpsters and ultimately transported for disposal at the East Carbon Development Company (ECDC) Landfill;

- Spent florescent light bulbs, which are managed as universal waste and transported for disposal at the ECDC Landfill; and

- Used oil is not stored on site. Used oil from the servicing of vehicles and equipment is removed from the site by Wheeler Machinery Co.

The solid waste containers (i.e., dumpsters) were observed during the inspection to be in good condition with lids to minimize storm water collection in the containers. There is also a roof over the waste oil containment area, which is consistent with best management practices to prevent potential losses from rain water.

No other hazardous or solid waste requirements or best management practices apply to the COVOL Operations, including permitting, manifests, record keeping, RCRA biannual reporting, and TRI reporting.

Opinion 2: COVOL operates under an environmental management system (EMS) that strives for continual improvement in protecting human health and the environment, which extends beyond the general compliance requirements.

Bases and Reasons for Opinion

The COVOL facility, as part of the Headwaters company, operates under the policies and procedures of the parent company. Headwaters has developed a written "Environmental Compliance Policies and Procedures." A copy of this document and other Environmental Management System (EMS) program developed by Headwaters and COVOL are attached as Exhibit 4.

The Headwaters Environmental Compliance Policies and Procedures (ECPP) document was prepared by the company to "advance [its] Vision Statement through the adoption of a strong and thoughtful Environmental Compliance Policy statement. "Headwaters Vision Statement" includes the following:

> *Headwaters Incorporated creates value through environmentally responsible energy, chemical products and services, and developing innovative value-added opportunities for customers.*

The ECPP also serves as a guide to the company's environmental compliance group and facilities' operations staffs by providing standard procedures and policies to help achieve company environmental standards and regulatory compliance. The content of the ECPP incorporates the following major topics:

I. Introduction
   - Vision Statement
   - Purpose
   - Scope

II. Environmental Compliance Policy

III. Organization and Responsibilities
   - Environmental Staff
   - Facility Managers
   - Laboratory Managers

IV. Corporate Environmental Audit Program
    Corporate Environmental Audit Program
    Audits

V. Information Management

VI. Planning and Permitting
    Air Programs and Permits
    Water Programs - NPDES and Others
    Solid Waste Management and Disposal Permits
    SARA Title III - Community Right-to-Know
    Hazardous Wastes
    Universal Waste
    SPCC - Oil Spill Prevention
    Used Oils
    Toxic Substances Control Act (TSCA)

VII. Training

VIII. Emergency Preparedness and Response

IX. Communications
    Internal Communications
        Corporate-Facility Information Transfer
        Internal Facility Communication
    Media Communications

X. Regulatory Audits/Inspections

Headwaters and COVOL are working to assure the utility and application of the ECPP through a formal audit/inspection program and development of an Environmental Management Information System (EMIS). The audits/inspections are performed at least annually at each Headwaters facility. A full copy of the Headwaters "Operations Review Checklist" used during the inspection is provided in Exhibit 4. The audit program includes assessment of the issues listed below:

1. General Housekeeping
2. Liquid Materials Management
3. Solid Materials and Product Management
4. Vehicle Fueling and Preventive Maintenance
5. Dust Control
6. Waste Management and Reduction
7. Spill Response
8. Container and Equipment Labeling
9. Monitoring, Sampling, and Inspections

10. Recordkeeping
11. Planning and Training
12. Reporting

The EMIS, is used to monitor and track regulatory compliance obligations and requirements for the Headwaters' facilities. The system is being configured to operate within a computer software application called Enverity. Upon completion of the system, this tool will assist the COVOL Plant manager and staff in tracking specific tasks to assure environmental compliance at the Wellington Plant. A draft document titled, "Enverity EMIS Configuration Document," shows the preliminary compliance requirements and data to be input into the COVOL Plant's EMIS. A copy of this document is included in Exhibit 4.

3.0 *DATA AND OTHER INFORMATION CONSIDERED IN FORMING OPINIONS*

I have reviewed the following documents in preparing my opinions, and referenced the following particular documents in this report:

- Covol Engineered Fuels, LLC, date unknown. Personnel Training Presentation: "Construction Storm Water Protection."
- Covol Engineered Fuels, LLC, December 2005. "Spill Prevention Control and Countermeasures Plan."
- Dejulis, Tim, November 9, 2005. Email to Covol from UDEQ: "Paved Roads at Wellington Plan."
- EIS Environmental & Engineering Consulting, December 2004. "Storm Water Pollution Prevention Plan and NOI Storm Water Discharges Associated with Construction Activities and NOI Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activities."
- Headwaters Incorporated, August 2006. "Draft - Environmental Compliance Policies and Procedures."
- Headwaters Incorporated, August 2006. "Draft - Operations Review Checklist."
- Headwaters Incorporated, August 2006. "Draft - Wellington Facility – Enverity EIMS Configuration Document."
- Thompson, Keith, January 16, 2006. Letter to UDEQ: "Storm Water Discharge Monitoring Reports for Covol Engineered Fuels, LC, UPDEQ MSGP Permit No. UTR000685."
- UDEQ, June 30, 2005. "Approval Order: Modification of Approval Order DAQE# AN2952001-03 by Adding Equipment.:
- UDEQ, September 18, 2002. "Storm Water General Permit for Construction Activities, Permit No. UTR100000."
- Van Ootegham, Steven, February 16, 2005. Letter to UDEQ: "Annual Emission Inventory, Covol Engineered Fuels, LLC Wellington Utah Coal Cleaning Facility."
- Van Ootegam, Steven, July 8, 2005. Memo to Keith Thompson (Headwaters): "Wellington, Utah Coal Cleaning Plant Air Quality Permitting Requirements."
- Van Ootegham, Steven, August 5, 2005. Letter to UDEQ: "Construction Initiation Notification, Covol Engineered Fuels, LLC: DAQE-AN2952003-05, Wellington, Utah Coal Cleaning Facility.

4.0 *EXHIBITS TO BE USED TO SUPPORT OPINIONS*

Reference	Description
Exhibit 1	Drawings of COVOL Facility
Exhibit 2	COVOL Environmental Permits and Plans
Exhibit 3	Photographs of COVOL Facility
Exhibit 4	COVOL Environmental Policies and Procedures and EMS Program Documents
Exhibit 5	David Wilson Resume

5.0 *EXPERT QUALIFICATIONS*

David S. Wilson is currently a Principal for ERM-Rocky Mountain, Inc., which is a member company of the Environmental Resources Management (ERM) Group. ERM is a world-wide environmental consulting company with approximately 2,500 employees in more than 120 offices and 30 countries.

Mr. Wilson manages ERM's Salt Lake City, Utah Office and directs most Utah projects, and oversee all administrative and business development activities. Mr. Wilson is a registered Professional Engineer in the State of Utah (License No. 189076-2202), and a registered Professional Geologist in the State of Utah (License No. 189076-2250). He is an UST Certified Consultant in the State of Utah (Certificate No. CC 72). He has a Masters Degree in Civil Engineering from Drexel University in Philadelphia, Pennsylvania (1993), and a Bachelors Degree in Geological Engineering from the University of Utah in Salt Lake City, Utah (1988). A resume for Mr. Wilson is included as Exhibit 3.

Mr. Wilson has more than 18 years experience in environmental and geotechnical engineering, including work in environmental compliance and permitting, site assessments and investigations, conceptual and final engineering design, and construction engineering services. His compliance expertise includes hazardous and solid waste management, wastewater and storm water, and air quality. He has performed environmental numerous environmental compliance audits and regulatory assessments, and developed regulatory permit applications and Notices of Intent (NOIs) for all environmental media. He has managed client programs in waste management, pollution prevention/waste minimization, hazardous materials inventories, and other environmental permitting projects. Compliance work has included U.S. projects required under CERCLA, RCRA, UST/LUST programs, Clean Water Act, Clean Air Act, TSCA, and other federal, state and local regulations, as well as international projects in Latin America.

He has previously testified in deposition and trial as an expert on one occasion for an environmental impacts case.

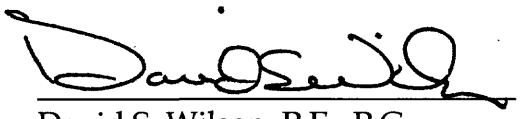
6.0 *COMPENSATION PAID FOR SERVICES*

My rate for this case is $165 per hour, plus reimbursement of out-of-pocket expenses.

7.0 CERTIFICATION

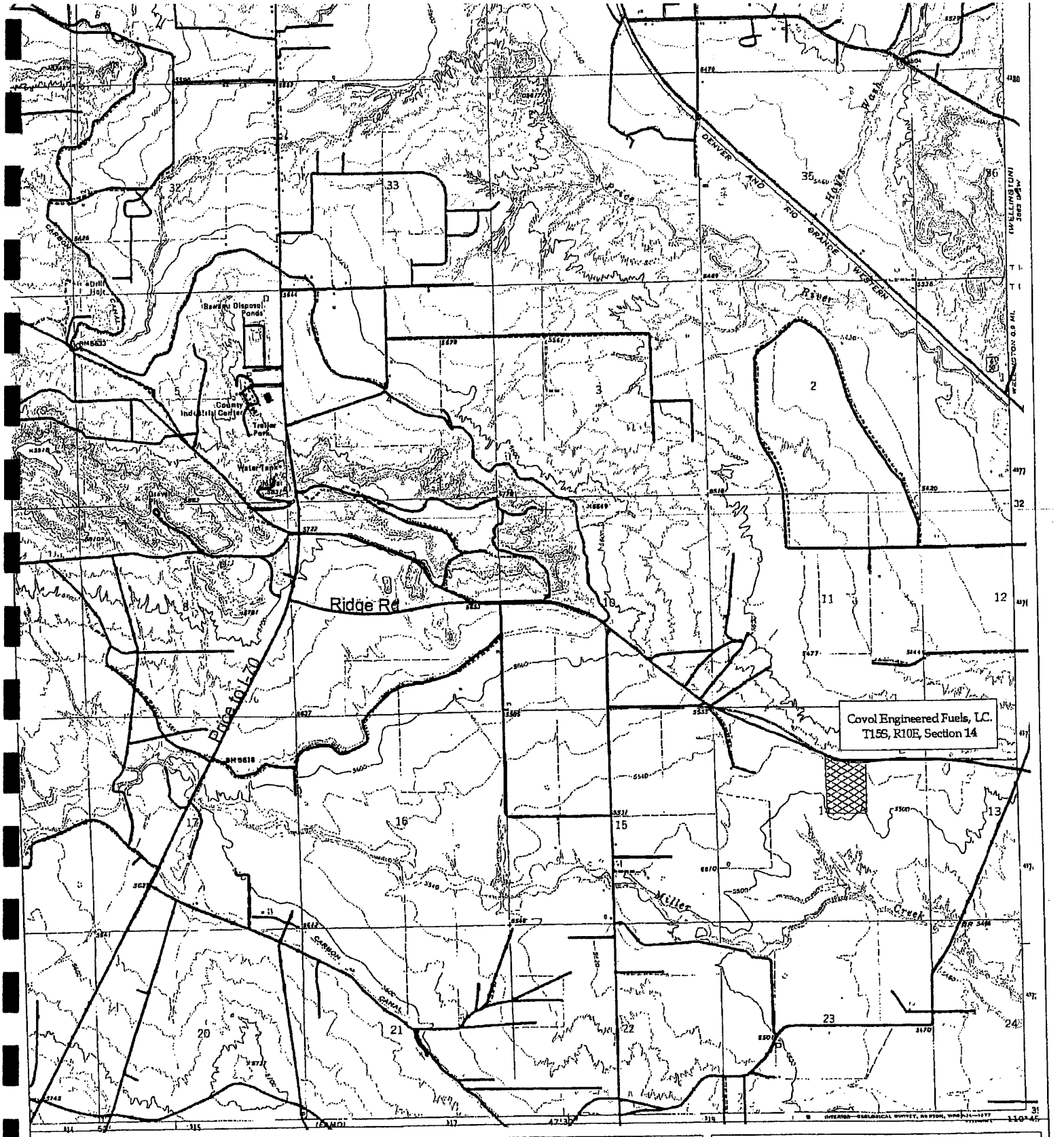
I submit that the opinions rendered herein are my own, and that they are based on my personal review of the available documents and my relevant experience as an environmental consultant.

Respectfully submitted,



David S. Wilson, P.E., P.G.
Principal
ERM-Rocky Mountain, Inc.

Exhibit 1
Drawings of COVOL Facility



Legend

Roads

Covol

N

Location Map

2000 0 2000 4000 Feet

Drawn By: K. Nash
Designed By. J.T. Paluso

EIS Environmental &
Engineering Consulting
31 North Main Street
Helper, Utah 84526

MATERIAL FLOW
BY-PRODUCT FLOW
PROCESS AIR
DUST COLLECTION
DUST RECOVERY

110' TRUCK SCALE TS-01
TELESCOPING CHUTE
GRIZZLY
TRUCK DUMP HOPPER
TRUCK DUMP FEEDER C-01
RADIAL STACKER RS-01
RAW MATERIAL STOCK PILE
PLANT FEED HOPPER
PLANT FEEDER C-02
BELT SCALE
MAGNET
SCREEN FEED CONVEYOR C-03
SCREEN
HAMMER MILL
BELT SCALE
FINES FEED CONVEYOR C-04
BELT SCALE
COARSE FEED CONVEYOR C-05
DIVERTER GATE
DIVERTER GATE
DUST COLLECTOR #1
EXHAUST FAN #1
DUST COLLECTOR #2
ROTARY AIRLOCK
EXHAUST FAN #2
DUST COLLECTOR #3
ROTARY AIRLOCK
EXHAUST FAN #3
ROTARY AIRLOCK
PULSE FAN #1
WORKING FAN #1
AIR JIG #1
PULSE FAN #2
WORKING FAN #2
AIR JIG #2
PULSE FAN #3
WORKING FAN #3
AIR JIG #3
'ALLMINERAL' SUPPLIED EQUIPMENT
DUST COLLECTION SCREW SC-01
DIVERTER GATE
BY-PRODUCT SCREW SC-02
TOTE
PRODUCT SCREW SC-03
BELT SCALE
BY-PRODUCT CONVEYOR C-06
PRODUCT CONVEYOR C-07
BY-PRODUCT STORAGE
RADIAL STACKER RS-03
BLENDING HOPPER
BLENDING FEEDER C-09
HIGH ANGLE CONVEYOR C-10
LOADING HOPPER
BELT SCALE
DIVERTER GATE
RADIAL STACKER RS-02
ALTERNATE PRODUCT STORAGE
200 TON BIN FEED CONVEYOR C-08
200 TON SILO
MANUAL GATE
ELECTRIC GATE
DUST COLLECTOR
LOADING SPOUT
160' TRUCK SCALE TS-02

No.	BY	CH'D	DATE	REVISIONS
C	TGM	-	06.13.05	ADDED FLOW FROM RAW MATERIAL TO BLENDING HOPPER
B	TGM	-	05.25.05	REVISED PER CLIENT REVIEW
A	TGM	-	05.24.05	ISSUED FOR REVIEW

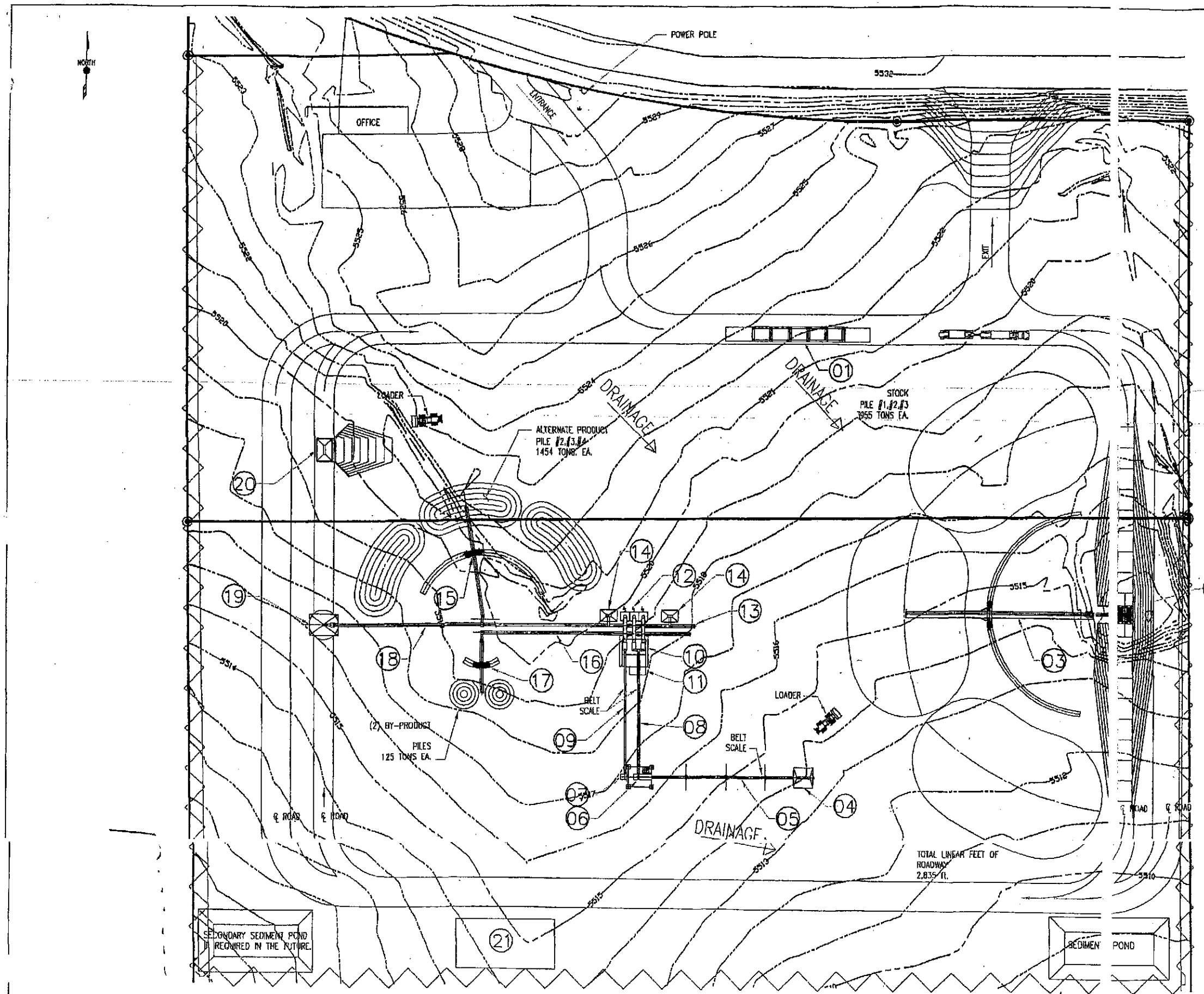
APPROVED FOR CONSTRUCTION
BY:
DATE:

DRAWN BY:	TGM	05.23.05
DESIGNED BY:	TGM	05.23.05
CHECKED BY:		
APPROVED:		
APPROVED:		

COVOL ENGINEERED FUELS, LC
SOUTH JORDAN, UTAH
Mine & Mill Engineering Inc.
Salt Lake City

COAL CLEANING FACILITY
WELLINGTON, UTAH
FLOW SHEET

SCALE: NONE
PROJECT NO: 05009
CADFILE: Flowsheet
DRAWING NO.
05009.1.1001
REV. C



EQUIPMENT LIST

ITEM NO.	QTY.	ITEM DESCRIPTION
01	1	TRUCK SCALE 100'-0"
02	1	TRUCK DUMP HOPPER WITH BELT FEEDER
03	1	STOCK PILE RADIAL STACKER 100' R. @ 18'x 53'-0" ht.
04	1	PLANT FEED HOPPER WITH 4x8 GRATE
05	1	FEED CONV. W/BELT SCALE @ 10' x 175'-0" x 30'-0" ht.
06	1	SCREEN XXXX
07	1	CRUSHER XXXX
08	1	FINES CONV. W/BELT SCALE @ 18' x128'-6" x 44'-0" ht.
09	1	COURSE CONV. W/BELT SCALE @ 18' x128'-6" x 44'-0" ht.
10	1	ALLAIR JIG Jx(4x8)
11	1	MMC CONTROL ROOM
12	1	3 COMPARTMENT BAGHOUSE WITH 3 FANS, 3 STACKS
13	1	PRODUCT CONV. #1
14	2	BLENDING HOPPER
15	1	ALT. RADIAL STACKER @ 18' x100'-0" x 30'-0" ht.
16	1	BY PRODUCT CONV. #1
17	1	BY PRODUCT RADIAL STACKER @ 18' x 65'-0"x20'-0" ht.
18	1	PRODUCT CONV. #2
19	1	PRODUCT SILO 200 TONS
20	1	ALT. TRUCK LOAD HOPPER
21	1	TERRA TEST UNIT

NOTES:
SURFACE CONTOUR IN SW CORNER MAY BE MODIFIED DURING CONSTRUCTION TO DIRECT RUNOFF TOWARDS SE CORNER.

EARTHEN BERMS WILL BE CONSTRUCTED AROUND SITE TO DIRECT SURFACE RUNOFF WATER TO SEDIMENT POND.

5.14 Ac's

REGISTERED PROFESSIONAL ENGINEER
NO. 22-150257-2202
J. THOMAS PALUSO
12/30/04
STATE OF UTAH

0' 50'-0"

REV	BY	CH	REVDATE	REVDESCRIPTION
R6	BY	CH	REVDATE	REVDESCRIPTION
R5	BY	CH	REVDATE	REVDESCRIPTION
D	KN	TP	12/23/04	INSERTED_BERMS,DRAINAGE,SED.PONDS
C	RP	TM	07.12.04	ADDED_PRODUCT_VOL_& ISSUED_FOR_REVIEW
B	RP	TM	06.24.04	REVISED_PER_COVOL_ISSUED_FOR_REVIEW
A	RP	-	05.26.04	ISSUED_FOR_REVIEW

REV	BY	CH	REVDATE	REVDESCRIPTION
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R11	BY	CH	REVDATE	REVDESCRIPTION
R10	BY	CH	REVDATE	REVDESCRIPTION
R9	BY	CH	REVDATE	REVDESCRIPTION
R8	BY	CH	REVDATE	REVDESCRIPTION
R7	BY	CH	REVDATE	REVDESCRIPTION

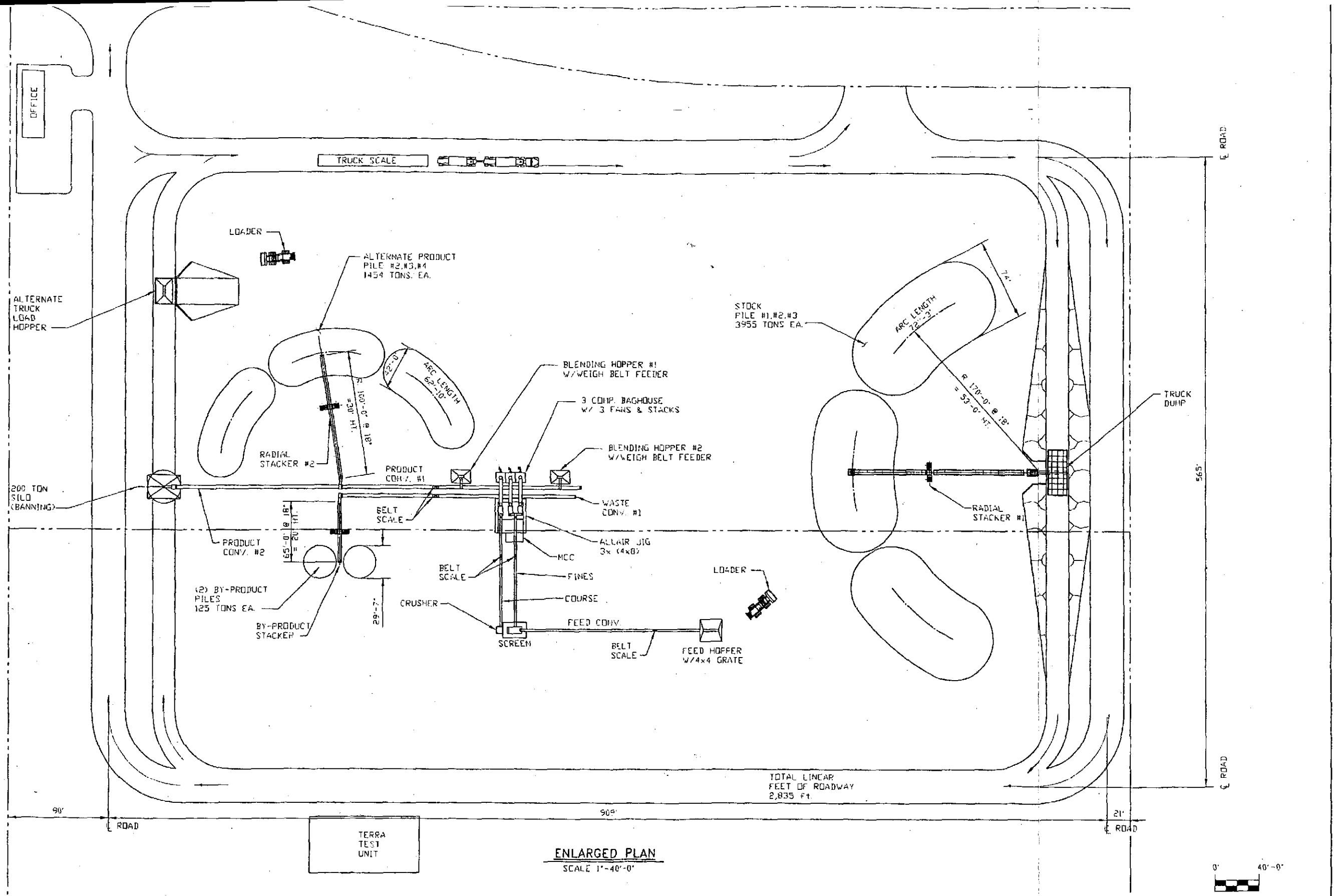
Enviromental Industrial Services

DRAWN BY:	KJN	12/23/04
DESIGNED BY:	JTP	12/23/04
CHECKED BY:	CHECKER	DATE
APPROVED:	APPROVER	DATE

COVOL ENGINEERED FUELS, LC
A DIVISION OF EAGLEWATERS INC.
EIS Environmental & Engineering Consulting

COVOL ENGINEERED FUELS, LC
WELLINGTON PLANT SITE
SITE PLAN

SCALE:	REV. 0
PROJECT NO: 04007	
CADFILE: SITEPLAN_01_KN	
DRAWING NO.	



ENLARGED PLAN

SCALE 1"=40'-0"

No	BY	CHK'D	DATE	REVISIONS
RP	TM		07.12.04	ADDED PRODUCT VOL. & ISSUED FOR REVIEW
RP	TM		06.24.04	REVISED PER COVOL ISSUED FOR REVIEW
RP	-		05.26.04	ISSUED FOR REVIEW

APPROVED FOR CONSTRUCTION
BY:
DATE:

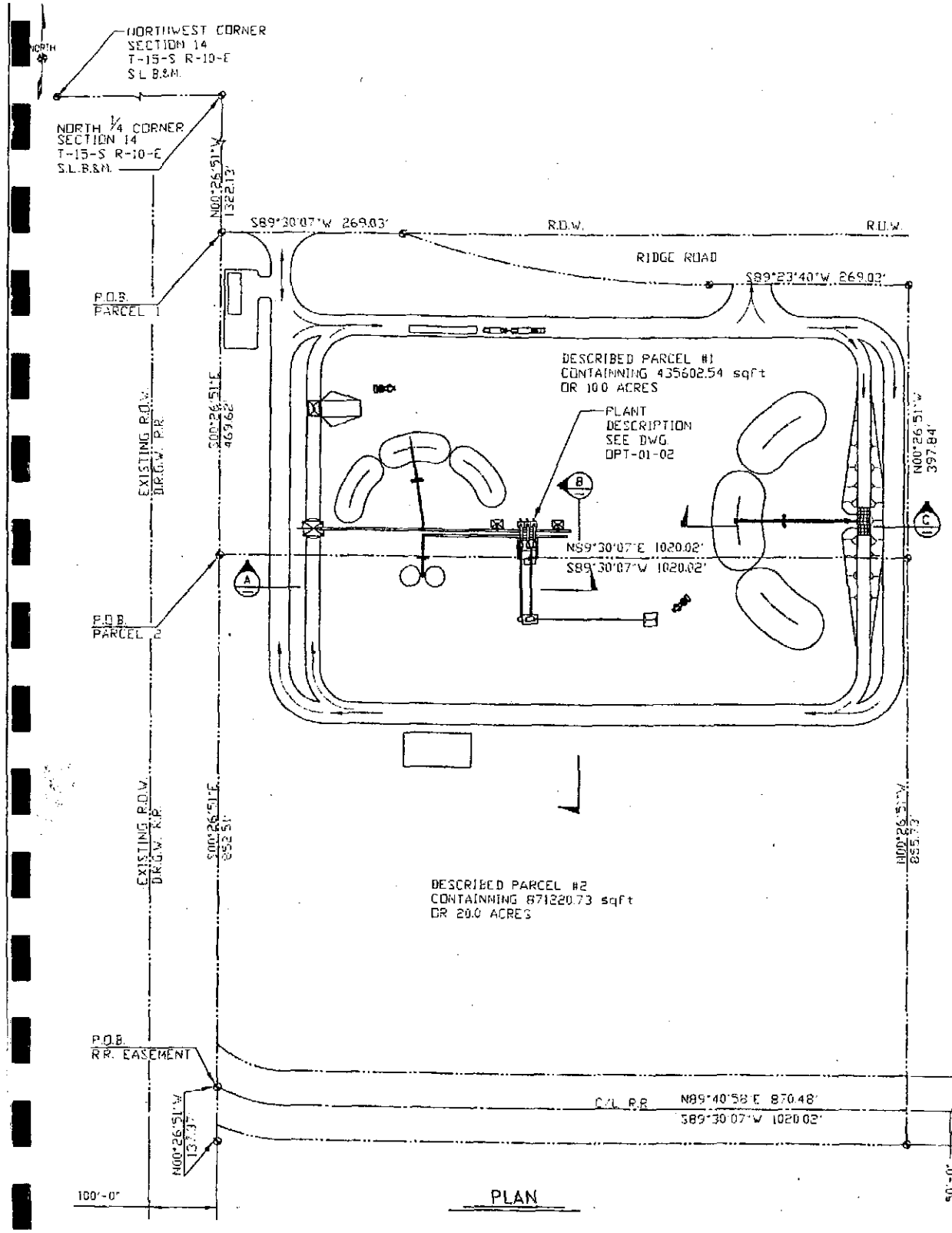
DRAWN BY:	RF	05.26.04
DESIGNED BY:	JA	05.26.04
CHECKED BY:		
APPROVED:		
APPROVED:		

COVOL FUELS
A DIVISION OF HEADWATERS INC.

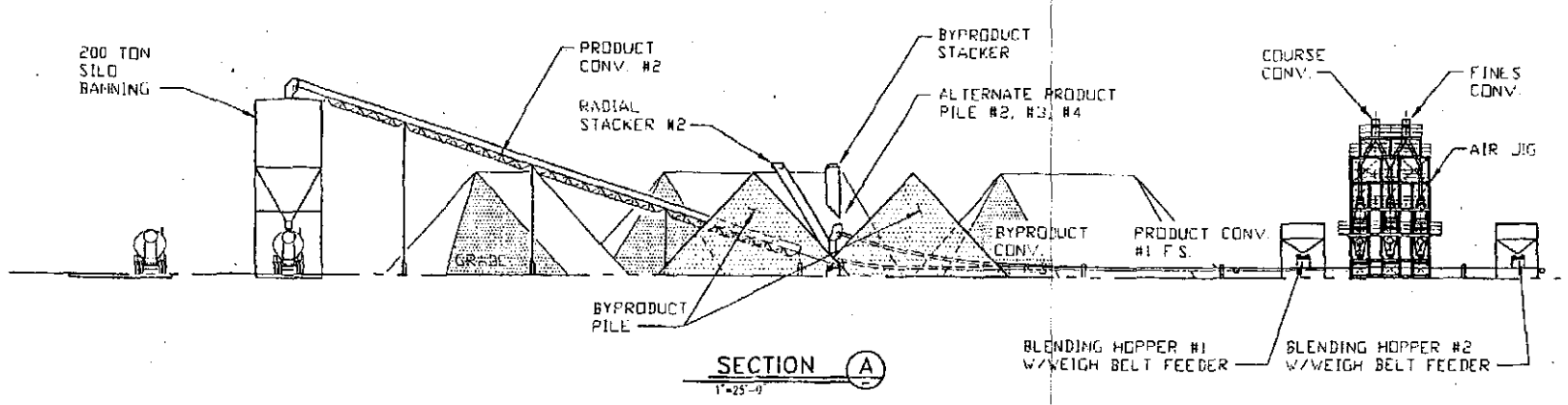
Mine & Mill Engineering Inc.
Salt Lake City

COVOL - CLEAN COAL PROJECT
SITE PLAN
OPTION -01,A

SCALE:	1"=40'-0"
PROJECT NO:	04007
CADFILE:	SITEPLAN01
DRAWING NO.	OPT-01-02
REV.	C



PLAN



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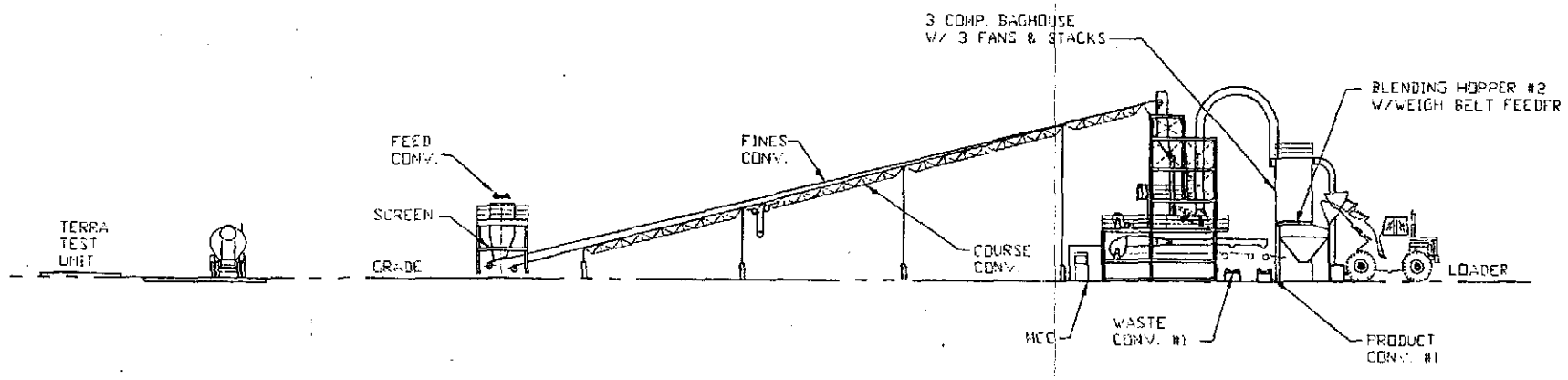

SECTION (B)
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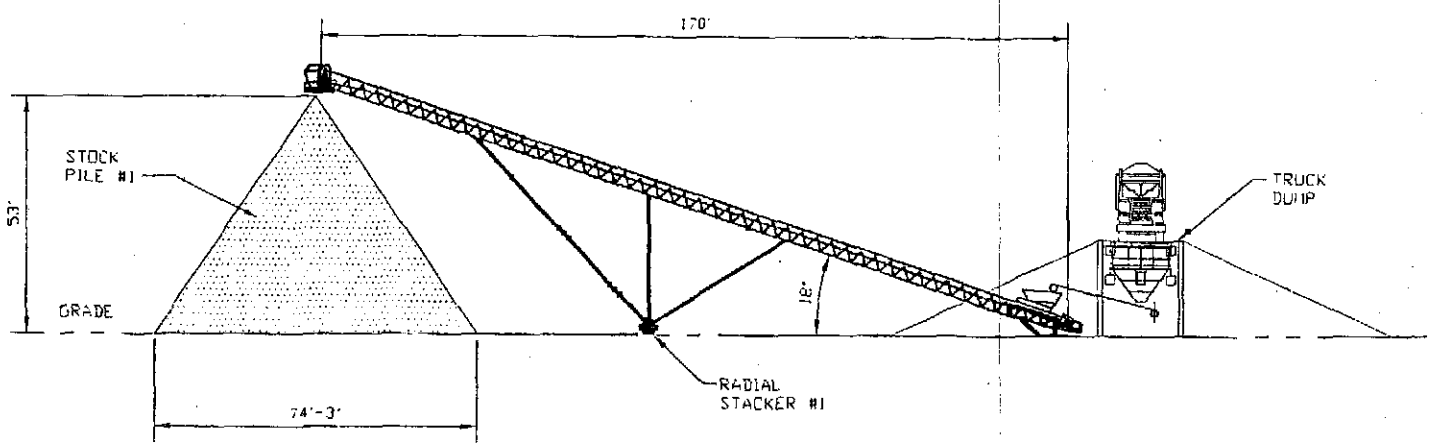


SECTION (C)
1"=20'-0"

NO	BY	CHK	DATE	REVISIONS
3	RP	TM	07.12.04	ADDED PRODUCT VOL. & ISSUED FOR REVIEW
2	RP	TM	06.24.04	REVISED PER COVOL ISSUED FOR REVIEW
1	RP	-	05.26.04	ISSUED FOR REVIEW

APPROVED FOR CONSTRUCTION
BY:
DATE:

DRAWN BY:	RP	05.26.04
DESIGNED BY:	JA	05.26.04
CHECKED BY:		
APPROVED:		
APPROVED:		

COVOL FUELS
A DIVISION OF HEADWATERS INC.

Mine & Mill Engineering Inc.
Salt Lake City

COVOL – CLEAN COAL PROJECT
SITE PLAN
OPTION –01

SCALE:	1"=100'-0"
PROJECT NO:	04007
CADFILE:	SITEPLAN01
DRAWING NO:	OPT-01
REV.	C

Exhibit 2
COVOL Environmental Permits and Plans

1. *Air Approval Order*
2. *Storm Water Construction Permit*
3. *Storm Water Industrial Discharge Permit*
4. *Storm Water Pollution Prevention Plan (SWP3)*
5. *Spill Prevention Control and Countermeasures (SPCC) Plan*

State of Utah

Department of
Environmental Quality

Dianne R. Nielson, Ph.D.
Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

JON M. NTSMAN, JR.
Governor

GARY HERBERT
Lieutenant Governor

DAQE-AN2952003-05

June 30, 2005

Keith Thompson
COVOL Engineered Fuels LLC
10653 South Riverfront Parkway, Suite 300
Sandy, Utah 84095

Dear Mr. Thompson:

Re: Approval Order: Modification of Approval Order DAQE# AN2952001-03, by Adding Equipment and Increasing Blended Coal Production, Carbon County – CDS B ATT; NSPS; TITLE V Minor Project Code: N2952-003

The attached document is the Approval Order (AO) for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Tim De Julis. He may be reached at (801) 536-4012.

Sincerely,

Richard W. Sprott, Executive Secretary
Utah Air Quality Board

RWS:TD:re

cc: Southeastern Utah District Health Department
Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

APPROVAL ORDER: Modification of Approval Order DAQE# AN 2952001-03 by Adding Equipment

Prepared By: Tim De Julis, Engineer
(801) 536-4012
tdejulis@utah.gov

APPROVAL ORDER NUMBER

DAQE-AN2952003-05

Date: June 30, 2005

COVOL Engineered Fuels LLC
Source Contact
Keith Thompson
(801) 984-9400

Richard W. Sprott
Executive Secretary
Utah Air Quality Board

Abstract

Covol Engineered Fuels, LC (CEF), proposes to modify the existing, blended coal preparation plant in Wellington, Carbon County, by adding equipment items, and increasing annual production. The plant will process as much as 1,500,000 tons of coal per year, utilizing crushers, screens, and air tables to create three different quality, blended coal products. Carbon County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS) apply to this source (40 CFR 60 Subpart A, and Subpart Y). National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Available Control Technology (MACT) regulations do not apply to this source. Title V of the 1990 Clean Air Act applies to this minor source. This source does not require a Title V operating permit.

The emissions, in tons per year, will change as follows: PM_{10} (+ 7.12).

The changes in emissions will result in the following, in tons per year, potential to emit totals: PM_{10} = 7.91

The project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). A public comment period was held in accordance with UAC R307-401-4 and no comments were received. This air quality Approval Order (AO) authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order.

General Conditions:

1. This Approval Order (AO) applies to the following company:

   Corporate Office Location
   Covol Engineered Fuels, LC
   10653 South Riverfront Parkway, Suite 300
   Sandy, Utah 84095

   Phone Number (801) 984-9400
   Fax Number (801) 984-9460

   The equipment listed in this AO shall be operated at the following location:

   1865 West Ridge Road, Wellington, Carbon County

   Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27
   4,374.55 kilometers Northing, 520.27 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307), and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.

3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.

4. Modifications to the equipment, or processes approved by this AO that could affect the emissions covered by this AO must be reviewed, and approved in accordance with R307-401-1.

5. All records referenced in this AO, or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Records shall be kept for the following minimum periods:

A.	Emission inventories	Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
B.	All other records	Two years

6. CEF shall install the various coal preparation equipment items listed in condition 8, and shall conduct its operations of the coal preparation plant in accordance with the terms, and conditions of this AO, which was written pursuant to CEF's Notice of Intent submitted to the Division of Air Quality (DAQ) on February 9, 2005, and additional information submitted to the DAQ on February 17, 2005, March 4, 2005, March 7, 2005, March 9, 2005, March 11, 2005, March 15, 2005, April 8, 2005, April 13, 2005, April 15, 2005, and April 19, 2005.

7. This AO shall replace the AO (DAQE-AN2952001-03) dated December 18, 2003.

8. The approved installations shall consist of the following equipment (or equivalent*):

A. Coal handling/ Preparation Equipment 40 CFR 60 Subpart Y
One (1) Crusher
One (1) Screen
Two (2) Feed Hoppers
Three (3) Air Tables
Various Conveyor Belts, or Radial Stacking Devices

B. Three (3) Fabric Filter Baghouses

C. One (1) Material Storage Silo
Capacity: 200 tons

D. Various Off-highway Equipment items **
Front-end Loaders

* Equivalency shall be determined by the Executive Secretary.

** This equipment is listed for informational purposes only.

9. The three baghouses shall control process streams from the air cleaning tables. All exhaust air from the air cleaning tables shall be routed through one of the three baghouses before being vented to the atmosphere. All filtered material collected within each

baghouse shall discharge to an enclosed conveyance device. The fabric filters installed in each baghouse shall have porosity of 0.5 micrometers, or use equivalent technology as determined by the Executive Secretary.

10. A manometer or magnehelic pressure gauge shall be installed to measure the differential pressure across the fabric filters in each baghouse. Static pressure differential across the fabric filter shall be between 1.5 to 6.0 inches of water column. The pressure gauge shall be located such that an inspector /operator can safely read the indicator at any time. The reading shall be accurate to within plus or minus 1.0 inches water column. The instrument shall be calibrated according to the manufactures instructions at least once every 12 months. Intermittent recording of the reading is required on a once per operational day basis.

11. CEF shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #8 has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If construction and/or installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-11.

Limitations and Tests Procedures

12. Visible emissions from the following emission points shall not exceed the following values:

A. All crushers - 15% opacity
B. All screens - 10% opacity
C. All conveyor transfer points - 10% opacity
D. All baghouse exhaust stacks - 10% opacity
E. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For sources that are subject to NSPS, opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

13. The following limit shall not be exceeded:

1,500,000 tons of coal processed per rolling 12-month period

To determine compliance with a rolling 12-month total the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12

months. Records of production shall be kept for all periods when the plant is in operation. Coal production shall be determined by examination of CEF billing records, and/or weight receipts. The records of coal production shall be kept on a daily basis.

Roads, and Fugitive Dust

14. The facility shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources.

15. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary, or the Executive Secretary's representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made 1/2 vehicle length, or greater behind the vehicle, and at approximately 1/2 the height of the vehicle, or greater. The accumulated six readings shall be averaged for the compliance value.

16. All unpaved operational areas that are used by mobile equipment shall be water sprayed, and/or chemically treated to control fugitive dust. An application of water, or chemical treatment shall be used. Treatment shall be of sufficient frequency, intensity, and duration to maintain the surface material in a damp/moist condition unless it is below freezing. The opacity shall not exceed 20% during all times the areas are in use. If chemical treatment is to be used, the plan must be approved by the Executive Secretary. Records of water, and/or chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:

    A. Date
    B. Number of treatments made, dilution ratio, and quantity
    C. Rainfall received, if any, and approximate amount
    D. Time of day treatments were made
    E. Records of temperature if the temperature is below freezing.

17. The in-plant haul roads shall be paved, and shall be periodically swept, or sprayed clean as dry conditions warrant, or as determined necessary by the Executive Secretary. Records of cleaning paved roads shall be kept for periods the plant is in operation. The records shall include the following items:

    A. Date of cleaning(s)
    B. Time of day cleaning(s) were performed

18. The haul road shall not exceed 0.69 miles in combined length, and the vehicle speed along the haul road shall not exceed 10 miles per hour.

19. The storage piles shall be watered to minimize generation of fugitive dusts, as dry conditions warrant, or as determined necessary by the Executive Secretary. Records of water, and/or chemical treatment shall be kept for all periods when the plant is in operation.

20. All conveyors, and radial stacking devices shall be covered, or enclosed along their length. The radial stacker conveyor drop, the truck loading chutes at the product storage silo, and the alternate product loading hopper shall be equipped with telescoping discharge tubes.

Federal Limitations and Requirements

21. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18, and Subpart Y, 40 CFR 60.250 to 60.254 (Standards of Performance for Coal Preparation Plants) apply to this installation.

Records & Miscellaneous

22. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded.

23. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.

24. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:
http://www.airquality.utah.gov/

The annual emissions estimations below include point source, fugitive dust, and road dust emissions, and do not include fugitive emissions, tail pipe emissions, or grandfathered emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment

area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for CEF's Wellington coal preparation plant are currently calculated at the following values:

Pollutant	Tons/yr
PM_{10}	7.91

Approved By:

Richard W. Sprott, Executive Secretary
Utah Air Quality Board

HEADWATERS
ENERGY SERVICES

Adding Value to Energy™

August 5, 2005

Richard W. Sprott, Director
Division of Air Quality
150 North 1950 West
P. O. Box 144820
Salt Lake City, Utah 84114-4820

Re: Construction Initiation Notification
Covol Engineered Fuels, LLC; DAQE-AN2952003-05
Wellington, Utah Coal Cleaning Facility

Dear Mr. Sprott:

On June 30, 2005 Covol Engineered Fuels, LLC received Approval Order (AO) number DAQE-AN2952003-05 for its coal cleaning facility to be located in Wellington, Utah near Price. The applicable requirements in the AO include 40 CFR Part 60, Subparts A and Y, General Provisions and Standards of Performance for Coal Preparation Plants, respectively.

40 CFR 60.7(a)(1) requires that once construction on an affected facility has been initiated, notification must be provided within 30 days. This letter fulfills this requirement for the coal cleaning facility in Wellington, Utah. On July 18, 2005 construction was initiated on the facility.

Once construction has been completed and initial startup takes place, the required initial startup notification will be made in a timely manner. In the mean time, if there are any questions please call me at (801) 984-3777.

Sincerely,

Steven P. Van Ootegham
Regional Environmental Manager

cc: Keith Thompson/Covol Engineered Fuels, LLC
Ron Sherbak/Covol Engineered Fuels, LLC

10653 S. River Front Parkway
Suite 300
South Jordan, UT 84095
P: 801.984.9400
F: 801.984.9410

COVOL
FUELS
A Division of Headwaters Incorporated

February 16, 2006

Ms. Deborah McMurtrie
Utah Department of Environmental Quality
Division of Air Quality
150 North 1950 West
PO Box 144820
Salt Lake City, Utah 84114-4820

VIA FACSIMILE

RE: Annual Emission Inventory
Covol Engineered Fuels, LLC Wellington Utah Coal Cleaning Facility

Dear Ms. McMurtrie:

Thank you for taking the time with me this morning to discuss the annual emission inventory for the above mentioned facility. As we discussed, an annual emission inventory for 2005 is not required because this facility is still under construction and not yet in production. We will make the appropriate written notification(s) when production begins, as required by 40 CFR 60.7(a)(3).

As you suggested, I spoke with our permit writer, Tim DeJulius about the designation of the facility as a Part 70 source and, therefore subject to Title V fees. As I suspected, this is the case because of the applicability of the NSPS for Coal Preparation Plants (Subpart Y). The Form A that we received is correct with respect to the regulatory status of the facility.

For future reference and to ensure that mailings arrive timely, please send correspondence directly to the facility or to me at the same South Jordan address. If there are any questions or concerns, please call me at (801) 984-3777.

Sincerely,

Steven P. Van Ootegham
Regional Environmental Manager

cc: Tim DeJulius/UDAQ (by FAX)
Keith Thompson/Headwaters Energy Services
Ron Sherbak/Headwaters Energy Services
Mike Gipson/Wellington Plant

10653 South River Front Parkway, Suite 300, South Jordan, UT 84095
Phone: (801) 984-9400 Fax: (801) 984-9410

STORM WATER POLLUTION PREVENTION PLAN

and

NOI Storm Water Discharges Associated with Construction Activities

and

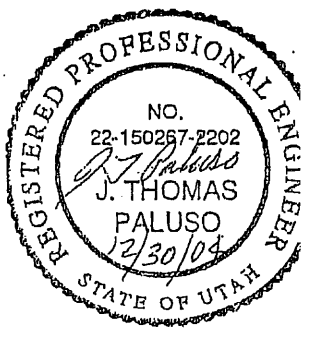
NOI Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activities

COVOL ENGINEERED FUELS, LC

PREPARED BY:

EIS Environmental & Engineering Consulting

DECEMBER 2004



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LIST OF APPENDICES

Section 1.0 General Site Information

COVOL Engineered Fuels, LC (COVOL) is planning to construct and operate a new coal cleaning facility in Carbon County, Utah. The new facility will be located in Section 14, Township 15 South, Range 10 East, Salt Lake Base & Meridian. This facility will be located approximately five miles south of Price, Utah. Refer to the attached Location Map in Appendix A. The facility lies in an undeveloped, rural area on a 30 acre site. Approximately 15 acres will be used for this new operation. The adjacent land on the east, west, and south remains undeveloped. Across the road to the west are coal transfer facilities where coal is stored, loaded, and unloaded for shipment. Across the road and to the north is Carbon County Lumber Company.

The site slopes to the southeast and the surrounding ground consists of native soil with sparse vegetation. The soil is classified as Persayo-Badland Association Soils, which consist of gently sloping and rolling hills, well drained, moderately fine textured and medium textured soils over shale. The area receives approximately 9.5-inches of precipitation annually. The regional groundwater flow is east toward the Price River which lies approximately two miles northeast of the facility. Refer to the Location Map in Appendix A.

This site was previously permitted by Terra Systems Incorporated (TSI). In compliance with the provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated 1953, TSI was issued a General Storm Water UPDES Permit UTR101090 on August 20, 2003, for this Wellington Plant Site. COVOL has purchased this site from TSI and will use different processing techniques. COVOL will receive coal from various sources around the Carbon/Emery area. COVOL will take this coal with varying qualities and by using air jigs will improve the final quality. The cleaning facility will be divided into three areas: feedstock material handling and storage systems, coal cleaning equipment, and finished product material handling and storage system. It is anticipated that this facility will process approximately 1,000,000 ton per year.

Feedstock Handling

Incoming coal trucks will be weighed at the truck scale and dump their loads at the truck dump hopper. Refer to the Site Plan in Appendix A. This high ash coal will be moved via conveyors and dumped in the inventory pile with a radial stacker. The radial stacker will be positioned to segregate and pile multiple sources/qualities of coal.

Coal Cleaning

High ash coal will be fed into the feed hopper via a rubber-tired front end loader. This material will be transported by conveyor to a screen for separation. Coarse or oversized material can be processed through the crusher to be sized to 2" minus. The feed streams (coarse and fine) are then fed into an air jig separation unit where the coal is separated from the rock and ash using air and vibration to perform the separation. The air jig is covered by a hood connected to a bag house (one bag house for each air jig) to prevent any fugitive dust particles from escaping into the atmosphere. Finished product is transferred to an inventory pile or silo via one set of conveyors and the byproduct is transferred to a pile via another set of conveyors. The bag house dust can be combined either with

the byproduct stream or the finished product stream depending on the required specifications.

Finished Product Handling
The finished product may be stored in the silo which is situated over the site haul road. A designated amount of product stored in the silo will be charged into trucks to be shipped to its final destination. Alternately, finished material from a segregated finished product pile may be fed into the product silo via the feed/blending hoppers or be loaded directly into trucks, for transportation, via the truck ramp and hopper.

Storm Water Pollution Prevention Plan

It has been determined that the permittee has a regulated storm water discharge as per UAC R317.8. Therefore, conditions governing storm water discharges apply. The permittee shall develop a storm water pollution plan. The receiving water for this facility is the Price River. Refer to Appendix D for Guidelines Associated with Storm Water Discharge from Construction Activities.

Section 2.0 Content of Plan

Section 2.1.1 Pollution Prevention Team

The facility will be operated two shifts per day. Each shift will have three employees, a shift foreman and two operators. During each shift the pollution prevention team at the facility will be comprised of these three individuals.

The shift foreman will be responsible to coordinate a spill response, oversee good housekeeping and best management practices. His responsibilities will also include monitoring, if required, and ensuring compliance with aforementioned permit. The on shift operators will be required to inspect and maintain all diversion and appurtenant structures to ensure proper control and treatment of storm water runoff prior to leaving the site.

All employees will be properly trained in their various areas and will be given the proper notification numbers and contact personnel to comply with the requirements of the permit. Refer to Section 2.4.1 Employee Training.

Section 2.2.1 Site Map

Included in Appendix A is a Site Map showing the proposed surface facilities. Additional features on the map include storm water flow directions, berm, and sediment pond locations.
Final engineering on this facility is presently being completed. Surface contours will be modified to direct all surface flows towards the sediment pond located in the southeast corner of the project. If this is not practical, an additional sediment pond may be constructed in the southwest corner of the project. An earthen berm will be constructed to contain all runoff from the site. All surface structures will be located inside the berm. This will prevent any potential contamination from leaving

the site.

Section 2.2.2 Material Inventory

Description of Potential Pollutant Sources

The potential sources which may reasonably be expected to add pollutants to storm water discharges from the site are those disturbed areas which facilitate the operation. The surface facilities are shown on the Site Plan drawing. The Potential Pollution Sources are listed in the following table.

Potential Pollution Source	Potential Pollutants	Likelihood of Contact
Truck Dump	Coal Fines, Equipment Fuels and Fluids	Low potential, No known spill or leak
Coal Storage Area	Coal Fines, Equipment Fuels and Fluids	Low potential, No known spill or leak
Front End Loader	Equipment Fuels and Fluids	Low potential, No known spill or leak
Conveyor Belt	Coal Fines, Lubricant	Low potential, No known spill or leak
Silo	Coal Fines, Lubricant	Low potential, No known spill or leak

All runoff will be contained by the berm surrounding the site. This runoff will report to the sediment pond. Coal fines in the storage areas are very fine-grained, therefore some storm events could potentially cause enough surface flow to transport the fines to the sediment pond.

Drainage

The Site Plan drawing provides the drainage direction and the location of the proposed sediment pond and berms. Existing contours, in the southwest corner, would be modified to direct runoff towards the sediment pond or an additional sediment pond may be constructed in the southwest corner of the project. Berms will be constructed to prevent storm water from leaving the site. Runoff from Ridge Road (County Road) will be diverted around the property. The sediment pond will remove pollutants from storm water runoff and will discharge to the south, if necessary. After construction both the berms and sediment pond will be inspected on a quarterly basis to insure that they are operating correctly.

Section 2.3.1 Best Management Identifications (BMP)

BMPs	Brief Description of Activities	Implementation of BMP
Good Housekeeping	Pick-up Trash, Use of absorbent materials to clean up minor spills. Training of staff in cleanup procedures.	Training of staff during annual training or as needed.
Preventative Maintenance	Maintain sediment control measures. Maintain equipment and machinery. Maintain fuel stations, coal pile and surface drainage..	Inspect and Maintain contours to drain to sediment controls
Inspections	Quarterly inspection of runoff control measures.	Quarterly Inspections or as needed after storm events.
Spill Prevention Response	Fuel tanks will be contained. Absorbent materials available for spill clean up.	Clean up or maintain as needed.
Sediment and Erosion Control	Inspection of pond and berms, at least quarterly or after/during storm event greater than .5 inches.	Sample pond during runoff event. Clean pond when necessary.
Management of Runoff	Off site runoff diverted around disturbed and storage areas. Disturbed and storage areas treated by sediment pond or berm.	Inspect, maintain and repair as needed.

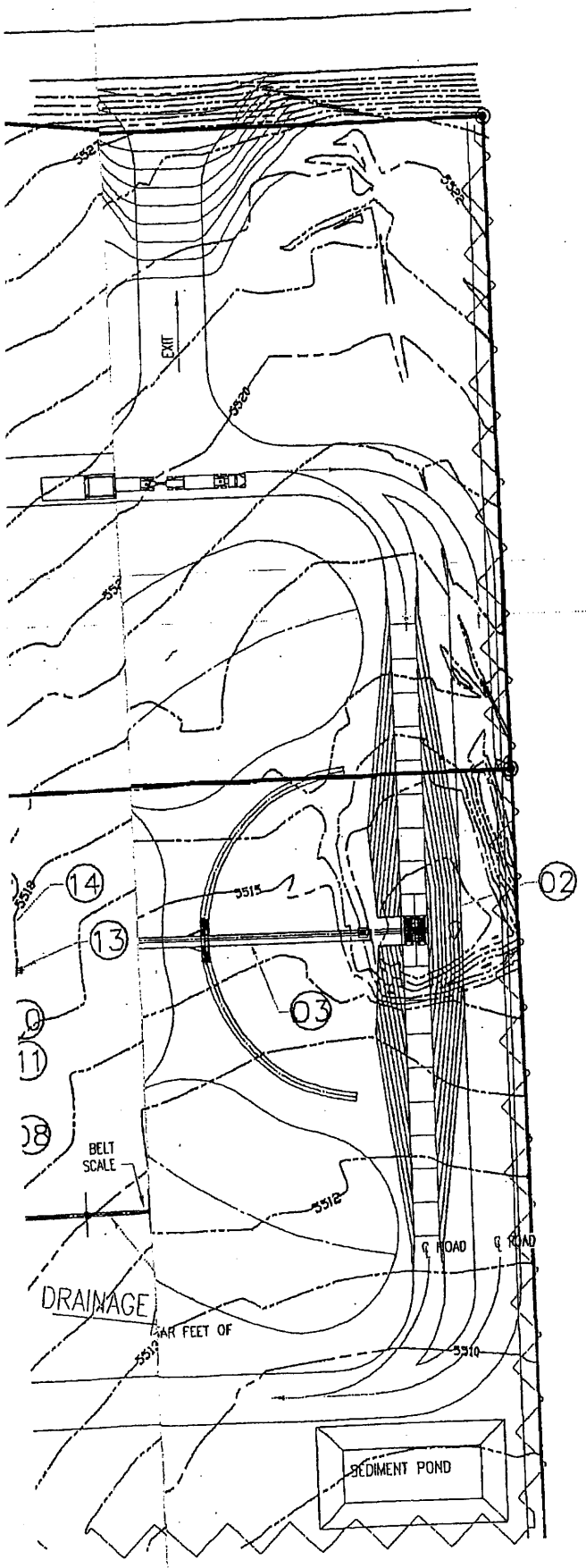
Section 2.4.1 Employee Training

Training topics will include, but not be limited to Spill Prevention and Response, Spill Reporting Procedures, Good Housekeeping, Material Management Practices, and Storm Water Sampling Procedures.

Employees will be provided training regarding the prevention and control of spillage of fuels and oils associated with machinery and equipment. Employees will be advised to not overfill fuel tanks while fueling equipment or vehicles. Employees will assist fuel vendors to watch tankgauges and not overfill bulk tanks.

APPENDIX A

DRAWINGS



EQUIPMENT LIST

ITEM NO.	QTY.	ITEM DESCRIPTION
01	1	TRUCK SCALE 100'-0"
02	1	TRUCK DUMP HOPPER WITH BELT FEEDER
03	1	STOCK PILE RADIAL STACKER 100' R. @ 18'x 53'-0" ht.
04	1	PLANT FEED HOPPER WITH 4x8 GRATE
05	1	FEED CONV. W/BELT SCALE @ 10" x 175'-0" x 30'-0" ht.
06	1	SCREEN XXXX
07	1	CRUSHER XXXX
08	1	FINES CONV. W/BELT SCALE @ 18" x128'-6" x 44'-0" ht.
09	1	COURSE CONV. W/BELT SCALE @ 18" x128'-6" x 44'-0" ht.
10	1	ALLAIR JIG 3x(4x8)
11	1	MMC CONTROL ROOM
12	1	3 COMPARTMENT BAGHOUSE WITH 3 FANS, 3 STACKS
13	1	PRODUCT CONV. #1
14	2	BLENDING HOPPER
15	1	ALT. RADIAL STACKER @ 18" x100'-0" x 30'-0" ht.
16	1	BY PRODUCT CONV. #1
17	1	BY PRODUCT RADIAL STACKER @ 18" x 65'-0"x20'-0" ht.
18	1	PRODUCT CONV. #2
19	1	PRODUCT SILO 200 TONS
20	1	ALT. TRUCK LOAD HOPPER
21	1	TERRA TEST UNIT

NOTES:
SURFACE CONTOUR IN SW CORNER MAY BE MODIFIED DURING CONSTRUCTION TO DIRECT RUNOFF TOWARDS SE CORNER.

EARTHEN BERMS WILL BE CONSTRUCTED AROUND SITE TO DIRECT SURFACE RUNOFF WATER TO SEDIMENT POND.

REGISTERED PROFESSIONAL ENGINEER
NO. 22-150267-2202
J. THOMAS PALUSO
12/30/04
STATE OF UTAH

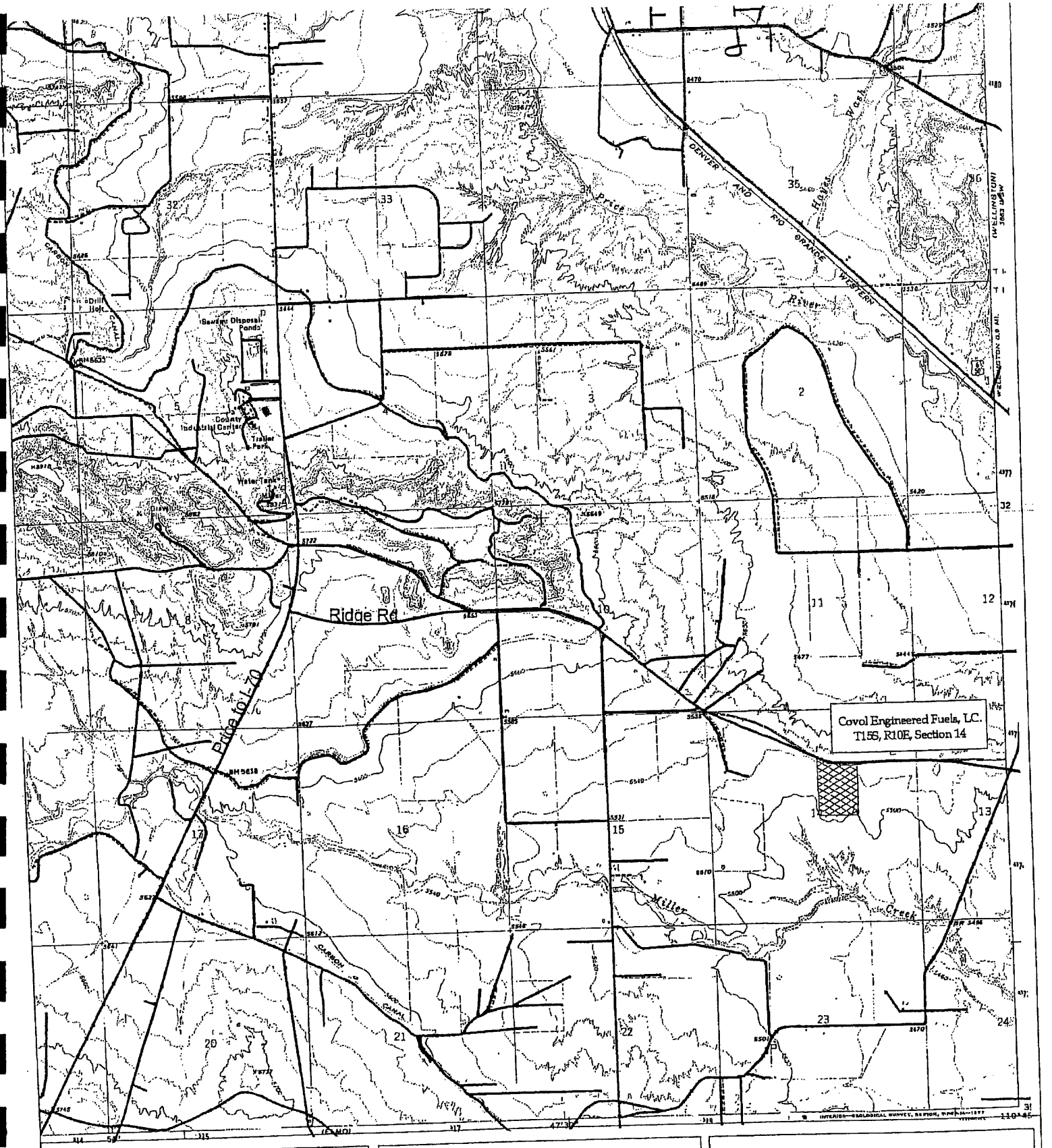
0' 50'-0"

Environ 1/04
Indus 3/04
Se IE

COVOL ENGINEERRED FUELS, LC
A DIVISION OF HEADWATERS INC.
FIS Environmental & Engineering Consulting

COVOL ENGINEERED FUELS, LC
WELLINGTON PLANT SITE
SITE PLAN

SCALE:
PROJECT NO: 04007
CADFILE: SITEPLAN_01_KN
DRAWING NO.
OPT-01-02
REV. 0



Legend

Roads

Covol

N

Location Map

2000 0 2000 4000 Feet

Drawn By: K. Nash
Designed By. J.T. Paluso

EIS Environmental &
Engineering Consulting
31 North Main Street
Helper, Utah 84526

APPENDIX B

NOI-STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER QUALITY
288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870 (801)538-6146

NOI

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under the UPDES General Permit No. UTR100000. SEE REVERSE FOR INSTRUCTIONS

Submission of this Notice of Intent constitutes notice that the party(s) identified in Section I of this form intends to be authorized by UPDES General Permit No. UTR100000 issued for storm water discharges associated with construction activity in the State of Utah. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

I. OPERATOR INFORMATION

Name (Main operator): COVOL ENGINEERED FUELS, LC
Phone: 801-984-9400
Status of Owner/Operator: P
Address: 10653 S. RIVERFRONT PARKWAY
City: SOUTH JORDAN State: UT Zip: 84095
Contact Person: KEITH THOMPSON
Phone: 801-984-9400

Name (1st Co-permittee): _____
Phone: _____
Status of Owner/Operator:
Address: _____
City: _____ State: _____ Zip: _____
Contact Person: _____
Phone: _____

Name (2nd Co-permittee): _____
Phone: _____
Status of Owner/Operator:
Address: _____
City: _____ State: _____ Zip: _____
Contact Person: _____
Phone: _____

Name (3rd Co-permittee): COVOL ENGINEERED FUELS, LC
Phone: _____
Status of Owner/Operator:
Address: _____
City: _____ State: _____ Zip: _____
Contact Person: _____ Phone: _____

Please copy this form if you have more co-permittees than what is allowed on this form.

II. FACILITY SITE / LOCATION INFORMATION

Is the facility located on Indian Lands? (Y or N) N

Name: COVOL ENGINEERED FUELS, LC
Project No. (if any): _____
Address: 1865 WEST RIDGE ROAD County: CARBON
City: WELLINGTON State: UT Zip: 84542
Latitude: 39 31 27 Longitude: 110 45 58

III. SITE ACTIVITY INFORMATION

Municipal Separate Storm Sewer System (MS4) Operator Name: _____

Receiving Water Body: PRICE RIVER

How far to the nearest water body? 2 MILES

List the Number of any other UPDES permits at the site: _____ _____

IV. TYPE OF CONSTRUCTION (Check all that apply)

1. ☐ Residential 2. ☐ Commercial 3. X Industrial 4. ☐ Road 5. ☐ Bridge 6. ☐ Utility 7. ☐ Contouring, Landscaping

8. ☐ Other (Please list) _____

V. BEST MANAGEMENT PRACTICES

Identify proposed Best Management Practices (BMPs) to reduce pollutants in storm water discharges: (Check all that apply)

1. ☐ Silt Fences 2. X Sediment Pond 3. ☐ Seeding/Preservation of Vegetation 4. ☐ Mulching/Geotextiles 5. ☐ Check Dams 6. X Structural Controls (Berms, Ditches, etc.)

7. ☐ Other (Please list) _____

VI. ADDITIONAL INFORMATION REQUIRED

A storm water pollution prevention plan has been prepared for this site and is to the best of my knowledge in Compliance with State and/or Local Sediment and Erosion Plans and Requirements.

Project Start Date: 08/01/05 Completion Date: 08/01/05 Estimated Area to be Disturbed (in Acres): 15

(Y or N) Y (A pollution prevention plan is required to be on hand before submittal of the NOI)

VII. CERTIFICATION: I certify under penalty of law that I have read and understand the *Part I.B.* eligibility requirements for coverage under the general permit for storm water discharges from construction activities. I further certify that to the best of my knowledge, all discharges and BMPs that have been scheduled and detailed in a pollution prevention plan will satisfy requirements of *Part I.B.*, and *Part III.* of this permit. I understand that continued coverage under this storm water general permit is contingent upon maintaining eligibility as provided for in *Part I.B.* I also certify under penalty of law that this document and all attachments were prepared under the direction or supervision of those who have place their signature below, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name (of responsible person for the main operator from first page): KEITH THOMPSON – V.P. COVOL ENGINEERED FUELS, LC Date: _____

Signature: _____

Print Name (of responsible person for the 1st co-permittee from first page): _____ Date: _____

Signature: _____

Print Name (of responsible person for the 2nd co-permittee from first page): _____ Date: _____

Signature: _____

Print Name (of responsible person for 3rd co-permittee from first page): _____ Date: _____

Signature: _____

Amount of Permit Fee Enclosed: $100.00

APPENDIX C

NOI-MULTI-SECTOR GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER QUALITY
288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870 (801)538-6146

NOI

Notice of Intent (NOI) for Coverage Under the UPDES General Multi-Sector Storm Water Permit for Discharges Associated with Industrial Activity, Permit No. UTR000000.

INSTRUCTIONS ON BACK PAGE

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a UPDES permit issued for storm water discharges associated with industrial activity in the State of Utah. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM. **A different NOI form is provided for construction activities disturbing over 5 acres.**

I. FACILITY OPERATOR INFORMATION

Name: COVOL ENGINEERED FUELS, LC Phone: 801-984-9400

Address: 10653 S. RIVERFRONT PARKWAY Status of Owner/Operator: P

City: SOUTH JORDAN State: U T Zip: 84095

Facility Contact Person: KEITH THOMPSON Phone: 801-984-9400

Facility Contact Person Title: VP COVOL ENGINEERED FUELS, LC

II. FACILITY SITE/LOCATION INFORMATION

Is the facility located on Indian Lands? (Y or N) N

Name: COVOL ENGINEERED FUELS, LC

Address: 1865 WEST RIDGE ROAD County: CARBON

City: WELLINGTON State: UT Zip: 84542

Latitude: 3 9 3 1 2 7 Longitude: 1 1 0 4 5 5 8 Quarter: S E

ction: 1 4 Township: 1 5 S Range: 1 0 E

Site Contact Person: KEITH THOMPSON Phone: 801-984-9400

Site Contact Person Title: C E O

III. SITE ACTIVITY INFORMATION

Name of Municipality which Operates the Storm Sewer System: _____

Receiving Water Body: PRICE RIVER

Is there existing quantitative storm water discharge data? NO

s

Is the facility required to do analytical monitoring? (See permit conditions Part V. and Sector monitoring requirements.) Yes

Is the facility required to do visual monitoring? (See permit conditions near the end of applicable Sector(s); Appendix A to AD) Yes

Is the facility required to submit monitoring data or retain it on site? (Submit) ☒ (Retain on site) ☒

Is This a New Facility, or is it an Existing Facility? (New) ☒ (Existing) ☐

If This is an Existing Facility, and the Start-up Date was After Oct. 1992, Please Fill in the Start-up Month: Month (Jan, Feb., etc.): _____ Year: _____

SIC or Designated Activity Code: Primary: 12 2nd: _____ 3rd: _____ 4th: _____

If You Have Other Existing UPDES Permits, Enter Permit #'s: _____

IV. SECTOR IDENTIFICATION: The General Multi-Sector Permit covers all industrial activity that is required by law to be covered by a storm water permit. On the following pages the sectors are listed with a description of the industrial activity that is covered by that sector. Please check each sector that covers industrial activities which occur at your site. The sector covered in Appendix AD is the catch-all sector and should only be used if positively no other sector covers your industrial activity. If you should select AD, please call the Storm Water Coordinator at DWQ to discuss the need for choosing Sector AD (Non-Classified Facilities).

IV. SECTOR IDENTIFICATION: The General Multi-Sector Permit covers all industrial activity that is required by law to be covered by a storm water permit. On the following pages the sectors are listed with a description of the industrial activity that is covered by that sector. Please check each sector that covers industrial activities which occur at your site. The sector covered in Appendix AD is the catch-all sector and should only be used if positively no other sector covers your industrial activity. If you should select AD, please call the Storm Water Coordinator at DWQ to discuss the need for choosing Sector AD (Non-Classified Facilities).

☐ **A. Timber Products Facilities** -- establishments [generally classified under Standard Industrial Classification (SIC) Major Group 24] that are engaged in cutting timber and pulpwood, merchant sawmills, lath mills, shingle mills, cooperage stock mills, planing mills, and plywood and veneer mills engaged in producing lumber and wood basic materials; and establishments engaged in wood preserving or in manufacturing finished articles made entirely of wood or related materials, except for wood kitchen cabinet manufacturers (SIC Code 2434), which are addressed under sector W.

☐ **B. Paper and Allied Products Manufacturing Facilities** -- facilities engaged in the manufacture of pulps from wood and other cellulose fibers and from rags; the manufacture of paper and paperboard into converted products, such as paper coated off the paper machine, paper bags, paper boxes and envelopes; and establishments primarily engaged in manufacturing bags of plastic film and sheet. These facilities are commonly identified by Standard Industrial Classification (SIC) Major Group 26.

☐ **C. Chemical and Allied Products Manufacturing Facilities** -- 1) Basic industrial inorganic chemicals (including SIC 281), 2) Plastic materials and synthetic resins, synthetic rubbers, and cellulosic and other humanmade fibers, except glass (including SIC 282), 3) Soap and other detergents and in producing glycerin from vegetable and animal fats and oils; specialty cleaning, polishing, and sanitation preparations; surface active preparations used as emulsifiers, wetting agents, and finishing agents, including sulfonated oils; and perfumes, cosmetics, and other toilet preparations (including SIC 284), 4) Paints (in paste and ready-mixed form); varnishes; lacquers; enamels and shellac; putties, wood fillers, and sealers; paint and varnish removers; paint brush cleaners; and allied paint products (including SIC 285), 5) Industrial organic chemicals (including SIC 286), 6) Nitrogenous and phosphatic basic fertilizers, mixed fertilizer, pesticides, and other agricultural chemicals (including SIC 287), 7) Industrial and household adhesives, glues, caulking compounds, sealants, and linoleum, tile, and rubber cements from vegetable, animal, or synthetic plastics materials; explosives; printing ink, including gravure ink, screen process ink, and lithographic; miscellaneous chemical preparations such as fatty acids, essential oils, gelatin (except vegetable), sizes, bluing, laundry sours, writing and stamp pad ink, industrial compounds, such as boiler and heat insulating compounds, metal, oil, and water treatment compounds, waterproofing compounds, and chemical supplies for foundries (including facilities with SIC 289), 8) Ink and paints, including china painting enamels, india ink, drawing ink, platinum paints for burnt wood or leather work, paints for china painting, artists' paints and artists' water colors (SIC 3952, limited to those listed; for others see sectorY.), 9) Medicinal chemicals and pharmaceutical products, including the grading grinding and milling of botanicals (including SIC 283).

☐ **D. Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities** -- 1) facilities engaged in manufacturing asphalt paving and roofing materials, including those facilities commonly identified by Standard Industrial Classification (SIC) codes 2951 and 2952, 2) portable asphalt plant facilities (also commonly identifiec by SIC code 2951), 3) facilities engaged in manufacturing lubricating oils and greases, including those facilities classified as SIC code 2992. Not covered are: 1) petroleum refining facilities, including those that manufacture asphalt or asphalt products and that are classified as SIC code 2911 (see sector I.), 2) oil recycling facilities (see sector N.), and 3) fats and oils rendering (see sectorU.).

☐ **E. Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities** -- manufacturing flat, pressed, or blown glass or glass containers; manufacturing hydraulic cement; manufacturing clay products including tile and brick; manufacturing of pottery and porcelain electrical supplies; manufacturing concrete products; manufacturing gypsum products; nonclay refractories; and grinding or otherwise treating minerals and earths. This section generally includes the following types of manufacturing operations: flat glass, (SIC code 3211); glass containers, (SIC code 3221); pressed and blown glass, not elsewhere classified, (SIC code 3229); glass product made of purchased glass (SIC code 3231) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products or industrial machinery are exposed to storm water; hydraulic cement, (SIC code 3241); brick and structural clay tile, (SIC code 3251); ceramic wall and floor tile, (SIC cod `253); clay refractories, (SIC code 3255); structural clay products not elsewhere classified (SIC code 3259); vitreous china plumbing fixtures, and china and earthen ware ,ttings and bathroom accessories, (SIC code 3261); vitreous china table and kitchen articles (SIC code 3262); fine earthenware table and kitchen articles (SIC code 3263); porcelain electrical supplies, (SIC code 3264); pottery products, (SIC code 3269); concrete block and brick, (SIC code 3271); concrete products, except block and brick (SIC code 3272); ready-mix concrete, (SIC code 3273); lime (SIC code 3274); gypsum products, (SIC code 3275); cut stone and stone products (SIC code 3281); abrasive products (SIC code 3291); asbestos products (SIC code 3292); minerals and earths, ground or otherwise treated, (SIC code 3295); mineral wool (SIC code 3296); nonclay refractories, (SIC code 3297); and nonmetallic mineral products not elsewhere classified (SIC code 3299).

☐ **F. Primary Metals Facilities** -- coking operations, sintering plants, blast furnaces, smelting operations, rolling mills, casting operations, heat treating, extruding, drawing, or forging of all types of ferrous and nonferrous metals, scrap, and ore. Coverage includes the following types of facilities: 1) Steel works, blast furnaces, and rolling and finishing mills including: steel wiredrawing and steel nails and spikes; cold-rolled steel sheet, strip, and bars; and steel pipes and tubes (SIC code 331), 2) Iron and steel foundries, including: gray and ductile iron, malleable iron, steel investment, and steel foundries not elsewhere classified (SIC code 332), 3) Primary smelting and refining of nonferrous metals, including: primary smelting and refining of copper, and primary production of aluminum (SIC code 333), 4) Secondary smelting and refinin of nonferrous metals (SIC code 334), 5) Rolling, drawing, and extruding of nonferrous metals, including: rolling, drawing, and extruding of copper; rolling, drawing, and extruding of nonferrous metals, except copper and aluminum; and drawing and insulating of nonferrous wire (SIC code 335), 6) Nonferrous foundries (castings), including aluminum die-castings, nonferrous die-castings, except aluminum, aluminum foundries, copper foundries, and nonferrous foundries, except copper and aluminum (SIC coc 336), 7) Miscellaneous primary metal products, not elsewhere classified, including: metal heat treating, and primary metal products, not elsewhere classified (SIC code 33!

☐ **G. Metal Mines (Ore Mining and Dressing)** -- active and inactive metal mining and ore dressing facilities [Standard Industrial Classification (SIC) Major Group 10] the storm water has come into contact with, or is contaminated by, any overburden, raw material, intermediate product, finished product, byproduct, or waste product locat on the site of the operation. SIC Major Group 10 includes establishments primarily engaged in mining, developing mines, or exploring for metallic minerals (ores) and alsc includes all ore dressing and beneficiating operations, whether performed at mills operated in conjunction with the mines served or at mills, such as custom mills, operated separately. For the purposes of this part of the permit, the term "metal mining" includes all ore mining and/or dressing and beneficiating operations, whether performed at mills operated in conjunction with the mines served or at mills, such as custom mills, operated separately. All storm water discharges from inactive metal mining facilities and the storm water discharges from the following areas of active, and temporarily inactive, metal mining facilities are the only discharges covered by this section of the permit: topsoil piles; offsite haul/access roads if off active area; onsite haul roads if not constructed of waste rock or if spent ore and mine water is not used for dust contrc runoff from tailings dams/dikes when not constructed of waste rock/tailings and no process fluids are present; concentration building, if no contact with material piles; mil site, if no contact with material piles; chemical storage area; docking facility, if no excessive contact with waste product; explosive storage; reclaimed areas released from reclamation bonds prior to December 17, 1990; and partially/inadequately reclaimed areas or areas not released from reclamation bonds. Not covered are: 1) active metal mining facilities that are subject to the effluent limitation guidelines for the Ore Mining and Dressing Point Source Point Source Category (40 CFR Part 440). Coverage under this permit does not include adit drainage or contaminated springs or seeps at active facilities, temporarily inactive facilities, or inactive facilities. Also see permit conditions, Limitations on Coverage, *Part I.B.3.* 2) Storm water discharges associated with an industrial activity that the *Executive Secretary* has determined to be, or may reasonably be expected to be, contributing to a violation of a water quality standard, 3) Storm water discharges associated with industrial activity from inactive mining operations occurring on Federal lands where an operator cannot be identified.

☐ **H. Coal Mines and Coal Mine-Related Facilities** -- coal mining-related areas (SIC Major Group 12) if they are not subject to effluent limitations guidelines under 4 *CFR Part 434.* Not covered are: inactive mining activities occurring on Federal lands where an operator cannot be identified.

☐ **I. Oil and Gas Extraction Facilities** -- oil and gas facilities listed under Standard Industrial Classification (SIC) Major Group 13 which are required to be permitted under *UAC R317-8-3.8(2)(a)3.* These include oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm wate contaminated by contact with or that has come into contact with any overburden raw material, intermediate products, finished products, by-products or waste products loc

on the site of such operations." Industries in SIC Major Group 13 include the extraction and production of crude oil, natural gas, oil sands and shale; the production of hydrocarbon liquids and natural gas from coal; and associated oil field service, supply and repair industries. This section also covers petroleum refineries listed under SIC code 2911. Contaminated storm water discharges from petroleum refining or drilling operations that are subject to nationally established BAT or BPT guidelines found at 40 CFR 419 and 435 respectively are not included. [Note that areas eligible for coverage at petroleum refineries will be very limited because the term "contaminated runoff," as defined under *40 CFR 419.11*, includes "... runoff which comes into contact with any raw material, intermediate product, finished product, by-product or waste product located on petroleum refinery property." Areas at petroleum refineries which may be eligible for permit coverage, provided discharges from these areas are not co-mingled with "contaminated runoff," include: vehicle and equipment storage, maintenance and refueling areas. Most areas of refineries will not be eligible for coverage including: raw material, intermediate product, by-product, waste material, chemical, and material storage areas; loading and unloading areas; transmission pipelines, and, processing areas.] Not covered are: inactive oil and gas operations occurring on Federal lands where an operator cannot be identified are not covered by this permit.

☐ **J. Mineral Mining and Processing Facilities** – active and inactive mineral mining and processing facilities (generally identified by Standard Industrial Classification (SIC) Major Group 14). Not covered are: 1) facilities associated with industrial activity which are subject to an existing effluent limitation guideline (*40 CFR Part 436*), 2) inactive mineral mining activities occurring on Federal lands where an operator cannot be identified are not eligible for coverage under this permit.

☐ **K. Hazardous Waste Treatment Storage or Disposal Facilities** – facilities that treat, store, or dispose of hazardous wastes, including those that are operating under interim status or a permit under subtitle C of RCRA. [Disposal facilities that have been properly closed and capped, and have no significant materials exposed to storm water, are considered inactive and do not require permits (*UAC R317-8-3.8(6)(c)*).]

☐ **L. Landfills and Land Application Sites** – waste disposal at landfills, land application sites, and open dumps that receive or have received industrial wastes. Open dumps are solid waste disposal units that are not in compliance with Sate/Federal criteria established under RCRA Subtitle D. Not covered are: inactive landfills, land application sites, and open dumps occurring on Federal lands where an operator cannot be identified.

☐ **M. Automobile Salvage Yards** – facilities engaged in dismantling or wrecking used motor vehicles for parts recycling or resale and for scrap (SIC Code 5015).

☐ **N. Scrap Recycling and Waste Recycling Facilities** – facilities that are engaged in the processing, reclaiming and wholesale distribution of scrap and waste materials such as ferrous and nonferrous metals, paper, plastic, cardboard, glass, animal hides (these types of activities are typically identified as SIC code 5093). Facilities that are engaged in reclaiming and recycling liquid wastes such as used oil, antifreeze, mineral spirits, and industrial solvents (also identified as SIC code 5093) are also covered under this section. Separate permit requirements have been established for recycling facilities that only receive source-separated recyclable materials primarily from non-industrial and residential sources (also identified as SIC 5093) (e.g., common consumer products including paper, newspaper, glass, cardboard, plastic containers, aluminum and tin cans). This includes recycling facilities commonly referred to as material recovery facilities (MRF).

☐ **O. Steam Electric Power Generating Facilities** – steam electric power generating facilities, including coal handling areas. Non-storm water discharges subject to effluent limitations guidelines are not covered by this permit. Storm water discharges from coal pile runoff subject to numeric limitations are eligible for coverage under this permit, but are subject to the limitations established by *40 CFR 423*. Not covered are: ancillary facilities such as fleet centers, gas turbine stations, and substations that are not contiguous to a steam electric power generating facility are not covered by this permit. Heat capture co-generation facilities are not covered by this permit; however, dual fuel co-generation facilities are included.

☐ **P. Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil ıtions and Terminals, the United States Postal Service, or Railroad Transportation Facilities** – ground transportation facilities and rail transportation facilities generally identified by Standard Industrial Classification (SIC) codes 40, 41, 42, 43, and 5171), that have vehicle and equipment maintenance shops (vehicle and equipment rehabilitation, mechanical repairs, painting, fueling and lubrication) and/or equipment cleaning operations are eligible for coverage under this section. Also covered under this section are facilities found under SIC code 4221-4225 (public warehousing and storage) that do not have vehicle and equipment maintenance shops and/or equipment cleaning operations but have areas (exclusive of access roads and rail lines) where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products or industrial machinery are exposed to storm water.

☐ **Q. Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities** – water transportation facilities that have vehicle (vessel) maintenance shops and/or equipment cleaning operations. The water transportation industry includes facilities engaged in foreign or domestic transport of freight or passengers in deep sea or inland waters; marine cargo handling operations; ferry operations; towing and tugboat services; and marinas (facilities commonly identified by SIC code Major Group 44).

☐ **R. Ship or Boat Building and Repair Yards** – facilities engaged in ship building and repairing and boat building and repairing (SIC code 373).

☐ **S. Vehicle Maintenance Areas, Equipment Cleaning Areas or Airport Deicing Operations located at Air Transportation Facilities** – establishments and/or facilities including airports, air terminals, air carriers, flying fields, and establishments engaged in servicing or maintaining airports and/or aircraft (generally classified under Standard Industrial Classification (SIC) code 45) which have vehicle maintenance shops, material handling facilities, equipment cleaning operations or airport and/or aircraft deicing/anti-icing operations. For the purpose of this permit, the term "deicing" is defined as the process to remove frost, snow, or ice and "anti-icing" is the process which prevents the accumulation of frost, snow, or ice. Only those portions of the facility or establishment that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or deicing/anti-icing operations are addressed under this section.

☐ **T. Wastewater Treatment Works** – treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including lands dedicated to the disposal of sewage sludge that are located within the confines of the facility with a design flow of 1.0 MGD or more, or required to have an approved pretreatment program under *40 CFR Part 403*.

☐ **U. Food and Kindred Products Facilities** – food and kindred products processing facilities (commonly identified by Standard Industrial Classification (SIC) code 20), including: meat products; dairy products; canned, frozen and preserved fruits, vegetables, and food specialties; grain mill products; bakery products; sugar and confectionery products; fats and oils; beverages; and miscellaneous food preparations and kindred products and tobacco products manufacturing (SIC Code 21), except for storm water discharges identified under paragraph I.B.3. where industrial plant yards; material handling sites; refuse sites; sites used for application or disposal of process wastewaters; sites used for storage and maintenance of material handling equipment; sites used for residential treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; and storage areas for raw material and intermediate and finished products are exposed to storm water and areas where industrial activity has taken place in the past and significant materials remain. For the purposes of this paragraph, material handling activities include the storage, loading, and unloading, transportation, or conveyance of ny raw material, intermediate product, finished product, by-product, or waste product.

☐ *V. Textile Mills, Apparel and other Fabric Product Manufacturing Facilities -- Textile Mill Products, of and regarding facilities and establishments engaged in the preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage, the manufacturing of broad woven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn; processes involved in the dyeing and finishing of fibers, yarn fabrics, and knit apparel; the integrated manufacturing of knit apparel and other finished articles of yarn; the manufacturing of felt goods (wool), lace goods, nonwoven fabrics; miscellaneous textiles, and other apparel products (generally described by SIC codes 22 and 23). This section also covers facilities engaged in manufacturing finished leather and artificial leather products (SIC 31, except 3111).*

☐ *W. Furniture and Fixture Manufacturing Facilities -- facilities involved in the manufacturing of: wood kitchen cabinets (generally described by SIC code 2434); household furniture (generally described by SIC code 251); office furniture (generally described by SIC code 252); public buildings and related furniture (generally described by SIC code 253); partitions, shelving, lockers, and office and store fixtures (generally described by SIC code 254); and miscellaneous furniture and fixtures (generally described by SIC code 259).*

☐ *X. Printing and Publishing Facilities -- newspaper, periodical, and book publishing or publishing and printing (SIC Codes 2711-2731); book printing (SIC Code 2732); miscellaneous publishing (SIC Code 2741); commercial printing, lithographic (SIC Code 2752); commercial printing, gravure (SIC Code 2754); commercial printing, not elsewhere classified (SIC Code 2759); manifold business forms, greeting cards, bankbooks, looseleaf binders and devices, bookbinding and related work, and typesetting (SIC Codes 2761-2791); and, plate making and related services (SIC Code 2796).*

☐ *Y. Rubber and Miscellaneous Plastic Product Manufacturing Facilities -- rubber and miscellaneous plastic products manufacturing facilities (SIC major group 30) and miscellaneous manufacturing industries, except jewelry, silverware, and plated ware (SIC major group 39, except 391).*

☐ *Z. Leather Tanning and Finishing Facilities -- leather tanning, currying and finishing (commonly identified by Standard Industrial Classification (SIC) code 3111). Discharges from facilities that make fertilizer solely from leather scraps and leather dust are also covered under this section.*

☐ *AA. Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware -- fabricated metals industry listed below, except for electrical related industries: fabricated metal products, except machinery and transportation equipment, SIC 34, and jewelry, silverware, and plated ware (SIC Code 391).*

☐ *AB. Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery -- transportation equipment, industrial or commercial machinery manufacturing facilities (commonly described by SIC Major Group 35 except SIC 357, and SIC Major Group 37, except SIC 373). Common activities include: industrial plant yards; material handling sites; refuse sites; sites used for application or disposal of process wastewaters; sites used for storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas for raw material and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.*

☐ *AC. Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods -- facilities that manufacture: electronic and other electrical equipment and components, except computer equipment (SIC major group 36); measuring, analyzing, and controlling instruments; photographic, medical and optical goods; watches and clocks (SIC major group 38) and computer and office equipment (SIC code 357).*

☐ *AD. Non-Classified Facilities -- facilities that meet the definition of storm water associated with industrial activity (UAC R317-8-3.8(6)(c) & (d), except for construction activities as defined under UAC R317-8-3.8(6)(d)10.) but, can not be classified in another industria* sector (i.e., sectors A to AC), and are not excluded from permit coverage elsewhere in this permit; or, the *Executive Secretary* has designated as needing a storm water permit under *UAC R317-8-3.8(1)(a)5.* Should conditions at a facility covered by this section change and industrial activities in another section(s) contained in sectors A to AC apply, the facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other section(s) in addition to those contained in this section. The monitoring and pollution prevention plan terms and conditions of this permit are additive for industrial activities being conducted at the same industrial facility (co-located industrial activities). The operator of the facility shall determine which monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

V. CERTIFICATION: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and comple I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: KEITH THOMPSON *Date:*

Signature: *Amount of Permit Fee Enclosed:* $ 200.00

APPENDIX D

GUIDELINES ASSOCIATED WITH STORM WATER DISCHARGES

Guidelines Associated with Storm Water Discharge from Construction Activities

Prevent a mixture of non storm water discharge with construction storm water discharge.

All discharges under this permit must be made up entirely of storm water, unless the mixed discharge meets UPDES standards which include TDS, TSS, pH, Total Iron. Water discharges may not contain detergents, oils, greases, toxic or hazardous materials, or solvents.

If storm water containing any of the following components is released from the site, the plant manager or foreman must be **notified immediately**.

Detergents
Oils
Greases
Toxic or hazardous materials, or
Solvents
Concrete
Asphalt

The plant manager must immediately notify the Division of Water Quality of the release, if the release is **in excess of established reportable quantities**.
(801) 538-6146 OR (801) 536-4123 (24 Hour Number)

Erosion and Sediment Controls

Erosion and Sediment Controls must be constructed and maintained during construction activities.
Sediment will be removed at a sufficient frequency to minimize offsite impacts.
Sediment will be removed from berms and ponds when the designed capacity has been reduced by 50%.

Stabilization Practices

Preserve existing vegetation.
Incorporate seeding, mulching, geotextiles, and other appropriate measures to stabilize disturbed soils.
Divert flows from exposed soils with silt fences, earth dikes, swales, sediment traps or basins.

Inspections

Qualified personnel will inspect disturbed areas of the construction site at least once every fourteen days (14), before anticipated storm events and within 24 hours of a storm event that is 0.5 inches or greater. Unless site is in an **arid period**, then inspections shall be conducted at least **once every month**.

Inspections shall include:

- Drainage Systems
- Sediment Control Measures
- Erosion
- Offsite Sediment Tracking by Vehicles

Inspection Reports will include:

Inspectors Name, Date of Inspection, Major Observations, Actions Taken to Repair Sediment Structures, Incidents of Non Compliance

Reports will be retained for three years (3) after the completion of the construction project.

APPENDIX E

NOT-NOTICE OF TERMINATION FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY

STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER QUALITY
288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870

NOT

Notice of Termination (NOT) for Storm Water Discharges Associated with Construction Activity Under the UPDES General Permit No. UTR100000. SEE REVERSE FOR INSTRUCTIONS

Submission of this Notice of Termination constitutes notice that the operator identified in Section II of this form is no longer authorized to discharge storm water associated with industrial activity under the UPDES program. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

I. Permit Information

UPDES Storm Water General Permit Number: UTR101090

Check Here if You are No Longer the Operator of the Facility: X Check Here if the Storm Water Discharge is Being Terminated:

II. Facility Operator Information

Name: TERRA SYSTEMS INC Phone: 435-637-2470

Address: P. O. BOX 1673

City: PRICE State: UT Zip: 84501

III. Facility Site/Location Information

Name: TERRA SYSTEMS INC

Address: 1865 WEST RIDGE ROAD County: CARBON

City: WELLINGTON State: UT Zip: 84542

Latitude: 39 31 27 Longitude: 110 45 58

IV. Certification: I certify under penalty of law that either: a) all storm water discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or b) I am no longer an operator at the construction site and a new operator has assumed operational control for those portions of the construction site where I previously had operational control. I understand that by submitting this notice of termination, I am no longer authorized to discharge storm water associated with construction activity under this general permit, and that discharging pollutants in storm water associated with construction activity to waters of the State is unlawful under the State of Utah Water Quality Act where the discharge is not authorized by a UPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Water Quality Act.

Date: 12/30/04

Print Name: CLAYTON TIMOTHY

Signature: FOR TERRA SYSTEMS, INC.

COVOL

ENGINEERED FUELS, LC

January 16, 2006

Utah Department of Environmental Quality
Division of Water Quality
PO Box 144870
Salt Lake City, Utah 84114-4870

RE: Storm Water Discharge Monitoring Reports for Covol Engineered Fuels, LC
UPDES MSGP Permit No. UTR000685

To Whom It May Concern:

The above referenced permit for the Covol Engineered Fuels, LC facility in Wellington, Utah requires the following:

- Submittal of a Storm water Discharge Monitoring Report (SWDMR) for coal pile runoff by January 28, 2006
- Submittal of a SWDMR for quarterly discharge monitoring during the second and fourth year of the permit by March 31.

During calendar year 2005, the CEF facility was under construction and construction is presently continuing, with completion scheduled in the first or second quarter of this year. As such, this facility is still covered by the UPDES General Construction Storm Water Permit and no SWDMR is required.

Since the CEF facility is still covered by UPDES Construction General Permit No. UTR101180, no industrial storm water discharge samples were taken during the fourth year of the MSGP (2005)[1]. There is a coal pile onsite, but because the facility is still under construction, the coal pile runoff sampling requirements from the MSGP do not yet apply. Further, there was no storm water runoff from this pile during 2005. Therefore, the SWDMR for coal pile runoff is not required and is not being submitted (it would be void of substantive information).

In 2006, once construction has been completed and industrial activity commenced at the facility, the requisite coal pile runoff monitoring requirements will be fulfilled if there is any discharge. The corresponding SWDMR will be submitted by January 28, 2007. If there are any questions or concerns, please call Steve Van Ootegham, Regional Environmental Manager, at (801) 984-3777.

Sincerely,

Keith Thompson
Vice President, Covol Engineered Fuels, LC

cc: Mike Gipson/CEF
Steve Van Ootegham/Headwaters Incorporated

[1] Permit No.UTR101180 is valid through March 3, 2006.

0653 S. River Front Parkway,
Suite 300
South Jordan, UT 84095
P: 801.984.3790
F: 801.984.9460

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

COVOL ENGINEERED FUELS, LC
1865 WEST RIDGE ROAD
WELLINGTON, UT 84542

ORIGINAL DATE OF PLAN/P.E. CERTIFICATION: December 2005

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1. FACILITY OWNER AND OPERATOR

A. Corporate Headquarters, Address, and Telephone:

Headwaters Incorporated
10653 So. River Front Parkway, Suite 300
Salt Lake City, Utah 84095
(801) 984-9400

B. Facility Operator, Address, and Telephone:

Covol Engineered Fuels, LC
1865 West Ridge Road
Wellington, UT 84542
Telephone: (435) 613-1631

2. FACILITY CONTACT(S):

Name	Title	Telephone
Mike Gipson	Plant Manager	(435) 613-1631

3. FACILITY CONFORMANCE [112.7(a)]:

A. Conformance [112.7 (a)(1)]

The facility intends to comply with the requirements of this Section. Details regarding the compliance with the requirements of Section 112.7 (a) are contained in this SPCC Plan.

The facility is new as of November 2005 and has not experienced any leaks or spill events. Should the facility experience spills they will be documented, reported according to applicable regulations and discussed in future updates of this plan.

B. Deviation from Requirements [112.7 (a)(2)]

The Facility does not plan to deviate from the requirements of Section 112.7 (a); therefore no variance is being requested.

C. Facility Description [112.7 (a)(3)]

Covol Engineered Fuels, LC operates a coal cleaning facility at 1865 West Ridge Road, Wellington, Utah. The facility produces coal-related products for commercial sale.

The facility has an area for feedstock handling and storage, an area containing coal cleaning equipment and an area for finished product storage. The facility is fenced with locked gate access.

In order to facilitate processing operations an aboveground storage tank within a secondary containment structure has been installed at a centralized location. Equipment maintenance needs will be taken care of offsite. Used oil will not be accumulated on site. There are no

underground oil storage tanks (UST) at this facility. The overall facility layout is shown in Figure 3-1, Facility Site Map, including the petroleum product storage area.

Facility Product Storage Inventory (Typical Volumes) [112.7(a)(3)(i)]:

ABOVEGROUND STORAGE

Tank ID No.	Contents	Volume (gallons)
Tank No. 1	Diesel Fuel	8,500
Drums/Containers (number varies)	Oil and Grease	5 to 55 per drum/container

Total Fixed Storage Volume:	8,500 gallons
Variable Storage Volume:	Up to 500 gallons
Total Storage Volume:	9,000 gallons

Discharge Prevention Measures [112.7(a)(3)(ii)]

A secondary containment has been constructed for the single diesel storage tank and another for the storage of various sized drums and containers, to prevent any spilled petroleum products in storage from reaching water of the United States. In addition, berms, culverts, ditches and detention ponds constructed to control stormwater runoff would also prevent oil from leaving the site. See Section 13 for loading and unloading procedures.

Discharge and Drainage Controls [112.7(a)(3)(iii)]

The nearest water body is the Price River, approximately two miles east of the Facility.

Berms, drainage ditches, and culverts direct operational area drainage into detention ponds. These detention ponds have the potential to receive and hold operational drainage and an unexpected release of oil from equipment or the oil storage areas. Figure 3-1 shows the facility layout and surface drainage direction of flow.

The Facility has been designed whereby drainage from undisturbed watershed areas is diverted away from the operational area with the use of berms, culverts, and diversion ditches.

Countermeasures [112.7(a)(3)(iv)]

Ideally, spill prevention measures would prevent a spill from occurring at the facility. However, a spill may still occur. Using the procedures listed below minor spills that are confined to small areas will be cleaned up as part of the ordinary operating procedure

Procedures to follow in the event of a spill:

- Terminate source of flow - plugging and/or closing valve(s).
- Confine spill - berming, and trenching.
- Prevent from entering waterway.
- Notify Plant Manager or Plant Supervisor.
- Clean up - Absorb liquid with absorptive material before removing contaminated soil and other media.

- Disposal - Dispose of absorbent material and contaminated media only after conferring with the Plant Manager.
- Report – Complete the facility Spill Reporting Form (Appendix E), report clean-up activities identify cause and determine remedial action. Evaluate whether or not the spill must be reported to EPA Region 8 (for two or more spills in excess of 42 gallons each within a 12 month period or a single spill in excess of 1,000 gallons).

Direct Countermeasures

Direct countermeasures outlined below have been designed to mitigate the possibility of oil reaching a waterway. Employees will undertake these countermeasures immediately and especially when there is danger of oil entering a waterway or in case of a spill of significant size. Countermeasures include the necessary action to terminate the source of the flow of oil.

Dig a trench or dike, build a berm, use appropriate oil-absorbent materials or do whatever else is necessary to confine the area or to stop oil from entering a waterway. After this is accomplished, immediately initiate the reporting procedure. After the countermeasures and reporting functions have been accomplished, cleanup will begin as detailed below:

Who to Contact for Cleanup

In the case of small spill less than 10 gallons and confined to the facility area, the cleanup operation will be conducted by Plant employees under the direction of the Plant Manager.

In the case of a spill over 10 gallons, the Plant Manager and the Regional Environmental Manager must be notified. If the Plant Manager decides outside help is required the Plant Manager can contact one of the following contactors.

Nielson Construction
750 East Ridge Road
Price, Utah 84501
(435) 636-8514

Rocky Mountain Excavation
6065 East North Coal Creek Road
Wellington, Utah 84542
(435) 637-9322

Cleanup Materials and Equipment

Spill control equipment at the facility includes absorbent pads and booms, granular absorbent material, shovels, and various earth moving equipment. A spill kit containing absorbent materials will be placed adjacent to the containment area.

Clean-up Procedures

For a spill on gravel or soil, it may be possible to absorb some of the liquid with absorptive material before removing the gravel or soil. All contaminated gravel or soil must be removed and discarded properly.

A spill on solid surfaces may be collected with absorptive materials and then cleaned thoroughly with rags. Sufficient quantities of absorbent material will be maintained adjacent to the containment area and other cleanup equipment will be available at the facility to accomplish cleanup.

Disposal of Contaminated Materials [112.7(a)(3)(v)]

When cleaning up diesel or oil, all spent cleanup material such as rags, absorbents, blankets, booms, and etc., must be disposed of in accordance with company's approved procedures.

Contact List and Phone Numbers [112.7(a)(3)(vi)]

When a petroleum spill in excess of 10 gallons is detected the following company personnel will be notified:

- Plant Manager, (435) 613-1631
- Plant Supervisor, (435) 613-1631
- Steven Van Ootegham, Regional Environmental Manager, (801) 984-3777

Reportable Spill Under 110 or 112

According to SPCC rule Section 112.4 (a) facilities that store, transfer, use or consume oil and oil productions (112.1(b) are accountable to report spills or releases of oil that enters into or upon the navigable water of the United States or adjoining shorelines in harmful quantities.

A spill becomes reportable to the appropriate regulatory agency whenever a SPCC regulated facility has a:

(1) discharge of more than 1,000 U.S. gallons of oil in a single discharge as described in 112.1(b)

or

(2) discharge of more than 42 gallons of oil as described in 112.1(b) in each of 2 discharges within any 12-month period.

The following agencies will be verbally notified in the event of a spill of oil that may be harmful as defined in 40 CFR 110 and 112. Verbal notification to the agencies must be made within 24 hours of a legally reportable spill. In Utah, legally reportable spills are reported to:

U.S. Environmental Protection Agency
Denver Place, Suite 1300
999 18th Street
Denver, CO 80202-2413
Permits and Technical Support Branch
(800) 227-8917

Utah Division of Environmental Quality
Division of Environmental Response and Remediation
168 North 1950 West
P.O. Box 144840
Salt Lake City, UT 84114-4840
(801) 536-4123

These agencies may require follow-up written reports depending on the magnitude and quantity of the spill. The Regional Environmental Manager will be responsible for coordinating agency(s) notification and correspondence with regulatory agency(s) following an incident.

The National Response Center requires notification if a discharge of oil causes a discoloration or "sheen" on the surface of water, violates water quality standards or causes a sludge or emulsion to be deposited beneath the surface or on the adjoining shorelines.

National Response Center (800) 424-8802 or (202)267-2675

A spill is defined as a discharge of oil in harmful quantities into navigable water of the United States or adjoining shorelines. (40CFR 112.2) Harmful Quantity means any discharge of oil into or upon waters of the United States that may be harmful to the public health or welfare of the United State, including discharges of oil that violate applicable water quality standards or cause a film or sheen upon or discoloration of the surface of the water or adjoining shoreline or cause sludges or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. (40 CFR 110.3).

Not Reportable Under 110 or 112

Small spills not reportable under 40 CFR 110 and 112 will be cleaned up as noted above.

D. Reporting Procedure [112.7 (a)(4)]

A spill becomes reportable to the appropriate regulatory agency whenever a SPCC regulated facility has a:

(1) discharge of more than 1,000 U.S. gallons of oil in a single discharge as described in 112.1(b)

or

(2) discharge of more than 42 gallons of oil as described in 112.1(b) in each of 2 discharges within any 12-month period.

When reporting discharges, the following information should be provided to the agencies:

The Company name, address and phone number.
Responsible company/person, including their address and telephone number.
Date, time, and type of incident (e.g., discharge or fire).
Quantity and type of material discharged.

Address of facility.
Waterways affected, if any, including amount of hazardous substance reaching water.
Description of circumstances causing discharge.
Description of methods used to stop and contain spill.
Describe actions used to remove and mitigate the effects of the discharge.
Description and estimate of any third party damages.
If applicable, any injuries associated with spill.
Procedures, methods, and precautions instituted to prevent a recurrence.
And the estimated quantity and disposition of recovered materials, if any.
Other pertinent information specific to the discharge.

A copy of the reporting form is provided in Appendix E.

E. Response Plan [112.7 (a)(5)]

The procedures to be used when responding to a spill are contained in Section 3 and Appendix E.

4. POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL [112.7 (b)]

The potential for a spill or releases to leave the property is slight due to the redundant controls and the size of the facility relative to the volumes stored on site and the porous nature of the soils at the site. The initial control for Tank #1 is the tank's secondary containment. The initial control for the various oil containers stored at the facility is the secondary containment. Backup containment exists in the berms, diversion/drainage ditches, and detention ponds at the facility. The location and layout of facility 's prevention measures are shown on Figure 3-1.

POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES AND CONTROL [112.7(b)]

Source	#1 Diesel Tank	#2 Various Containers (5 to 55 gallons)
Type of Failure	Rupture, Hose, Valve Failure	Rupture/puncture
Volume (Gallons)	8,500	55
Rate (Gallons/hour)	Variable – event dependent	Variable – event dependent
Direction of Flow	Containment or Southwest	Containment or Southwest
Net Secondary Containment (Gallons)	9,084	67.3

5. DRAINAGE CONTROL DIVERSION STRUCTURES AND CONTAINMENT [112.7 (c)]

The diesel storage tank and other oil containers are enclosed within a steel secondary containment structure. The containment structures are capable of holding the volume of the largest oil container within each structure, plus the 25-year, 24-hour storm precipitation event for uncovered containment areas (approximately 2.2 inches of precipitation). The containment structures will have drains with locking valves.

6. DRAINAGE CONTROL [112.8(b)]

A. Facility Drainage Systems and Equipment

The initial control for the diesel tank is it's secondary containment. Backup containment exists in the berms, diversion/drainage ditches, and detention ponds for the facilities. The tank containment has no connections to a sewer system.

To maintain containment capacity, when no oil sheen is present, the operator will manually drain or pump water from the secondary containment to one of the detention ponds. The required information associated with each drainage event will be recorded. When oil sheen is present the content of the containment structure will be collected by a licensed recycling or disposal company.

Surface water drainage reports to one of the two detention ponds, which provides control and treatment prior to release from the site. When oil is present, it will be collected with absorbent materials (pads, booms, etc.) or skimmed off for disposal or recycling at a licensed facility.

B. Final Discharge of Drainage

Prior to discharge, runoff from the facility reports to one of the detention ponds. The ponds are equipped with a spillway, which acts as an outlet control structure to provide detention time prior to final discharge. Drainage features are shown on Figure 3-1.

The detention ponds are checked periodically during normal operations and during storm events. If present, oil is removed with absorbent booms or pads or skimmed off for disposal or recycling at a licensed facility.

7. BULK STORAGE TANKS AND SECONDARY CONTAINMENT [112.8(c)]

A. Tank Compatibility

The storage tank is constructed of carbon steel with painted exterior and is compatible with the material stored inside. The tank conforms to all applicable building and fire codes.

B. Containment Volume for Storage Tanks

The containment structure is capable of containing the volume in the largest tank/container within the containment area plus the 25-year, 24-hour storm precipitation event. The net volume for secondary containment structures is shown in Table 4-1. Calculation sheets for the net volume of the secondary containment are contained in Appendix A.

Secondary containment protection for service trucks, equipment, fueling facilities, loading/unloading areas are provided by berms, drainage/diversion ditches, and detention ponds.

C. Containment Area Inspection and Drainage of Stormwater

When required prior to manually draining or pumping accumulated water from the secondary containment, the operator will perform a careful visual examination of accumulated water for oil or oil sheen. Further requirements for draining of secondary containment areas by the operators are contained on the Drainage Discharge Report Form in Appendix B. Record keeping requirements for these forms are discussed in Section 6, Part E.

The ponds are all constructed and operated as described above. The ponds are inspected periodically and during storm events. If oil is present, it is removed with the use of absorbent materials (pads, booms, etc.) or skimmed off for off-site disposal.

D. Corrosion Protection of Buried Metallic Storage Tanks

Not applicable - No underground storage tanks or buried oil conveyance piping.

E. Corrosion Protection of Partially Buried Metallic Storage Tanks

Not applicable - No partially buried storage tanks.

F. Aboveground Tank Periodic Inspection

Users/operators visually observe tanks, supports, and foundations for signs of deterioration and/or leaks which might cause a release or accumulation of hydrocarbons within the tank's secondary containment. Concerns are reported to the Plant Manager or Plant Supervisor. Visible leaks from tank seams, rivets, or bolts that may lead to accumulation of oil within the secondary containment are repaired.

Fifty-five gallon drums and five-gallon cans on-site are observed for excessive external corrosion on a regular basis. Formal inspection of drums includes moving the drum so that all exterior surfaces can be observed. Any drum with rust blisters or flakes of rust is replaced.

Fixed storage tanks and secondary containment structures are inspected annually following the Facility Inspection Checklist contained in Appendix C. Record keeping requirements for these forms are discussed in Section 10.

G. Control of Leakage Through Internal Heating Coils

Not applicable.

H. Good Engineering Practices

Each container to be filled is inspected manually to ensure sufficient volume prior to the start of the filling process. The supplier and/or facility personnel will monitor the tank and gauges during the entire filling process of bulk storage containers to ensure it is not over filled (40CFR112.8(c)(8)(iv).

I. Observation of Disposal Facilities for Effluent Discharge

Secondary containment structures are routinely observed during operation and are inspected annually. Any oil present is removed prior to manual draining or pumping by using absorbent materials (pads, booms, etc.) or skimmed for off-site disposal.

System failure will require shut down by supplier or facility operator until the problem can be corrected. A release during loading/unloading or from a service truck will drains to the detention ponds where it will be collected and removed as discussed in Section 6, Part A.

J. Visible Oil Leak Corrections from Tank Seams and Gaskets

Visible oil leaks from tank seams, rivets, or bolts that may lead to accumulation of oil within the secondary containment is reported to the Plant Manager of Plant Supervisor and repaired by plant personnel. If repairs cannot be made immediately, temporary repairs are performed until permanent repairs are made. Plant personnel will clean up oil released following completion of the repairs.

K. Appropriate Positions of Mobile Oil Storage Tanks

Not Applicable.

8. FACILITY TRANSFER OPERATIONS [112.8(d)]

Not Applicable. No buried or aboveground pipeline.

A. Buried Piping Installation Protection and Examination

Not Applicable.

B. Not-In-Service and Standby Service Terminal Connections

Loading and unloading terminal connections to storage tanks are capped when not in use. There are no out of service lines at this facility.

C. Pipe Supports Design

Steel pipe supports, where required, are anchored to the localized secondary containment floors and walls. Pipelines are short and contained within the containment structure. This eliminates the need for expansion loops.

D. Aboveground Valve and Pipeline Examination

Users/operators visually observe piping and valves for signs of deterioration and/or leaks when in use. Any sign of deterioration or leakage that might cause a release or accumulation of oil inside a containment area is reported to the Plant Manager or Plant Supervisor. Visible leaks at flanges, valves, or fittings, which may lead to accumulation of oil in the secondary containment, are promptly repaired.

Valves are inspected annually by following the Facility Inspection Checklist contained in Appendix C. Record keeping requirements for these forms are discussed in Section 10.

E. Vehicle Traffic

The tank is aboveground, anchored, and contained within a secondary containment structure. The tank location and containment assist in protecting the tank from vehicular traffic.

9. PRACTICALITY OF INSTALLATION OF REQUIRED STRUCTURES [112.7(d)]

Secondary containment is practical and currently in use for all storage tanks and oil containers at this facility.

10. INSPECTIONS, TESTS AND RECORDS [112.7(e)]

In addition to annual inspections, the storage tanks and corresponding secondary containment systems containing petroleum product are inspected by an engineer every five years in conjunction with the review and re-certification of this SPCC plan. Inspection of the loading/unloading facilities and security features are also included. These inspections are documented and signed by the inspector on the Facility Inspection Checklist. Blank checklists are contained in Appendix C and completed checklists are maintained for three years in Appendix F.

11. PERSONNEL TRAINING AND SPILL PREVENTION PROCEDURES [112.7(f)]

A. Personnel instructions [112.7(f)(1)]

All new employees are trained in spill prevention and are made familiar with the SPCC Plan as part of their initial training. Regular refresher safety training also addresses spill prevention and response. Training records for personnel are maintained at the facility.

B. Designated Person Accountable for Spill Prevention [112.7(f)(2)]

The Plant Manager is the designated responsible person accountable for spill prevention.

C. Spill Prevention Briefings [112.7(f)(3)]

Spill prevention issues are regular topics at safety meetings, thus fulfilling the requirement of annual spill prevention briefings. In the event of a spill, spill prevention policies would be reviewed following the spill response. The spill response process will be reviewed and suggestions for improvement discussed.

12. SITE SECURITY [112.7(g)]

A. Fencing [112.7(g)(1)]

The Facility is fenced and gated. The gate to the facility remains open during operating hours and shut and locked when the facility is not in operation.

B. Flow Valves Locked [112.7(g)(2)]

All drain valves permitting an outward flow of fuel from storage tanks and local secondary containment drains have on-off type valves that remain securely locked in the closed position when not in use.

C. Starter Controls Locked [112.7(g)(3)]

The facility has a fixed tank storage area with a fueling station for equipment. The fueling station has manual locks to control fueling.

D. Pipeline Loading/Unloading Connections Securely Capped [112.7(g)(4)]

All loading and unloading connections on storage tanks are capped with threaded or cam type caps. These caps are removed only during filling or draining operations and are replaced at the end of the operation.

E. Lighting Adequate to Detect Spills [112.7(g)(5)]

The facility has yard lights sufficient to illuminate storage, maintenance, and fueling areas. These yard lights are sufficient to observe any release, vandalism, or equipment problems during nighttime operations.

13. FACILITY LOADING/UNLOADING OPERATIONS [112.7(h)]

Loading/unloading procedures for supplier tank trucks meet or exceed the minimum requirements and regulations of the Department of Transportation as set forth in 40 CFR 112.7. No rail tank cars are used at this facility.

Though the loading/unloading area does not have localized secondary containment the area is provided secondary containment by the berms, drainage/diversion ditches, and detention ponds that protect the operational facility as previously discussed in Sections 3 and 6.

A. Secondary Containment for Vehicles Adequate [112.7(h)(1)]

The tank truck loading/unloading areas are unpaved. These areas do not have localized secondary containment features. However, all areas drain to a detention pond. This pond has sufficient volume to store the entire contents of the largest single compartment of a tanker truck servicing the facility (approximately 10,000 gallons) or piece of equipment being fueled (approximately 175 gallons) except in the event of a 25-year storm event. In the event of a 25-year 24-hour storm, absorbent booms will be deployed at the pond overflow spillway to provide capture and additional storage for oil products.

B. Warning System for Vehicles [112.7(h)(2)]

Warning and instructions for loading/unloading are posted on all tank truck, including instructions for disconnecting all flexible transfer lines. Supplier personnel are present during all loading/unloading of storage tanks. Operating personnel are present during all fueling

operations for equipment. These personnel assure all lines are properly connected and disconnected as necessary.

C. Vehicles Examined for Lowermost Drainage Outlets Before Leaving [112.7(h)(3)]

Prior to the departure of any tank truck from the loading/unloading areas, the lower most drain and all outlets of the tank truck will be checked for leakage. If necessary, valves and fittings will be tightened, adjusted, or replaced to prevent leakage during transit. Supplier personnel present during the loading/unloading operation will ensure these procedures are followed.

14. BRITTLE FRACTURE EVALUATION [112.7(i)]

If a tank at the facility is repaired, modified, experiences a change in service or fails, the tank will be evaluated for the risk of brittle fracture or other means of failure. If a risk of failure exists appropriate action will be taken.

15. ADDITIONAL REQUIREMENTS FROM STATE RULES AND REGULATIONS [112.7(j)]

The State of Utah does not have any additional regulations related to oil spill prevention beyond that which are currently found in the Federal Regulations. This SPCC Plan has been prepared based on the Federal Regulations and as such it addresses all pertinent Utah Regulations.

Professional Engineer Certification:

I hereby certify:

I am familiar with the requirements of 40 CFR Part 112:

- I have visited and examined the facility;
- The plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of part 40 CFR 112;
- Procedures for required inspections and testing have been established; and the plan is adequate for the facility.

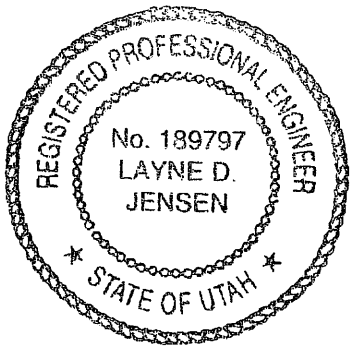
Layne Jensen
Printed Name of Registered Professional Engineer

Layne Jensen
Signature of Registered Professional Engineer

12-16-05
Date

189797
Registration Number

(Seal)



SPILL PREVENTION CONTROL AND COUNTERMEASURE COMPLIANCE PLAN REVIEW RECORD

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, Covol Engineered Fuels, LC will amend the SPCC Plan within six months of the review if the plan is ineffective. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable water of the United States or adjoining shorelines.

Review Dates	**Signature**
1. No later than: December 2010*	_____
2. No later than: December 2015*	_____
3. No later than: December 2020*	_____
4. No later than: December 2025*	_____

- SPCC Plan reviewed, amended and certified by a Registered Professional Engineer per 40 CFR112.3 (d).

CERTIFICATION

Facility:

Covol Engineered Fuels, LC
1865 West Ridge Road
Wellington, UT 84542
Telephone: (435) 613-1631

Owner:

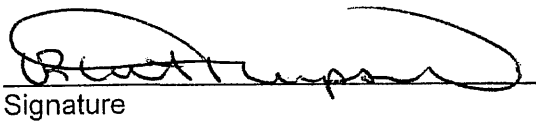
Headwaters Incorporated
10653 So. River Front Parkway
South Jordan, UT 84095
Telephone: (801) 984-9400

Management Approval:

This Spill Prevention Control and Countermeasure Plan (SPCC) was prepared to satisfy the requirements of 40 CFR Part 112. I approve of this plan and have the authority to commit the necessary resources to fully implement this Plan, which will be put into practice as described. Covol Engineered Fuels, LC is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating, and implementation of this Spill Prevention Control and Countermeasure Plan.

R. Keith Thompson
Printed Name

Vice President
Title


Signature

19 Dec 05
Date

FIGURES

APPENDIX A

SECONDARY CONTAINMENT VOLUME CALCULATIONS

TANK #1
SECONDARY CONTAINMENT CALCULATIONS

The tank is mounted on skids and set inside the secondary containment.

Tank Dimensions: Length = 25 feet 8.5 inches
Diameter = 7 feet 6 inches
Tank Volume: 8,500 gallons = 1136.3 cubic feet

The secondary containment for this tank is a pre-fabricated rectangular steel tank. The top of the tank is open allowing storm water to accumulate. A 2" gate valve can be used to drain rain water from the secondary containment.

Interior Secondary Containment Dimensions: Length = 35'-0"
Width = 10'-0"
Height = 3'-8" feet

Total Secondary Containment Volume = 35' x 10' x 3.67' = 1280.5 cubic feet

Items Reducing Secondary Containment Capacity

Tank Skid and Support Volume:

The tank is mounted on two 6" channels 31' long with 4" channel laterally every 5' with a length of 2.5'. A 2.5' long section of 6" channel is also on both ends of the skids.

Area of 6" channel = 0.0266 square feet
Area of 4" channel = 0.0148 square feet
Length of 6" channel = (2)31' + (2)2.5' = 67'
Length of 4" channel = (5)2.5' = 12.5'
Volume of skid = 67'*0.0266 ft^2 + 12.5' * 0.0148 ft^2 = 1.97 cubic feet

Rainfall Volume: 25-year 24-hour storm event = 2.2 inches

2.2"/(12 inches/ft) x 35' x 10' = 64.17 cubic feet

Net Secondary Containment

Net Secondary Containment = 1280.5 – 1.97 – 64.17 = 1214.36 cubic feet = 9084 gal.

9,084 gal. > 8,500 gal.

Excess Secondary Containment = 1214.36 ft^3 – 1136.30 ft^3 = 78.06 ft^3 = 584 gal.

Therefore, the available secondary containment volume can contain the entire contents of the tank and the stormwater from a 25-year 24-hour storm event of 2.2 inches.

DRUM STORAGE AREA
SECONDARY CONTAIMENT CALCULATIONS

The Drum Storage Area may hold up to 500 gallons in a variety of 55-gallon drums or smaller containers. The minimum dimensions of the secondary containment will be calculated based on the assumption that up to (10) 55-gallon drums will be stored within the secondary containment.

Maximum Spill Volume = 55 gallons = 7.4 cubic feet

Assume 6.25 square feet of storage space needed for each 24-inch diameter drum.

Total area needed = 10 x 6.25 square feet = 62.5 square feet

Containment Dimensions: 7.5 feet x 8.5 feet x 7 inches

Containment volume = 7.5' x 8.5' x 0.583' = 37.2 cubic feet

Rainfall volume = 2.2"/(12 inches/feet) x 7.5 x 8.5 = 11.7 cubic feet

Area of drum = (3.14159)(1 ft)^2 = 3.14159 square feet

Drum volume below top of containment = (9 drums)(3.14 ft^2)(0.583') = 16.5 cubic feet

Note: 9 drums are used in this calculation because it is assumed that one of the 10 drums has failed and is the source of the spilled oil.

Drum volume = 55 gallons = 7.4 cubic feet

Total containment required = 7.4 ft^3 + 16.5 ft^3 + 11.7 ft^3 = 35.6 cubic feet

37.2 cubic feet > 35.6 cubic feet

Net Secondary Containment = 37.2 ft^3 -16.5 ft^3 – 11.7 ft^3 = 9.0 cubic feet
= 67.3 gallons

Therefore, adequate secondary containment capacity exists to hold the 25-year 24-hour storm event and the spill of a 55 gallon drums while the maximum number of barrels are being stored in the containment structure.

CONTAINMENT CALCULATIONS FOR POTENTIAL SPILL DURING LOADING/UNLOADING

The largest tanker truck to be used to deliver fuel to the site has a capacity of 10,000 gallons (1,337 cubic feet). As shown on figure 3-1 the site drains to one of two sediment ponds depending on location.

SW Pond Capacity = 31,000 cubic feet
SE Pond Capacity = 52,000 cubic feet

Either of the above ponds have the capacity to easily contain the maximum spill from loading/unloading operations.

APPENDIX B

DRAINAGE DISCHARGE REPORT FORM

DRAINAGE DISCHARGE REPORT FORM

Operator Name:
Area Designation:
Drained: Yes ____ No ____ Pumped: Yes ____ No ____
Date: _____ Time: _____
Quantity of Water Discharged (Gallons): _____ Appearance of Water at Time of Pumping or Discharge:
Signature of Operator:

APPENDIX C

FACILITY INSPECTION CHECKLIST

FACILITY INSPECTION CHECKLIST

Date: _____ Time: _____

Inspector: _____

Drainage – Ponds/Ditches

____ Oil sheen on water surface or runoff
____ Erosion or leaking embankment/slopes
____ Visible oil sheen in containment area
____ Do containment areas require pumping or draining

Security

____ Fence and gates intact
____ Gate lock(s) in working order
____ Facility lighting working
____ Pump starter controls locked when not in use

Storage Tank(s)

____ Tank checked for signs of leakage
____ Tank condition good (no rusting, corrosion, pitting)
____ Bolts, rivets, or seams damaged
____ Tank foundation intact
____ Gauges working properly
____ Vents not obstructed
____ Containment walls are intact with no visible gaps
____ Valves, flanges & gaskets leak-free

Loading/Unloading Area

____ Standing water in area
____ Out-of-service pipes/hoses capped
____ Signs posted (Warning, Diesel, etc.)
____ Connections are capped or blank-flanged
____ Leaks in or damage to hoses
____ Leaks at valves, flanged, fittings

Remarks/Recommendations:

_____

_____

_____

_____

_____

_____

R = Repair or Adjustment Required

APPENDIX D

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME & ADDRESS: Covol Engineered Fuels, LC – Ridge Road Facility
1865 West Ridge Road, Wellington, Utah 84542

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   Yes _____ **No X**

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
   Yes _____ **No X**

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III to this Appendix or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (see Appendix E to this part, Section 13, for availability) and the applicable Area Contingency Plan.
   Yes _____ **No X**

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this Appendix or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?
   Yes _____ **No X**

5 Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years?
   Yes _____ **No X**

[1] If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2] For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Name (please type or print)	Signature
Title	Date

from 40 CFR 112 Appendix C, Attachment C-11

APPENDIX E

SPILL COUNTERMEASURES PLAN, SPILL REPORTING PROCEDURES AND SPILL REPORTING FORM

APPENDIX E

SPILL REPORTING PROCEDURES

For the purpose of Oil Spill Reporting, the word "spill" is used to reference a "spill event" (as defined in 40 CFR 112.2), as well as any discharge, release, or leak of "oil" (as defined in 40 CFR 112.2).

The Spill Prevention Control and Countermeasures (SPCC) Plan for the Plant will be filed in the Plant Office. This plan identifies responsible personnel (names and telephone numbers), and steps to be taken for response and clean up, (refer to Section (c) below).

The following procedures should be followed in the event of a reportable spill of oil:

Proper reporting of a spill is very critical and must be performed carefully, accurately, and in a timely manner. Spills of 10 gallons or more are to be reported to the Plant Manager.

(i) When to Report

According to SPCC rule Section 112.4 (a) facilities that store, transfer, use or consume oil and oil productions (112.1(b) are accountable to report spills or releases of oil that enters into or upon the navigable water of the United States or adjoining shorelines in harmful quantities.

A spill becomes reportable to the appropriate regulatory agency whenever a SPCC regulated facility has a:

(1) discharge of more than 1,000 U.S. gallons of oil in a single discharge as described in 112.1(b)

or

(2) discharge of more than 42 gallons of oil as described in 112.1(b) in each of two discharges within any 12-month period.

At any operation, any leakage or spill of oil that is in danger of leaving or has left company property must be reported immediately as described below.

(ii) How to Report and To Whom

(a) In-House Verbal Reporting

In the case of a small spill less than 10 gallons and confined to the facility area, the cleanup operation will be conducted by Plant employees under the direction of the Plant Manager.

In the case of a spill over 10 gallons, the Plant Manager and the Regional Environmental Manager must be notified.

After taking immediate action, the person discovering the spill must notify his/her supervisor, giving the information listed below.

1. The location of the spill, including type of terrain and nearest waters and anticipated movement of spilled material;
2. Into what medium(s) was the oil spilled (land, water, and/or air);
3. The time and date the spill was first observed;
4. Existing weather conditions;
5. The device or activity involved when the spill occurred;
6. The cause of the spill;
7. The material spilled;
8. The estimated quantity of the spill;
9 What actions have been taken to stop, contain and cleanup the spill;
10. The effectiveness of cleanup operations;
11. Report any health hazards and characteristics;
12. Any injuries or problems as a result of the spill;
13. Who responded to spill;
14. Is help needed?

The Plant Manager or Regional Environmental Manager will determined if the spill is reportable. The Regional Environmental Manager will notify the regulatory agencies concerning the spill as required.

(b) In-House Written Reporting

For a reportable spill outside of a containment area, a complete written report must be submitted to the Plant Manager as soon as possible (usually within 24 hours of the spill discovery). This written report must address the same components listed above, and any additional issues deemed important by operating personnel. The attached spill reporting form has been designed to facilitate such written reporting.

(c) Reporting to State and Federal Agencies

The Plant Manager, Regional Environmental Manager or designated representative will execute all reporting to the agencies.

1. Report immediately any "reportable" spill, as well as any spill that enters or threatens to enter any river, stream, canal, sewer, drain, lake or pond to the EPA, and to the State as detailed in the SPCC Plan.

2. Make necessary written reports to the State, EPA and other agencies as required. The U.S. Coast Guard National Response Center typically does not require a written report of the spill, although one may be requested in certain situations. Verbal notification to the agencies must be made as soon as possible, but not later than the first working day after the spill. In case the

Regional Environmental Manager cannot be contacted by the end of the first working day after the spill, the verbal report must be made by the Plant Manager or designated representative. Oil entering water or having the potential to do so requires immediate verbal notification. Immediate has been defined for this situation as "as soon as possible" after the spill. Telephone numbers of agencies requiring notification are listed below.

U.S. Environmental Protection Agency, Permits and Technical Support Branch (800) 227-8917

Utah Division of Environmental Quality, Division of Environmental Response and Remediation (801) 536-4123

The National Response Center requires notification if a discharge of oil causes a discoloration or "sheen" on the surface of water, violates water quality standards or causes a sludge or emulsion to be deposited beneath the surface or on the adjoining shorelines.

National Response Center (800) 424-8802 or (202)267-2675

SPILL REPORTING FORM

1. Date of spill _____
2. Person(s) to discover spill _____
3. Location of spill, including type of terrain and nearest waters or drains _____
4. Time spill was first observed _____
5. Existing weather conditions _____
6. Device or activity involved when spill occurred _____
7. Cause of spill _____
8. Material spilled _____
9. Estimated quantity of spill (gallons) _____
10. Persons and/or agencies notified _____
11. When and what action was taken for countermeasures, control and cleanup _____
12. Effectiveness of cleanup operations _____

Date: _____, Person completing form: _____, Title: _____

APPENDIX F

COMPLETED FORMS AND CHECKLISTS

Exhibit 3
Photographs of COVOL Facility

Photo 1: COVOL Wellington Administrative Offices.

Photo 2: Processing facility entrance and security gate.

Photo 3: Raw material conveyor and radial stacker with telescoping chute to reduce emissions.

Photo 4: Feed hopper, conveyor, screen and hammermill – covered to reduce emissions.

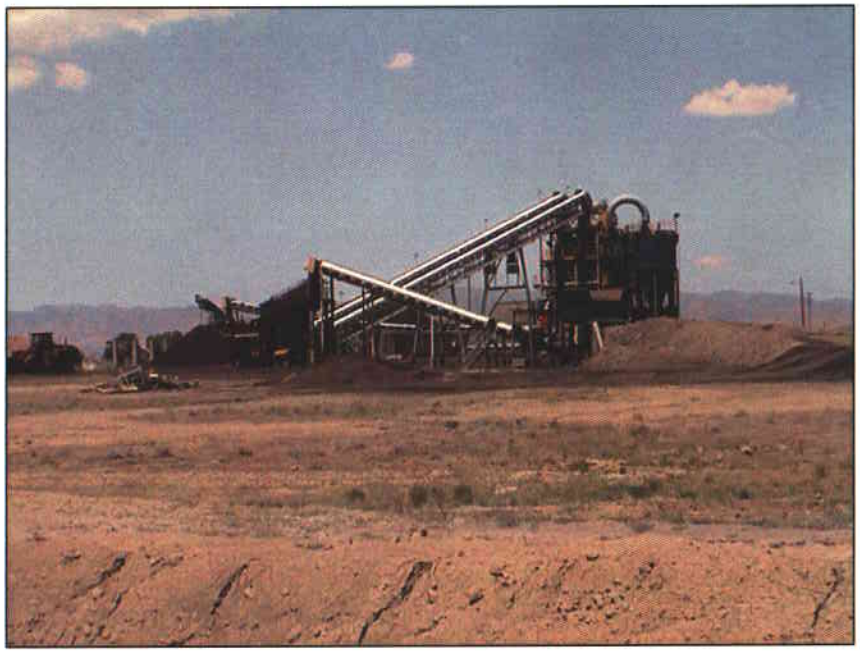


Photo 5: Processing area from south showing low opacity and good air quality.

Photo 6: Coal separation and bag house dust control equipment.

Photo 7: Conveyors and stackers for final coal piles.

Photo 8: Internal roads consist of aggregate cover to minimize fugitive dust from mobile sources.

Photo 9: Water truck used daily for dust suppression on roads.

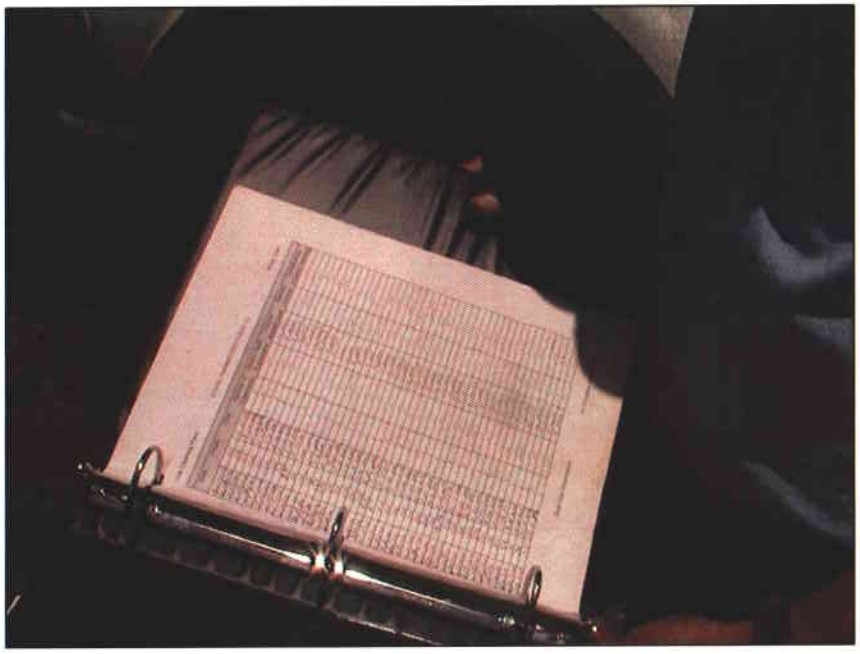


Photo 10: Water truck log showing water application records.

Photo 11: Storm Water managed on site using drainage channels and culvert pipes.

Photo 12: Silt fencing and straw bales used to complement drainage system and preclude sediment erosion off site.

Photo 13: Drainage pipe discharges water toward storm water detention basins on south side of facility.

Photo 14: Storm water detention basin at southeast area of facility.

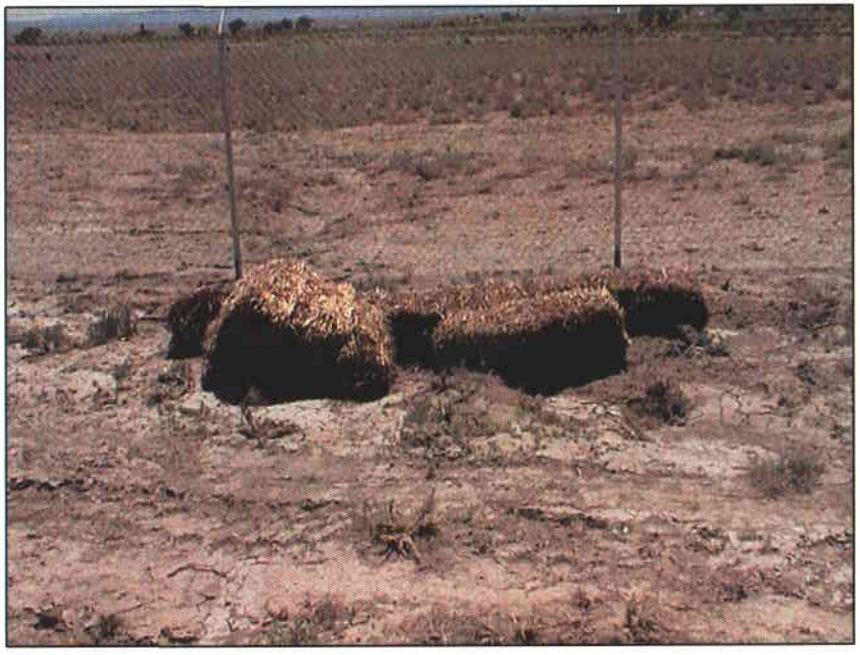


Photo 15: Straw bales used per SWPP plan for erosion protection.

Photo 16: Drainage channel and additional straw bales (if needed) for erosion protection.

Photo 17: Solid waste management provided by local disposal company.

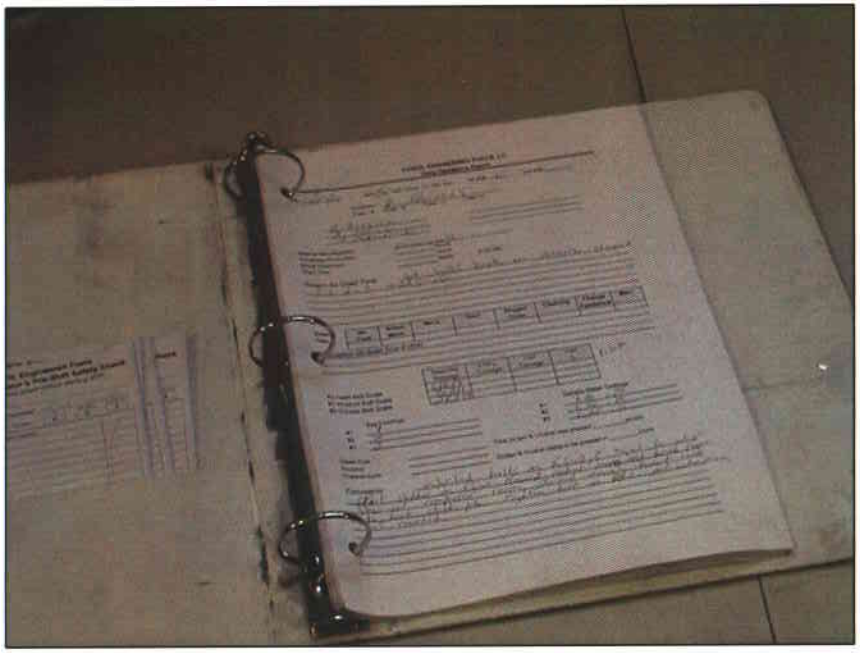


Photo 18: Weekly environmental inspection records maintained at facility.

Photo 19: Diesel fuel tank with secondary containment per site SPCC Plan.

Photo 20: Non-hazardous drum storage area for petroleum products with secondary containment per SPCC Plan.

Exhibit 4
COVOL EMS Task List

HEADWATERS INCORPORATED

Environmental Compliance Policies and Procedures

DRAFT

Headwaters Incorporated
10653 River Front Parkway, Suite 300
South Jordan, Utah 84095
Phone 801.984.9400 • Fax 801.984.9410

HEADWATERS INCORPORATED

Environmental Compliance Policies and Procedures

Table of Contents

SECTION I
INTRODUCTION

VISION STATEMENT

Headwaters Incorporated creates value through environmentally responsible energy, chemical products and services, and developing innovative value-added opportunities for customers.

PURPOSE

The purpose of this document is to advance our Vision Statement through the adoption of a strong and thoughtful Environmental Compliance Policy statement for Headwaters Incorporated, and its subsidiaries and affiliates (the "company"). This document will also serve as a guide to the company's environmental compliance group and facilities' operations staffs by providing standard procedures and policies to help achieve company environmental standards and regulatory compliance.

SCOPE

This Policy expresses the commitment of, and provides a course of action for, the company to meet the environmental compliance standards applicable to all facets of its operations.

SECTION II
ENVIRONMENTAL COMPLIANCE POLICY

Headwaters Incorporated ("company") is committed to providing environmental security and protection to our customers, to our employees, to the communities in which we operate, and to the environment. Each employee of the company will ensure that the appropriate standards of health, safety and environmental protection are observed and enforced.

The company will work closely with regulatory agencies and industry associations to develop and comply with sound environmental protection policies. When necessary, the company will act reasonably to implement new environmental protection initiatives. The company will utilize resources as an alternative to disposal wherever technically feasible and economically viable.

The company will periodically conduct environmental audits of its operations and will act promptly to provide corrective actions for any deficiencies that may be found. Our management will monitor each operating unit and will ensure that these principles are maintained.

The company's Environmental Compliance Policy is demonstrated through:

Awareness: Exercising sound environmental practices and stewardship at all company-owned facilities and for all resources under our management.

Planning: Using environmental factors as a critical component in our planning and decision making processes and committing sufficient resources to implement effective environmental programs.

Education: Providing employees with sufficient knowledge to perform their work in an environmentally compliant and personally accountable manner. Allowing all employees to seek environmentally responsible solutions to all aspects of the company's operations.

Research and Development: Engaging in research and development efforts to create technologies aimed at minimizing the environmental impacts of our customers and our own operations.

Communications: Maintaining open channels of communication with our customers, employees, government agencies, public officials, the media and the public to meet their information needs in regard to environmental issues.

Improvement: Evaluating our environmental performance through periodic reviews and audits to ensure that our conduct is consistent with these principles.

Participation: Participating with government agencies, professional organizations, and others in developing responsible regulations and standards affecting our activities in and impact on the environment.

Reducing Impacts: Optimizing operations in a manner that reduces any adverse environmental impacts caused by operations conducted at our facilities.

SECTION III
ORGANIZATION and RESPONSIBILITIES

The purpose of this section is to provide a description of the organization and responsibilities of the Headwaters Environmental Health and Safety (EH&S) Regulatory Compliance Section.

The company established its EH&S Regulatory Compliance Section to provide corporate support to ensure that facilities are operated in compliance with applicable laws, rules, regulations, policies, and procedures. The Regulatory Compliance Section and its Environmental Staff are within the Corporate Development and Administration Department. The Corporate Development and Administration Department in turn reports to the CEO of the Company. The Environmental Staff consists of a Corporate Environmental Manager that is supported by Regional Environmental Managers and an Administrative Assistant. As to environmental compliance matters, each Facility Manager has "dotted-line" reporting responsibility to the Corporate Environmental Manager.

Environmental Staff

The Corporate and Regional Environmental Managers' primary responsibility is to facilitate implementation of corporate environmental policies and procedures, assist facility management in the identification and resolution of specific environmental compliance problems, and provide assurance to corporate management regarding the regulatory compliance status of its operating facilities. This responsibility is two-fold: one - to provide a compliance resource for Facility Managers; and, two - to provide corporate oversight for compliance issues. The duties of the Environmental Managers include: maintaining a working knowledge of applicable environmental regulations, and anticipating the effects of new and proposed regulations on facility operations; participating in facility management meetings where the impact of regulatory changes on facility operations is discussed and planned for; developing and implementing an environmental compliance and information management system for Headwaters' facilities; assisting Facility Managers in resolving any regulatory compliance issues related to either governmental regulations or internal company policies and procedures; assuring that Headwaters' facilities operating permits are maintained and current, including permit revisions and modifications; assisting in staff training on applicable regulations; and consulting with the Legal Department from time to time for assistance in completing the tasks listed above.

Individual business units within the company may employ local or sub-regional environmental support staff whose primary function is to coordinate the day-to-day environmental duties within one or more facilities. These coordinators serve as an extension of the Corporate Environmental Staff with respect to compliance management and are the liaisons between the Environmental Staff and the Facility Managers.

The Environmental Staff has administrative record keeping and documentation responsibilities that include maintenance of all facility permits, inspections, internal environmental monitoring records, and oversight of the Facility Managers efforts to maintain environmental operating records.

Facility Managers

Facility Managers are principally responsible for achieving and maintaining compliance with the applicable provisions of local (including tribal, where applicable), state and federal laws, rules and regulations, and company policies and procedures. Facility Managers are assisted by corporate staff and by various programs and policies developed and implemented by Headwaters' Regulatory Compliance Section, Corporate Development and Administration, Legal, Public Relations, and Human Resources Departments. Facility Managers have direct line reporting responsibility to their respective regional operations vice president and "dotted-line" reporting responsibility to the Corporate Environmental Manager. Facility Managers are responsible for management of daily regulatory compliance related tasks and maintaining environmental records, while still retaining authority and responsibility for all onsite policy and operating decisions that affect environmental compliance. Facility Managers have final responsibility for assuring the facility's conformance with federal, state and local environmental regulations as well as with the company's internal environmental and quality assurance procedures if, and where, they differ. They are responsible, with the assistance of the company's Environmental Staff and Legal Department, for securing and maintaining required environmental permits and licenses for the facility and for training facility personnel.

Laboratory Managers

Laboratory Managers that are primarily responsible for quality control/quality assurance matters, have "dotted-line" reporting responsibility to the Corporate Environmental Manager for applicable environmental programs that they are involved in. They are responsible for conformance with their facility's environmental permit requirements and ensuring that their facility handles only materials that are properly documented. Documentation for on-site material includes, but is not limited to, maintaining Material Safety Data Sheets ("MSDS") and making all required notifications under the Superfund Amendments and Reauthorization Act ("SARA") program.

Laboratory Managers of facilities that are primarily involved in research and development will need to have a constant and flexible relationship with the Environmental Staff. These Laboratory Managers will deal directly with a representative of the Environmental Staff on an as needed basis to ensure environmental compliance.

SECTION IV
CORPORATE ENVIRONMENTAL AUDIT PROGRAM

The purpose of this section is to describe the company's Corporate Environmental Audit Program.

Corporate Environmental Audit Program

An environmental compliance audit program has been established within the Environmental Services Compliance Group to monitor compliance efforts at the company's facilities. At the direction of the Legal Department, the company conducts both announced and unannounced environmental compliance audits at all company operating facilities on a periodic basis. The audits focus on compliance with applicable local (and tribal, if applicable) state and federal environmental laws and regulations as well as corporate policies and procedures. Audits also provide an opportunity to develop practical compliance solutions.

Audits

The company operates at approximately 200 facilities in the United States and Canada. Inasmuch as the operations at these facilities vary greatly, the company has developed a multi-leveled priority list for audits. Factors considered in determining the frequency of environmental audits include: potential environmental impact; levels of capital investment; environmental permits; levels of environmental regulatory requirements; size of operation; compliance history; size of staff; and visibility to clients and the public. Consequently, facilities that rate higher among the above listed factors are audited more frequently than other facilities.

Facilities that have the highest potential impact based on the above criteria are audited every twelve to eighteen months. The next level of facilities is audited every twenty-four months. Other facilities are not audited on a regular schedule, but are subject to random unannounced audits, and are contacted on a minimum triennial basis to assure the environmental program is being observed. Any facility requesting an audit will be audited in a timely manner.

All audits are conducted at the direction of the Legal Department, and, thus, subject to the attorney-client privilege. The focus of each audit is compliance and improvement. That is, to maintain compliance and to improve operations from an environmental standpoint.

SECTION V
INFORMATION MANAGEMENT

The purpose of this section is to provide general guidance for managing regulatory compliance information at the company's facilities.

The management of regulatory compliance information is a key element of the company's goal of environmental compliance. Federal, state, and local (including tribal) regulations require that specific information on facility operations be available for inspection and review by regulatory personnel. In addition, this information can be used by facility personnel as a measure of operational efficiency and effectiveness.

The Facility Manager is responsible for maintaining environmental facility records including: permits, environmental plans and employee training, inspections, annual reports, emergency preparedness (SARA), MSDS, agency correspondence, monitoring/sampling and test data, spill reports, etc. It is the responsibility of the Facility Manager to set up an information management system to organize and document these critical environmental compliance records. This information management system must be compatible and consistent with any electronic environmental management system implemented by the company.

Any environmental documents required by permits or regulations are maintained for the minimum retention times required by those permits or regulations. If no retention time is specified, a minimum five-year retention period is observed. Duplicate files of permits and agency related materials are kept at corporate offices. If there is any question about requirements for records retention, contact the Corporate Environmental Manager.

Periodic inspection information, as well as operating records must be maintained either manually or electronically. In addition, permits, environmental compliance-related reports, training requirements and other environmental records must be an integral part of a facility's operation. The information management system used must be capable of calling to attention all routine environmental activities, scheduled maintenance for pollution abatement systems, and corrective actions or repairs that are required to maintain the facility's desired operational status and environmentally compliant condition.

SECTION VI
PLANNING and PERMITTING

The purpose of this section is to provide guidance for obtaining and maintaining required environmental permits.

The Regional or Corporate Environmental Manager must be contacted as soon as possible when planning any new construction project, physical change, or operational changes to or at existing facilities. Environmental permit preparation time and agency review time together are usually measured on the order of months. Environmental permits are usually required prior to breaking ground. ***Headwaters will not begin construction of a project unless all required environmental permits are in place.***

Many facilities where the company operates on the client's property may require less environmental program involvement by the company due to client ownership and/or contract conditions that assign environmental program implementation to the client (e.g. facilities that primarily market ash from a utility-owned silo may have less environmental program obligation than one owned by the company). Other facilities that are owned by the company, operated with the company's equipment, and heavily staffed with company personnel may be involved in several programs requiring environmental permits, record keeping and notification responsibilities. The following is a list of potential environmental programs that a facility could be involved in. The list is considered comprehensive for major federal and/or state programs:

- **Air Programs and Permits**
- **Water Program - National Pollutant Discharge Elimination System (NPDES) and Publicly Owned Treatment Works (POTW)**
- **Solid Waste Management and Disposal Programs and Permits**
- **SARA TITLE III – Community Right-To-Know (RTK; Tier II and Toxic Release Inventory (TRI) Reporting)**
- **Hazardous Wastes Programs and Permits**
- **Spill Prevention Control and Countermeasure (SPCC – oil spill plan)**
- **Universal Waste**
- **Used Oil**
- **Toxic Substances Control Act (TSCA) – for chemical manufacturing**

There are always unusual situations in which local or obscure permits or programs may be required, but this list is complete for practical purposes. Each of these programs is described below.

Air Programs and Permits

Any facility where there are company owned silo(s), stockpile(s), baghouse(s), research equipment, or other equipment that vents directly to the atmosphere and contains potential pollutants will likely require an air permit or documentation of an air permit exemption. Air permits may also be required for screening operations; however, states are variable as to whether

a permit is required or not – even in a situation where emissions are negligible. Whether or not an air permit is required, a facility is required to meet general air pollution requirements for fugitive dust (incidental, non-point source dust) and point sources.

Water Programs - NPDES (National Pollutant Discharge Elimination System) and Others

A General Storm Water Permit may be required at any facility at which coal, synfuel, or coal combustion products ("CCPs") are processed, transferred, or stockpiled, or at which CCPs are otherwise exposed to the environment. Company manufacturing operations may also require a storm water permit if storm water leaves the facility. Facilities or operations performing a structural fill or other construction project that disturbs over one acre require a Construction storm water permit. Projects that alter a wetland a stream may also require a water permit. Each facility that has a general industrial or construction based storm water permit will also require a Storm Water Pollution Prevention Plan (SWPPP). Facilities with any type of storm water permit require annual storm water training of employees involved in activities that may pollute storm water. At utility or client property on which the company operates, a client's water permit may be in place; the Facility Manager must check with the client to assure that all water program requirements are covered prior to operation.

Industrial wastewater discharges to waters of the United States, other than storm water, and/or to a POTW may also require a specific permit.

Solid Waste Management and Disposal Permits

These permits are generally required for structural fills, some transfer facilities and reclamation projects. Permits for clients' landfills are generally held by the client. Very often, structural fills will also require NPDES storm water permits if they are greater than one acre. They may also require local land disturbance and/or erosion and sediment permits. At manufacturing facilities, care must be taken when managing rejected materials onsite, as this activity may trigger the requirement for a landfill permit. Contact the Environmental staff to discuss options on managing rejects, unused and unwanted raw materials, or unwanted finished products.

SARA TITLE III - Community Right-to-Know

This program is comprised of two components commonly referred to as Tier II Reporting and Toxic Release Inventory or TRI Reporting. Tier II Reporting is an emergency preparedness program and deals with notifications to appropriate state and local authorities when certain hazardous substances (not hazardous wastes) are present at a facility above threshold quantities. Hazardous substances are generally considered to be any material or substance that requires an MSDS. The normal threshold quantity for reporting is 10,000 pounds. In most instances, the only potential chemical/substances at a facility are diesel, gasoline, latex reagents, cement, concrete admixtures, aggregates and/or fly ash/bottom ash. At a utility site, the utility has most likely taken steps to meet the requirements of this program. Virtually all manufacturing sites are in this program. Terminal or transfer facility sites not on utility property generally need to make their own notification. Structural fills and mine reclamation sites need to be checked on a case-by-case basis with the Regional or Corporate Environmental Manager.

TRI Reporting is required for facilities that exceed a specific threshold for listed materials that are manufactured, processed, or otherwise used. The thresholds are 25,000 pounds, 25,000 pounds, and 10,000 pounds respectively. The list of materials that must be evaluated against these thresholds include heavy metals and organic compounds. Certain materials referred to as potentially bioaccumulative toxics or PBTs have much lower thresholds, including lead at 100 pounds and mercury at 10 pounds. These low thresholds impact facilities like block and stucco plants because of the lead and/or mercury inherent in the raw materials. Facilities that trigger one or more of these thresholds are required to complete and submit annual TRI Reports to EPA and their own state on forms provided by EPA. These reports provide a detailed account of any releases of the specific material to the environment through air, water, or solid waste disposal.

Hazardous Wastes

For most facilities, no hazardous wastes are handled at company facilities, with the exception of small quantities of spent solvents used with parts cleaners and solvent rags. Parts cleaners are usually exempt from the hazardous waste program if conditionally exempt small quantity generator (CESQG) status is maintained. Generation and accumulation of less than 220 pounds of hazardous waste per month, will maintain CESQG status. However, it is still important to maintain receipts and documentation of quantities guaranteed to verify quantities used. If the client handles hazardous wastes on site, be aware of additional record keeping requirements they may need. If you handle any other wastes, particularly in shops and garages, which you believe may be hazardous (toxic, reactive, ignitable or corrosive), or if you generate more that 220 pounds of hazardous waste per month contact the Regional or Corporate Environmental Manager immediately so that a hazardous waste program can be developed for your facility.

Universal Waste

A particular class of hazardous waste that is regulated and managed differently than all other hazardous wastes is referred to as "Universal Waste". Currently, Universal Wastes are limited to batteries, mercury thermostats, mercury-containing fluorescent light tubes, and pesticides. (In California this list is larger.) Industrial facilities that generate Universal Waste are classified as Small Quantity Handlers (SQH) if they accumulate less than 5,000 kilograms (11,000 pounds) of Universal Waste at any time or Large Quantity Handler (LQH) if they accumulate more than 5,000 kilograms (11,000 pounds) of Universal Waste at any time. SQH's, which include virtually all Headwaters facilities, are not required to notify EPA of Universal Waste Handling activities. Facilities with LQH status are required to notify EPA of Universal Waste Handling activities. SQH and LQH facilities are required to manage Universal Wastes as described in the Federal Regulations. In summary, for most facilities involved, this should include a small amount of additional recordkeeping, training and use of sound recycling practices for these particular items.

SPCC – (Spill Prevention Control and Countermeasure – oil spill prevention)

If more than 1,320 gallons of petroleum product (diesel fuel, hydraulic oils, gasoline, lube oils, etc.) is stored above ground in containers with a volume greater than or equal to 55 gallons, and that petroleum product has the potential to reach water (you cannot consider dikes, berms or any other manmade structure when you evaluate the potential to reach water) - then an SPCC Plan is required for the facility. If the petroleum product tanks and containers at the facility are under utility or client ownership or control, the client may maintain an existing Plan. Facility Managers must verify if products are covered by an existing Plan.

Used Oils

Used oil should either by handled by the client or by a heavy equipment servicer. If used oil cannot be handled in this manner, identify a reputable oil recycler and monitor all dealings with it. Oil recyclers are only allowed to perform certain activities with oils. Question and verify the legitimacy of any oil recycler. If you handle bulk quantities of used oil contact the Regional or Corporate Environmental Manager. All containers of Used Oil, regardless of size, must be labeled "Used Oil".

Toxic Substances Control Act (TSCA)

The Toxic Substances Control Act (TSCA) of 1976 was enacted by Congress to give EPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. EPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk.

Any facility contemplating manufacture or import of any chemical should contact the Corporate Environmental Staff immediately to determine pre-manufacture/import notification requirements and potential Inventory Update Reporting (IUR) requirements. As the company grows, facility managers must recognize whether they manufacture or import chemicals and actively enlist assistance from the Environmental Staff in determining if TSCA applies. Questions about TSCA should be directed to the Corporate or Regional Environmental Managers.

SECTION VII
TRAINING

The purpose of this section is to provide guidance for conducting training of facility employees.

Personnel training programs are essential for safe working conditions and efficient operations at company facilities. Training must adequately prepare new employees to work within the parameters of their job description, and must reinforce current employees' knowledge of safe operating practices. Training must also address emergency response information. Company employees must be adequately trained to ensure that all operations are performed in a safe manner and in compliance with federal, state, and local (including tribal where applicable) regulations. These requirements are separate from OSHA Health and Safety requirements at facilities. For those requirements, please refer to the Company Health and Safety Policies and Procedures Manual.

The responsibility for training of the company's personnel with regard to environmental matters lies jointly with the Facility Manager and the Environmental Staff. Training programs are arranged by the Facility Manager and supported by the Environmental Staff and the Legal Department. Certain permits and regulations require training at regular intervals. In some instances, documentation of training and training programs is required. Annual formal training of employees must be documented at those facilities with General Storm Water Permits. The level of training required is specified in the individual facility Storm Water Pollution Prevention Plans. Annual training is also required for all facilities that handle Universal Waste and for any facility with a SPCC Plan. ***All new hires must receive environmental training regarding their position and the facility at which they work within 30 days of their initial employment.***

Training must adequately familiarize facility personnel with proper hazardous materials procedures, facility operations, emergency procedures and use of emergency equipment systems, conditions of the facility's permit, best management practices, and pertinent environmental, health and safety regulations.

Employees must complete the training appropriate to the responsibilities of their job before beginning unsupervised work. This training will consist of initial classroom training, on-the-job training, and annual update training. All training conducted must be accurately and consistently documented.

The training program must include provisions to allow for updates or reviews of the training program, as necessary to ensure compliance with the terms of the facility's permit and/or applicable regulations. Copies of any required training program or operations/maintenance manual must be kept on file at the operating facility for review by state, federal, and local (and tribal, where applicable) regulatory officials.

SECTION VIII
EMERGENCY PREPAREDNESS and RESPONSE

The purpose of this section is to provide guidelines for the preparation for, and response to, an emergency environmental condition.

Emergency conditions are generally caused by the upset or failure of normal operating procedures or equipment. Company facilities, in general, store only a limited number of materials in any quantity that could likely cause an environmental emergency condition. These materials include, but are not limited to, coal, latex reagents, synfuel, coal fly ash, cement, and diesel fuel. These materials, if stored in significant quantity, are registered with local, regional, and state emergency response organizations under the emergency planning and community right-to-know laws that we refer to as 'SARA III'.

The most effective emergency preparedness measures are to ensure sound operating practices and to constantly adhere to the environmental program fundamentals. All company facilities have posted emergency response contact phone numbers. These numbers include company, local, and state contact numbers that require notification of upset and emergency conditions. Should normal operating procedures fail, or natural conditions occur that disrupt normal operations, and an environmental emergency condition arise, the following actions are to be undertaken:

- Take any immediate action to contain the spill or release **that does not endanger the responder** (e.g. dike area; apply absorbent, turn off pumps, conveyors, fans, valves, etc.).
- Evacuate immediate area of spill.
- Verify identity of spilled material.
- Notify primary or secondary emergency company contacts.
- Notify appropriate response centers.
- Make necessary arrangements for cleanup and disposal.
- Assess incident and revise applicable plans accordingly.

If someone at the facility has received the required training and certification, the following steps may be taken to clean up the spill or release:

- Determine proper handling precautions (see MSDS).
- Secure appropriate personal protective equipment.
- Close off appropriate valve or take other action to stop the leak.
- Remove sources of ignition.
- Control and contain the spill, neutralize if necessary.
- Collect spilled material (vacuum, absorb, pump, or other as necessary).
- Transfer collected material to recover container.
- Decontaminate area.
- Label recovery container.
- Contact the Environmental Staff regarding storage and disposal.

Report and record the following information:

- Name, address and phone number of person reporting.
- Exact Location of the spill.
- Company name and location.
- Material spilled.
- Estimated quantity.
- Source of spill.
- Cause of spill.
- Action taken for containment and cleanup.

Report all spills or releases to the Corporate Environmental Manager or a Regional Environmental Manager or the head of the Regulatory Compliance Section within two hours of occurrence. Contact Numbers are:

- Tom Schmaltz (office) 706. 549.7903
- Tom Schmaltz (cell) 404.661.5485
- Steve Van Ootegham (office) 801.984.3777
- Steve Van Ootegham(cell) 801.953.4408
- Doug Martin (office) 484.947.2211
- Doug Martin (cell) 610.733.3099
- Mike Hampton (office) 801.984.9498
- Mike Hampton (cell) 801.201.7322

SECTION IX
COMMUNICATIONS

The purpose of this section is to provide general guidelines for facilitating environmental compliance communications as well as the transfer of critical regulatory information between the corporate office and the company's facilities as well as among facility personnel. The company recognizes the importance of providing a network for communicating relevant environmental compliance issues between the company's facilities and corporate management, and between facility management and all facility personnel.

INTERNAL COMMUNICATIONS

Corporate-Facility Information Transfer

Environmental regulations in the United States are in an almost constant state of change. The US EPA regulates all environmental media including; air, water and land. Programs responsible for the protection of air, water, and land are managed, for the most part, independently by individual State programs, leading to almost daily proposal or issuance of new regulations.

In order to remain in compliance with these ever-changing programs, operating facilities must be provided with the information needed to develop new operating procedures, or amend existing ones. It is the responsibility of the company's Corporate Environmental Manager and the Environmental Staff to analyze proposed and final regulations to determine the effect they will have on company facilities. This information will then be provided to upper management, facility management, and other appropriate staff in a timely manner so that operational and budgetary planning can be conducted.

Information transfer can be conducted through a number of mechanisms including but not limited to; regulatory alerts, newsletters, or seminars and training sessions. Management and staff are encouraged to share information between facilities in order to facilitate solutions to common problems.

On routine issues, communications related to environmental affairs are to be made between the Facility Manager and the Corporate Environmental Staff. Any employees who have environmental questions or concerns should relate them to the Facility Manager. Support and assistance can come from anywhere, particularly Area Operations Mangers and Facility Managers of similar facilities. Facility Managers and the Corporate Environmental Staff may need to coordinate environmental efforts with the Legal Department, Regional Managers, Area Managers or Regional Vice Presidents, depending upon the gravity of the environmental issue. Prudent judgment must dictate the involvement of appropriate persons.

Any environmental upset condition should be immediately reported to the Facility Manager or Corporate Environmental Staff.

Internal Facility Communication

Each Facility Manager is responsible for insuring that facility personnel are provided with all the information needed to conduct their jobs safely and effectively, while remaining in compliance with environmental permit requirements and state, federal, and local (including tribal, where applicable) regulations. To accomplish this, periodic meetings with all plant personnel should be held to discuss environmental compliance issues and plant operating problems and concerns.

Good internal facility communication is dependant on good two-way communication between Facility Managers and the Environmental Staff. Facility Managers should periodically inform corporate of progress and problems with environmental issues. Corporate Environmental Staff must maintain communications as described in the previous section. Facility and corporate management must be notified immediately of any incidents (i.e., spills, fires, explosions, security breaches, etc.) that have the potential to affect the facility's compliance with federal and/or state environmental laws, rules and/or regulations.

MEDIA COMMUNICATIONS

The company's policy on communications with media regarding environmental matters is established so that only accurate, non-confidential information is released to the media. ***Employees are instructed to refer all calls, questions and inquiries from outside the company, to the company's Director of Investor Relations***. In addition, it is the company's policy for all employees to respond to questions about rumors in the following manner: ***"It is our policy not to comment about rumors or speculation."***

SECTION X
REGULATORY AUDITS/INSPECTIONS

The purpose of this section is to provide guidance in the event that a representative of a regulatory or other law enforcement agency presents himself at a company facility for the purpose of conducting an inspection, or conducting a search.

Inspections and searches by regulatory agencies and law enforcement agencies may be conducted with or without prior notice. Inspections and searches are usually conducted during regular working hours. Upon arrival, the inspector or law enforcement officer should be directed to the Facility Manager or a designated alternate.

Inspectors or officers should be requested to provide their credentials, and a copy of any subpoena, order, search warrant or other authority under which the inspection or search is being conducted. However, routine (annual, etc.) agency inspections may not be accompanied by a formal request document and the lack of such a document is not grounds to deny entry.

The Facility Manager or a designated alternate should inquire as to the reasons for the inspection or search and which areas of the facility and records will be inspected or searched.

The Facility Manager or a designated alternate must accompany the inspector at all times during the inspection or search. ***Under NO CIRCUMSTANCES are inspectors to be allowed anywhere within the facility without a company representative escort.***

If a facility has received prior notice of an inspection or search, facilities should notify the Regional or Corporate Environmental Manager to ensure that they have the appropriate personnel on hand to provide information.

Company facility management may not refuse access to the facility to an inspector from a regulatory agency or law enforcement officer, except under extreme circumstances with the prior approval of the Legal Department.

If an inspection or search becomes unreasonably disruptive the Facility Manager or a designated alternate must contact the Legal Department immediately.

If an inspector or law enforcement officer has access to information or areas of the facility that contains trade secret information, the inspector or law enforcement officer should be informed that such information must be treated with confidentiality. This notification should be provided in writing.

Inspectors and law enforcement officers may take photographs but may be requested to provide copies of such photographs to the facility. Any photographs of trade secret areas or other areas that the company considers sensitive should be requested to be marked confidential. This request should be provided in writing. Where possible, the view of trade secrets should be

blocked. The facility should take its own photographs as well if the inspector takes photos and the photos taken by the facility should be nearly identical to those taken by the inspector.

Inspectors and law enforcement officers may take environmental samples. The facility should document procedures used by the inspector or law enforcement to obtain samples. The facility must also record analyses planned for the samples by the inspecting agency. Facility personnel must observe sampling and obtain sample splits.

Inspectors and law enforcement officers may review all facility operating records and records that reside or will reside in the public domain (e.g. permits). Inspectors and law enforcement officers may not review non-operating business records or legal documents without the prior approval of the Legal Department. In the event that such records are requested, the Facility Manager or a designated alternate must contact the Legal Department.

The Facility Manager must attempt to immediately correct any violations pointed out by the inspection, such as blocked aisles, missing labels, misuse of safety equipment, leaking drums, and other similar conditions.

The Facility Manager must notify the Environmental Staff or Legal Department immediately following the inspector or law enforcement officer presenting himself at the facility.

Copies of all notices of violation or other inspection reports from regulatory agencies must be immediately forwarded to the Legal Department.

DRAFT

Operations Review Checklist

Facility Name: _____ Reviewer's Name: _____

Date of Review: _____ Plant Manager: _____

1. General Housekeeping
    a. All trash, debris, and unusable scrap is cleaned up and properly disposed.
    b. Paved work areas are maintained free of excess dust.
    c. Dumpsters are not overfilled and are kept closed when not in use.
    d. Mobile and other oil-containing equipment is stored in a location that minimizes risk to the environment.
    e. Raw materials and recyclables (cardboard, pallets, plastics, recyclable rejects, used oil, batteries, fluorescent lights, mercury switches, etc.) are maintained in designated location(s) that minimize potential environmental risk.
    f. The tops of silos and areas around silos are free of raw materials.
    g. Small spills are immediately cleaned up.
2. Liquid Materials Management
    a. Secondary containment structures are functioning properly (no cracks, leaks, seepage, etc.).
    b. Liquid within secondary containment is periodically removed and disposed of as used oil or oily waste (oil) or drained if not contaminated (water).
    c. Areas where liquids are stored and maintained are free of visible spills or leaks.
    d. Empty drums are completely empty and stored so as not to accumulate water (closed bungs, tops in place, on their sides).
    e. Piping and/or hoses from hydraulic and similar oil-containing equipment are free of leaks.
    f. All liquid storage containers 55 gallons or greater are free of leaks.
    g. Containers without secondary containment are stored in a manner to minimize the risk of a leak or spill reaching water by:
        i. Being away from drains unless the drains are covered or plugged.
        ii. Being away from creeks, rivers, other waterways.
        iii. Being under cover whenever possible.
    h. Storm water and process water are always separate.
3. Solid Materials and Product Management
    a. Aggregate materials (pumice, gravel, sand, shale, etc.) are neatly stored in a designated and managed location.
    b. Solid materials are covered whenever possible.
    c. Rejects are stored in a manner to minimize solids runoff (covering, minimize fines content, etc.).

d. Storage containers (silos, hoppers, bins, bunkers, etc.) are properly maintained (no leaks, cracks, significant structural degradation, etc.)

e. Finished product is properly packaged and stored in the correct manner to minimize exposure to storm water.

f. Excess pallets are neatly stacked and excess inventory is minimized.

4. Vehicle Fueling and Preventive Maintenance

   a. Fueling hoses and connections are leak-free.

   b. Fueling nozzles and hoses are stored in a way to prevent uncontained spills or leaks.

   c. Small spills are responded to and cleaned up immediately.

   d. Vehicle maintenance activities are conducted in a manner to minimize exposure to storm water.

5. Dust Control

   a. There are no visible emissions from baghouses or bin vent filters.

   b. Methods of dust control for roadways and work areas are in place and adequate.

   c. Dust-producing equipment (crushers, screens, pug mills, conveyors, etc.) is equipped with proper dust control.

   d. Pneumatic material-transfer lines are properly operated and maintained to minimize dust.

   e. Silo overfill protection measures (high level alarm, fill policy, etc.) are in place and effective.

6. Waste Management and Reduction

   a. Items including but not limited to cardboard, pallets, plastics, recyclable rejects, used oil, batteries, fluorescent lights, mercury switches, etc. are managed by recycling wherever possible.

   b. Waste containers (dumpsters, roll-offs, etc.) are of adequate size and the frequency of removal is adequate to avoid overflow.

   c. Different types of wastes, especially those that might not be safely compatible, are separated.

   d. Liquid wastes (used oil, solvents, additives, etc.) are labeled and stored in contained areas.

   e. All hazardous wastes are properly containerized in labeled containers that are stored in specified hazardous waste storage areas.

7. Spill Response

   a. The facility has adequate spill response materials (absorbents like kitty litter, pumice, etc.; pads, boom, etc.) readily available.

   b. Employees have been given training on how to respond to spills.

   c. This facility has a defined spill response procedure.

8. Container and Equipment Labeling
    a. All containers containing used oil are labeled "Used Oil".
    b. Containers of Universal Waste; i.e. fluorescent light tubes, batteries, and mercury switches, are appropriately labeled.
    c. Containers of hazardous waste are properly labeled.
    d. Air emissions equipment is properly labeled (as required by individual permits).
9. Monitoring, Sampling, and Inspections
    a. All storm water samples are taken timely.
    b. Visible emissions are monitored as required in site permits.
    c. Dust control devices (baghouses, bin vent filters, sweepers, etc.) are routinely inspected and properly maintained.
    d. All required stack/emissions testing is completed on time and for the correct parameters.
10. Recordkeeping
    a. All emission test records are current and maintained for at least three years.
    b. All dust control device maintenance records are maintained and up to date. are current and maintained for at least three years.
    c. Throughput records are current and maintained for at least three years.
    d. Records of hours of operation are current and maintained for at least three years.
    e. All discharge monitoring records are current and maintained for at least three years.
    f. Waste disposal records (hazardous waste manifests, solid waste manifests, used oil manifests) are available and maintained for at least three years.
    g. Records of any environmental incidents are available and maintained for at least three years.
    h. Past reports; i.e. DMRs, excess emission reports, annual emission/throughput reports, etc. are maintained and available for at least three years.
    i. Training records for programs like SPCC, Stewardship, and Storm Water are current and available.
11. Planning and Training
    a. The facility Storm Water Pollution Prevention Plan (SWPPP) is current and available.
    b. The Spill Prevention Control and Countermeasure (SPCC) Plan is current and available.
    c. A current Storm Water Training Program is in place and being used.
    d. A current SPCC and/or Environmental Stewardship Training Program is in place and being used.
    e. Other required plans (Fugitive Dust Control Plan, RCRA Contingency Plan, etc.) are current and available.

12. Reporting
    a. DMRs are completed and submitted on time.
    b. Annual throughput and emissions reports are completed and submitted on time.
    c. Annual Storm Water Compliance Evaluation reports are completed in a timely manner and available.
    d. Tier II reports are completed and submitted on time.
    e. TRI Reports are completed and submitted on time.
    f. Annual environmental fees are paid on time.

Wellington – Air and Water Compliance

1. Task Summary

1.1. Overview

- Please verify the configuration settings in the task summary and complete any unfilled cells.

Task (Air/Water)	Person Assigned	Frequency	Due Date	Reminder Frequency	Person to Receive Reminder Notifications	Overdue Frequency	Person to Receive Overdue Notifications
Daily Coal Processed (Air)	Mike Gipson, Plant Manager	Daily	Next Day	None	Person assigned only	Once per week, until complete	Person assigned, Keith Thompson, Business Unit VP
Daily Baghouse Pressure Drop Readings (Air)	Mike Gipson, Plant Manager	Daily	Next Day	None	Person assigned only	Once per week, until complete	Person assigned, Keith Thompson, Business Unit VP
Annual Facility Task – Baghouse Inspection (Air)	Mike Gipson, Plant Manager	Annual, 1/1	12/31	Quarterly Reminders	Person assigned only	Once per week, until complete	Person assigned, Keith Thompson, Business Unit VP
Monthly Dust Suppression Activity Recordkeeping Task (Air)	Mike Gipson, Plant Manager	Monthly	1 Week	None	Person assigned only	Once per week, until complete	Person assigned, Keith Thompson, Business Unit VP
Quarterly Visual Observation and Facility Inspection (Water)	Mike Gipson, Plant Manager	Quarterly, calendar	2 Months	Weekly reminders, starting one month before due date	Person assigned only	Once per week, until complete	Person assigned, Keith Thompson, Business Unit VP

Annual Sampling (Water)	Mike Gipson, Plant Manager	1/1	12/31	Monthly Reminders	Person assigned only	Once per week, until complete	Person assigned, Keith Thompson, Business Unit VP
Annual SW Training Reminder (Water)	Mike Gipson, Plant Manager	1/1	12/31	Quarterly Reminders	Person assigned only	Once per week, until complete	Keith Thompson, Business Unit VP
Annual DMR Report Reminder	Mike Gipson, Plant Manager	12/1	1/28	Weekly Reminders	Person assigned only	Once per week, until complete	Person assigned, Keith Thompson, Business Unit VP

1.2. Upload File Tasks Notes

- All tasks requiring a file to be uploaded will contain the following: 1) a comments box, 2) validation checkbox requiring the user to manually indicate that the documents were uploaded.

Field	Display Name	Type	Is Required	Validation	Notes
Comments	Comments	Text Area	No	None	
File Upload	Upload File	File Upload	Yes	None	
Upload Acknowledgement	Did you upload files?	Yes/No	Yes	None	

2. Tasks

2.1. Daily Coal Processed

2.1.1. General

- Does the facility run 7 days a week? If so, how should we handle Saturday and Sunday entries? The facility may change its schedule during the year. Let's set this up with a day/date field so that the form has an entry for every day and on those days that the facility does not operate, a notation will be made to this effect when the next operation day readings are made

2.1.2. Fields

Field	Display Name	Type	Is Required	Validation	Notes
Coal Processed	Coal Processed	Text Field	Yes	Whole Number	Tons

2.2. Daily Baghouse Pressure Drop Readings.

2.2.1. General Questions

- Does the facility run 7 days a week? If so, how should we handle Saturday and Sunday entries? The facility may change its schedule during the year. Let's set this up with a day/date field so that the form has an entry for every day and on those days that the facility does not operate, a notation will be made to this effect when the next operation day readings are made
- Confirm 1 task for the three readings. One task, three readings

2.2.2. Fields

Field	Display Name	Type	Is Required	Validation	Notes
Pressure Drop #1	Pressure Drop Baghouse #1	Text Field	Yes	Whole Number	Inches
Pressure Drop #2	Pressure Drop Baghouse #2	Text Field	Yes	Whole Number	Inches
Pressure Drop #3	Pressure Drop Baghouse #3	Text Field	Yes	Whole Number	Inches

2.3. Annual Task.

2.3.1. General Questions

- What information is being captured for the baghouse inspection? Is it the same as all of the others? (Wasn't specified in Schedule C) Yes, let's use the information that we are using in the others. Don't need to have a "Baghouse Differential", since this is the same as pressure drop reading.
- Is any information captured for the pressure drop device calibration? Just a confirmation that it was performed? Just confirmation, unless a document verifying calibration is received, in which case it should be scanned and saved asa a PDF file.

2.3.2. Fields

Field	Display Name	Type	Is Required	Validation	Notes

2.4. Monthly Recordkeeping Task.

2.4.1. General Questions

- Should this task be started at the beginning of the month to allow the data to be entered as it occurs? Yes

2.4.2. Fields

- Dust Suppression Section - List

Field	Display Name	Type	Is Required	Validation	Notes
Date	Date	Date/Time	Yes	None	
Number of Treatments	Number of Treatments	Text Field	Yes	Whole Number	
Volume Applied	Dilution Ration Volume Applied	Text Field	Yes	Numeric	Units?Gallons

- Pile Dust Suppression Activity - List

Field	Display Name	Type	Is Required	Validation	Notes
Date	Date	Date/Time	Yes	None	
Dust Suppression Applied	Dust Suppression Applied	Text Field	Yes	None	What type of field is this?
Duration	Duration	Text Field	Yes	None	

- Rainfall Record - List

Field	Display Name	Type	Is Required	Validation	Notes
Date	Date	Date	Yes	None	
Rainfall	Rainfall	Text Field	Yes	None	What type of field is this?

- Below Freezing Record - List

Field	Display Name	Type	Is Required	Validation	Notes
Date	Date that max daily temp was below freezing	Date	Yes	None	
Comments	Comments	Text Area	No	None	

- Pavement Sweeping - List

Field	Display Name	Type	Is Required	Validation	Notes
Date	Date	Date/Time	Yes	None	
Comments	Comments	Text Area	No	None	

2.5. Quarterly Visual Observation and Facility Inspection

2.5.1. General

2.5.2. Fields (See 1.2 Above)

2.6. Annual Sampling

2.6.1. General

2.6.2. Fields (See 1.2 Above – if a document is uploaded)

2.7. Annual SW Training Reminder

2.7.1. General

- Is any information being captured, or is this a simple reminder? Upload a scanned copy of the trainng log.

2.7.2. Fields – None

2.8. Annual DMR Report Reminder

2.8.1. General

- Is any information being captured, or is this a simple reminder? Upload a scanned (or electronic) copy of the DMR

2.8.2. Fields - None

3. Emissions

- No emissions for the facility

4. Limits

- Confirm that the system should send sanity check threshold warnings when the emissions come within 80% of limit. The system should have the ability to calculate the total coal processed on a rolling 12-month basis. For any 12-month period that the amount exceeds 80%,a sanity check should be sent out indicating how much coal may be processed in the next month so as not to exceed the rolling 12-month limit.

Process	Material	Limit	Notes
Coal Processed	Coal	1.5 million tons per rolling 12 month period	

Exhibit 5
David Wilson Resume

DAVID S. WILSON, P.E., P.G.

Drexel University, M.S., Civil Engineering (1993)
University of Utah, B.S., Geological Engineering (1988)

SUMMARY OF EXPERIENCE

Mr. Wilson has more than eighteen years of experience in environmental and geotechnical engineering. He is a Professional Engineer, registered in Utah, Wyoming, Oklahoma and Kansas, and a Professional Geologist, registered in Utah. His technical areas of expertise include engineering and environmental geology, hydrogeology, geotechnical engineering, solid and hazardous waste management, and site remediation. He is experienced in site investigations, conceptual engineering, final engineering design, and remedial construction oversight. He has performed investigations, developed hydrogeologic and environmental interpretations, and designed remedial solutions for sites having contaminated sludges, debris, soil, surface water and ground water. His project work has included Remedial Investigations and Feasibility Studies for CERCLA sites, RCRA Facility Investigations and Corrective Measures Studies for RCRA facilities, underground storage tank sites (USTs)/Leaking USTs, and environmental audits, assessments, investigations, and engineering studies under a variety of other state and industry specific programs.

PROFESSIONAL EXPERIENCE

ERM-Rocky Mountain, Inc., Salt Lake City, Utah
(1994 - present)

As a Principal and manager of ERM's Salt Lake City, Utah office, Mr. Wilson has managed and directed a variety of environmental projects, including environmental assessments, hydrogeologic studies, remedial designs, and hazardous waste management plans. Representative clients and projects are listed below by category.

Facility Development and Infrastructure

List of Clients

Safety Kleen (Laidlaw)
BNSF Railroad
Williams Energy
Tooele County
Createrra (Sharon Steel Site)
Western Slope Refinery
OCI Wyoming
Conagra
Tri-State Energy
Mercer (Midvale Slag Site)
Bloomfield Refining Co.
Kennecott Copper
Colorado Electric Power
Alliant Techsystems

Representative Projects

- Provided due diligence, plan development and Soil Management oversight for redevelopment of OU1 of the Midvale Slag Superfund on behalf of the brownfield redeveloper.

- Prepared a Site Modification Plan for Redevelopment for the closed Sharon Steel Superfund site on behalf of the developer who acquired the property for brownfield redevelopment.

- Performed a "Needs Assessment" for the Tooele County Environmental Impact Board to assess the market place for disposal facilities handling low-level radioactive waste (LLRW) and naturally occurring radioactive materials (NORM).

- Designed a 20 acre wastewater treatment lagoon for a potassium mining company to provide aerobic and anaerobic treatment, and complete evaporation of the water without discharge.

- Provided forensic analysis of a failed pond liner for a Colorado electric power plant that was developing a claim against the designer/contractor of the pond.

- Managed the quality assurance program during closure construction activities for three hazardous waste cells at a commercial disposal facility in Utah.

- Prepared "basis of design," construction plans, and specifications for retrofit of two wastewater lagoons to meet minimum technology requirements at New Mexico petroleum refining company.

General Site Remediation

List of Clients

U.S. Army - Ft. Wingate
Daw Technologies
Teleflex Defense Systems
Village Cleaners
SLOC - Olympics 2002
Questar
BP
Occidental Chemical
Crysen Refinery
Boyden Medical
Campbell Soup
Union Pacific
Salt Lake City Corporation
O.C. Tanner
St. Gobain
Lennar (Country Square)
Pep Boys
Mark Miller Toyota
Chevron

Representative Projects

- Served as Project Coordinator for remediation of the Northwest Oil Drain on behalf of the Working Group responsible for cleanup under an AOC with EPA for removal of hydrocarbon affected sediment from the canal.
- Directed environmental assessments to determine the impacts at several oil & gas fields in Wyoming for development of remedial action plans and site restoration costs for a major natural gas development company.
- Performed geotechnical investigations, siting studies, and preliminary design for a solid/hazardous waste landfill under consideration for a former U.S. Army Base in New Mexico.
- Provided consulting services for removal of abandoned underground "oil/water separation tank" discovered during expansion of a Utah manufacturer's facilities.
- Provided site characterization and engineering services for remediation of ground water impacted by the release of 180,000 pounds of isobutyl alcohol at a chemical plant in Brazil.
- Performed enhanced bioremediation of petroleum contaminated soil at Utah manufacturer's facility using enzyme catalysts.
- Provided sampling/analysis and regulatory support during remediation of lead contaminated soil at an existing shooting range to be developed for the biathlon events during the 2002 Winter Olympic Games.

Remedial Design

List of Clients

Martin Marietta	Village Cleaners	Chevron U.S.A.
Valeo Refrigerants (Brazil)	Union Pacific	Lennar (Country Square)
U.S. Silica	Occidental Chemical	Western Slope Refining
Bloomfield Refinery	TRW	Watson Pharmaceutical
LDS Church	Conagra – Monford	BNSF Railroad - Gallop

Representative Projects

- Directed risk assessment and remedial alternatives evaluation for selection of a pump and treat remedy for source area remediation at an automotive part manufacturing plant

in São Paulo, Brazil; subsequently lead design of a recovery well and air stripper remediation system.

- Managed and designed a multi-layer protective cover for a chemical waste landfill; and designed an LNAPL recovery system for chemical plant in Brazil.

- Performed forensic evaluation of cap movement at a closed hazardous waste landfill for a Colorado aerospace manufacturer.

- Designed a sheet-pile retaining wall to protect a canal during excavation of hazardous sludge at a Utah refinery.

- Prepared solid waste disposal plan, including design of landfill, for solidified petroleum sludge at closed refinery in Colorado.

- Designed an in-situ remediation system for shallow ground water at a dry cleaning facility where perchloroethylene (PCE) had historically been released to the environment.

Site Characterization and Hydrogeologic Studies

List of Clients

Union Pacific
Hercules
Rhodia (Rhone Poulenc)
Columbia Gas
Parsons Behle & Latimer
Safeway Stores
Occidental Chemical
General Electric
Bountiful City Landfill
Linatex
Johnson Matthey
A&Z Produce
Northrop Grumman
Holme Roberts & Owens
U.S. Construction
Phillips 66
Air National Guard
Village Cleaners
Heber Creeper Village
Lennar (Country Square)
Inland Refining (Crysen)
Questar
Kennecott Copper
Nielson Construction
Honeywell

Representative Projects

- Conducted subsurface investigations at several Utah railroad yards to delineate presence of light non-aqueous phase liquid (LNAPL) plumes; and developed remedial solutions to recover free product and mitigate environmental impacts.

- Performed sampling of landfill compost for metals analysis to assess potential use of compost in reclamation at Utah mine tailings impoundment.

- Performed statistical analysis of ground water quality data for monitoring of closed RCRA impoundments at Delaware chemical plant.

- Reviewed existing ground water data to assess changes in water quality at former coal gasification facility in Utah.

- Provided hydrogeological and environmental interpretation for third party property owner located adjacent to a site undergoing an RI/FS.

Risk Assessments

List of Clients

Crysen Refinery
St. Gobain
Your Valet Cleaners
Hercules
Village Cleaners
Occidental Chemical
Marathon/Husky
Teleflex
TRW (Lucas Varity)
Questar

Representative Projects

- Directed an environmental assessment, site investigation, risk assessment, site management plan development, and decontamination/demolition of an aerospace, plating operation at a Utah facility.

- Conducted a site investigation and risk assessment, and developed a closure plan for two former refinery sludge lagoons at a Utah petroleum refinery.

- Performed quality assurance testing during decontamination of a former metals plating operation in Utah to ensure acceptable health-risk levels.

- Performed a human health risk assessment on behalf of a chemical plant in Brazil to validate a proposed plan to close a landfill in place beneath a multi-layer protective cover.

- Developed a human health risks assessment based on potential exposures to chlorinated solvents in shallow ground water associated with releases from a dry cleaning facility.

Environmental Assessments and Compliance Audits

List of Clients

Gates Rubber
Williams Field Services
Chrysler Motor
Windjet
Wasatch Recreation
Raytheon
Fischer Scientific
Northrop Grumman
Freeport Center
Diamond Rental
Safeway Foods
White Oak Mine
Kennecott Copper
Johnson Matthey
Intermountain Real Estate
Wasatch Property
Amoco Transmission
Meridian Laboratory
Union Pacific
Paracelsus Hospital
Autoliv
Salt Lake Organizing Committee - Olympics
Jordan Valley Hospital
Hercules
IMC Kalium (GSL Mineral)
Heber Creeper Village
Superior Ice
Boyer Company
U.S. Express Trucking
ITT Fluid Technologies
Diamond Rental
Safety-Kleen

Representative Projects

- Performed Phase I assessments and compliance audits at multiple rubber hose and belt manufacturing facilities in Brazil.
- Conducted Phase I and Phase II assessments at an existing warehouse facility to characterize baseline conditions before building occupancy by our client.
- Conducted environmental assessment of existing and proposed railroad and mining facilities to facilitate expansion of mine tailings facility for Utah mining company.
- Delineated wetlands associated with Utah hospital as part of an environmental assessment to facilitate a property transfer.
- Performed a Phase I Assessment and limited compliance audit at a coal mine operation in central Utah.

Environmental Permitting

List of Clients

Theratech Pharmaceuticals
Owens Corning
Montana Brands
Asarco
Questar
Firestone Building Products
Safety Kleen
ICI Explosives
Johnson Matthey
Cargill
Specialized Bicycle
Jetway
Alcoa (Alumax)
Southwire
Borden Foods
Air Liquide

Representative Projects

- Developed Storm Water Pollution Prevention (SWPP) Plan and Spill Prevention, Control, and Countermeasures (SPCC) Plan for dairy product manufacturer in Utah.
- Prepared audit checklists for a mining client to assist in the performance of internal audits, with particular emphasis on CERCLA continuous releases, Land Disposal Restrictions, and wetlands.
- Assisted Utah pharmaceuticals manufacturer with review of environmental permits relative to proposed facility expansion.
- Reviewed and updated closure plan for TSCA storage unit operated at a hazardous waste landfill located in Utah.
- Provided regulatory consultation to bring an insulation manufacturing plant into compliance with all environmental regulations, including storm water management, SPCC, air permits, and waste management.

ERM, Inc., Exton, Pennsylvania
(1988 - 1994)

Mr. Wilson served as a project manager, engineer and hydrogeologist on several projects for ERM, Inc. His experience included work on a variety of projects for industrial clients and regulated government agencies. He designed remedial systems for hazardous waste sites requiring stabilization, closure by capping, installation of slurry walls, placement of geosynthetic materials, removal of wastes, and recovery of contaminated ground water. Representative projects are listed below.

General Site Remediation

List of Clients

Amphenol Corporation
Amana Appliances
Allied Signal
Arco Chemical
AT&T
Union Carbide
Occidental Chemical
Hercules

Representative Projects

- Evaluated the hydrogeology for design of a shallow ground water interceptor trench at New York aerospace component manufacturer.
- Prepared subsurface investigation work plan to evaluate slurry wall and cap containment system for a western Pennsylvania site.
- Directed subsurface investigation, risk assessment, and development of remedies for a chemical plant in Brazil.
- Engineering design and construction observations services during installation of the slurry wall and cap system at an Iowa facility.
- Performed feasibility study for Pennsylvania Superfund site in which plastic recycling and capping were determined to be the most practical alternatives.
- Conducted a Feasibility Study for remediation of a New Jersey Superfund site in which capping alternatives were compared for in-place closure of a solid/hazardous waste landfill.

Remedial Design

List of Clients

Union Carbide	Occidental Chemical	Chrsyler Motors
Exxon	U.S. Navy	Mobile Oil
St. Judes Hospital	City of Indiana	Scott Paper
PNC Realty	Allied Signal	

Representative Projects

- Performed slope stability analysis for design of a landfill cap and gabion well system for a New Jersey landfill.
- Engineered closure for the RCRA units at a Delaware chemical manufacturing facility, including a mercury brine sludge impoundment, a drum storage area, and a carbon tetrachloride tank.
- Evaluated subsurface conditions and designed infiltration gallery system for New Jersey petroleum company.
- Managed conceptual design for removal of LNAPL from ground water at a Maryland petroleum company.
- Detailed design of a 20-foot-deep, 500-foot-long ground water recovery system to intercept and remove contaminated ground water at a Pennsylvania Superfund site.
- Designed landfill gas collection system for closed sanitary landfill in new Jersey.

Site Characterization and Hydrogeologic Studies

List of Clients

Occidental Chemical	Allied Signal	YMCA
Union Carbide	Rohman Has	Hazelton Nuclear Power Plant
Reichold Chemical		

Representative Projects

- Prepared work plan and performed geotechnical/geological engineering assessment for Virginia site in Karst terrain.
- Managed Task I, II, III of RCRA Corrective Action Program, including development of a site-wide soil and ground water investigation at Delaware site.
- Managed geotechnical/environmental assessment at Pennsylvania YMCA.
- Directed borehole logging and well installation at A Pennsylvania Power & Light plant that had released sulfuric acid to the ground water.
- Performed contaminant transport analysis in ground water for a Delaware Superfund site to complete a risk assessment and remedial alternatives evaluation.

ADDITIONAL EDUCATION

Hazardous Waste Operations, 40-hour training (29 CFR 1910.120(e)), May 1988.
Hazardous Waste Operations, 8-hour update (29 CFR 1910.120(e)), most recent May 2001.
Subsurface Investigation Methods, University of Wisconsin, 1990.
Designing with Geosynthetics, Geosynthetic Research Institute, 1988

PROFESSIONAL AFFILIATIONS, REGISTRATIONS, AND CERTIFICATIONS

Registered Professional Engineer (Utah, Wyoming, Oklahoma, Kansas)
Registered Professional Geologist (Utah)
Association of Engineering Geologists (AEG)
Utah Certified UST Consultant

PUBLICATIONS and PRESENTATIONS

"Performance Analysis of Remedial Action Alternatives for a Superfund Feasibility Study," 1991. Proceedings of the Twenty-Third Mid-Atlantic Industrial Waste Conference. Pittsburgh, Pennsylvania.

"Performance Analysis of Remedial Alternatives," 1991. Environmental Engineering, Proceedings of the 1991 Specialty Conference, American Society of Civil Engineers. Reno, Nevada.

"Design and Construction of an Interceptor Trench for Shallow Ground Water Recovery," 1992. Proceedings of the Twenty-Fourth Mid-Atlantic Industrial Waste Conference. Washington, D.C.

"Design, Construction, and Operation of an Interceptor Trench for Shallow Ground Water Remediation," 1993. Joint CSCE-ASCE National Conference on Environmental Engineering. Montreal, Canada.

"Introduction to Engineering Evaluation for Contaminated Sites," 1994. Northeastern University - Marcel Dekkar, New York, NY.

"Recovery System Design for Light Non-Aqueous Phase Liquid (LNAPL) at Chemical Plant in Brazil," 1997. Association of Engineering Geologist, 40th Annual Meeting, Portland, Oregon.

"Recovery System Design for Light Non-Aqueous Phase Liquid (LNAPL) at Chemical Plant in Brazil," 1997. The Geological Society of America, 1997 Annual Meeting. Salt Lake City, Utah.

"Mitigation of Environmental Liabilities at Brazilian Chemical Plant," 2000. Air & Waste Management Association, 2000 Annual Meeting. Salt Lake City, Utah

"Environmental Ethics," 2003. Utah Environmental Symposium, Salt Lake City, Utah

"Pilot and Full-Scale ISCO Program for TCE Plume Remediation in Multi-Layered Hydrogeolgic Environment," 2006. Battelle Conference – Remediation of Chlorinated and Recalcitrant Compounds, Monterey, California.

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