



State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Table with 2 columns: Representative Name, Title. Includes Priscilla Burton and Steve Demczak.

Inspection Report

Table with 2 columns: Field Name, Value. Includes Permit Number, Inspection Type, Date, Time, and Last Inspection.

Inspector: Priscilla Burton, Environmental Scientist III

Weather: overcast, windy 79 F

InspectionID Report Number: 639

Accepted by: whedberg
7/7/2005

Permittee:
Operator:
Site: SPECIAL PROJECT
Address:
County: OTHER
Permit Type:
Permit Status:

Table with 3 columns: Current Acreages, Mineral Ownership, Types of Operations. Includes checkboxes for various categories.

Report summary and status for pending enforcement actions, permit conditions, Division Orders, and amendments:

This site visit was conducted as a follow-up to the Division letter dated September 13, 2004 from Mary Ann Wright to Mr. Layne Ashton, Covol Engineered Fuels. The letter indicated that a Division inspection would be conducted prior to making a final determination concerning the appropriateness of SMCRA regulation of the site.

Inspector's Signature

Date Friday, June 17, 2005

Priscilla Burton, Environmental Scientist III
Inspector ID Number: 37

Note: This inspection report does not constitute an affidavit of compliance with the regulatory program of the Division of Oil, Gas and Mining.

REVIEW OF PERMIT, PERFORMANCE STANDARDS PERMIT CONDITION REQUIREMENTS

1. Substantiate the elements on this inspection by checking the appropriate performance standard.
 - a. For COMPLETE inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check Not Applicable.
 - b. For PARTIAL inspections check only the elements evaluated.
2. Document any noncompliance situation by reference the NOV issued at the appropriate performance standard listed below.
3. Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
4. Provide a brief status report for all pending enforcement actions, permit conditions, Divison Orders, and amendments.

	Evaluated	Not Applicable	Comment	Enforcement
1. Permits, Change, Transfer, Renewal, Sale	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Signs and Markers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Topsoil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.a Hydrologic Balance: Diversions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.b Hydrologic Balance: Sediment Ponds and Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.c Hydrologic Balance: Other Sediment Control Measures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.d Hydrologic Balance: Water Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.e Hydrologic Balance: Effluent Limitations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explosives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Disposal of Excess Spoil, Fills, Benches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Coal Mine Waste, Refuse Piles, Impoundments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Noncoal Waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection of Fish, Wildlife and Related Environmental Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Slides and Other Damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Contemporaneous Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Backfilling And Grading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Revegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Subsidence Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Cessation of Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.a Roads: Construction, Maintenance, Surfacing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.b Roads: Drainage Controls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Other Transportation Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Support Facilities, Utility Installations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS Check	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Air Quality Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
21. Bonding and Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1. Permits, Change, Transfer, Renewal, Sale

The office trailer on site identified the business as Terra Systems. Personnel on site were Jay Martin and Clayton Timothy, employees of Headwater Energy Services/ Covol Engineered Fuels, LC. Steve Demczak and I represented the Division.

In April 2005, Terra Systems stockpiled coal on a previously undeveloped site, located at 1865 South Ridge Road, within Wellington City limits. This area is zoned for industrial development. The site is adjacent to Miller Creek, a tributary of the Price River. (Antelope were noticed on site.)

A license for the trailer/office was obtained from Wellington City two years ago, but a construction license has not yet been issued for the remainder of the site. Topsoil was removed from beneath the coal stockpile and is being utilized to form a berm around a catch basin. Site promoters intend to obtain an MSHA permit for the existing stockpile.

The decision to permit the site should take these facts into consideration:

1. The site will process mine waste from permitted sites and may return waste from the process to the permitted mine disposal site.
2. The site will process coal from permitted sites returning the coal to the permitted site for blending.
3. Stockpiling and processing coal from several permitted coal mine sites occurred at Savage Coal Co., a site on Ridge Road that is regulated under SMCRA, by the Division. Although the processing facilities at Savage have been dismantled and currently the site is used for stockpiling and blending custom coal mixtures for various mine sites, the site is still under a SMCRA permit. Customers have included: White Oak, West Ridge, PacificCorp, Dugout, Emery, Genwal, and SUFCO.
4. Stockpiling and crushing coal from various coal mine sites occurs at Wildcat Loadout, a site on Gordon Creek Road that is regulated under SMCRA, by the Division. Although the site originally was associated only with Centennial Mine, current customers include: Horizon, Skyline, White Oak, and Centennial.
5. An unpermitted site along Ridge Road is the RailCo site is owned by Co-Op Mining Co. At this site coal is unloaded from trucks and loaded onto railroad cars. No processing occurs.

The percentage ownership of Covol, Headwaters, and Terra Systems in the venture should be obtained by the Division.

The Pacificcorp tolling-fee contract information needs to be acquired and reviewed. Mr. Keith Thompson of Headwater Energy Services indicated that the tolling-fee information would be forthcoming (phone conversation on June 10, 2005).

7. Coal Mine Waste, Refuse Piles, Impoundments

Currently 27,080 Tons of coal are stockpiled on site. The coal is from Pacificorp. This stockpile is 30' high and is being stored until permits are acquired from DEQ, Air Quality, to allow processing of the coal. Although the current coal stockpile is from a single source, during a phone call on Friday, June 10, 2005, Mr. Keith Thompson of Headwaters indicated that a second contract is currently being negotiated. He further indicated that information on the Pacificorp's "tolling fee" would be forthcoming.

The stockpiled coal will be processed to improve the Btu value. Processing will include grinding, sizing, and differential settling based on density. The end product will be returned to PacificCorp. The Air Quality Order (DAQE-IN2952003-05) allows expansion of the site to 20 acres with a 1.5 MT annual throughput.

The following information is a summary of our discussion with Jay Martin during the site visit.

- Terra Systems has purchased the conveyors and hoppers etc from the Banning site.
- The stockpile will reach 50 ' high during operations and cover 2 acres.
- The processing will entail grinding, sorting, sizing, and differential settling based on density.
- The process increases the Btu value of the coal by removing moisture and eliminating sources of ash and in so doing removes sulfates and mercury from the end product. For instance, the process can reduce ash from 30% to 8%.
- Waste from the process will be high in ash, mercury, and sulfate.
- The waste remaining from the existing stockpile will be either sold as road base or fill or returned to the PacifiCorp waste stockpile.
- The processed coal will be returned to PacifiCorp for blending.
- An agreement with Arch Coal is anticipated that would allow for the waste coal currently stored at the Dugout Waste Rock site to be processed by Terra Systems. Mr. Martin indicated that the agreement was not yet firm. The final disposition of waste from Terra Systems processing of Dugout mine waste was not discussed. The product (the processed waste) would be returned to Dugout for blending purposes.
- Terra Systems will handle each mine's coal separately, calibrating the process to the coal from each site.

20. Air Quality Permit

Plans currently being reviewed by DEQ are for a 20-acre disturbance with 1.5 MT throughput. The DEQ, Intent to Approve document (DAQE-IN2952003-05) is nearing the end of the 30-day public comment period.

22. Other

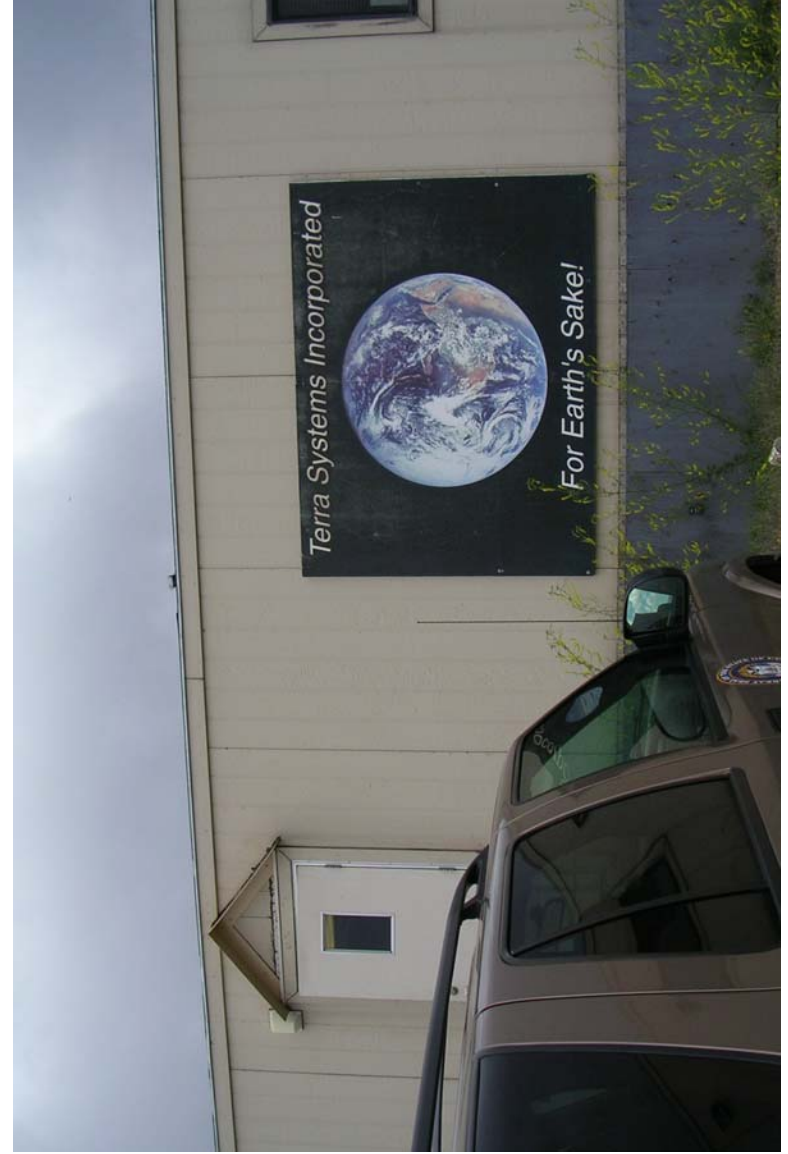
The Terra Systems site is separate and distinct from the former Covol syn-fuels site adjacent to RailCo. At this unpermitted site, the coal was treated with a lacquer to create a higher Btu product. Covol has since sold this site to Detroit Edison (DTE). Under current ownership it is generally thought that the coal is being crushed but not treated with the lacquer.

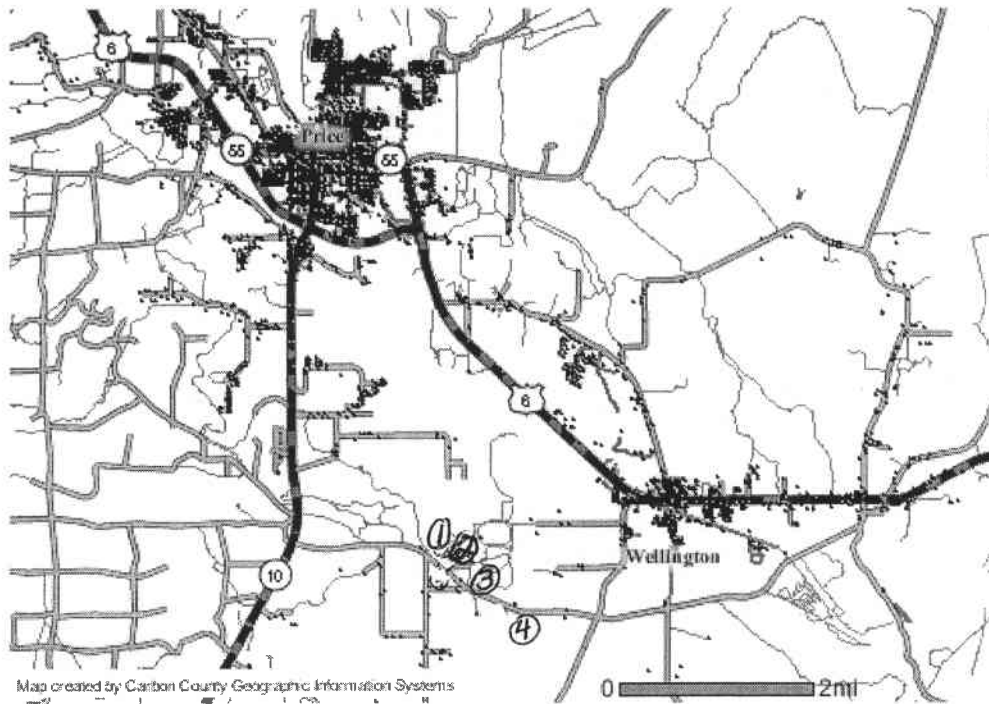


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- ① = Detroit Edison (formerly Covol Synfuels)
- ② = CO-OP Rail Co.
- ③ = Sewage (formerly CV Spur)
- ④ = Terra Systems (Covol/Headwaters) - - 5 miles southeast of Price. 4 miles south on Hwy 10. east on Ridge Rd. 2.75 miles. Terra Systems (Covol/Head);
is south of ridge road at UTM coordinates North 4374758
East 520098

HEADWATERS

ENERGY SERVICES

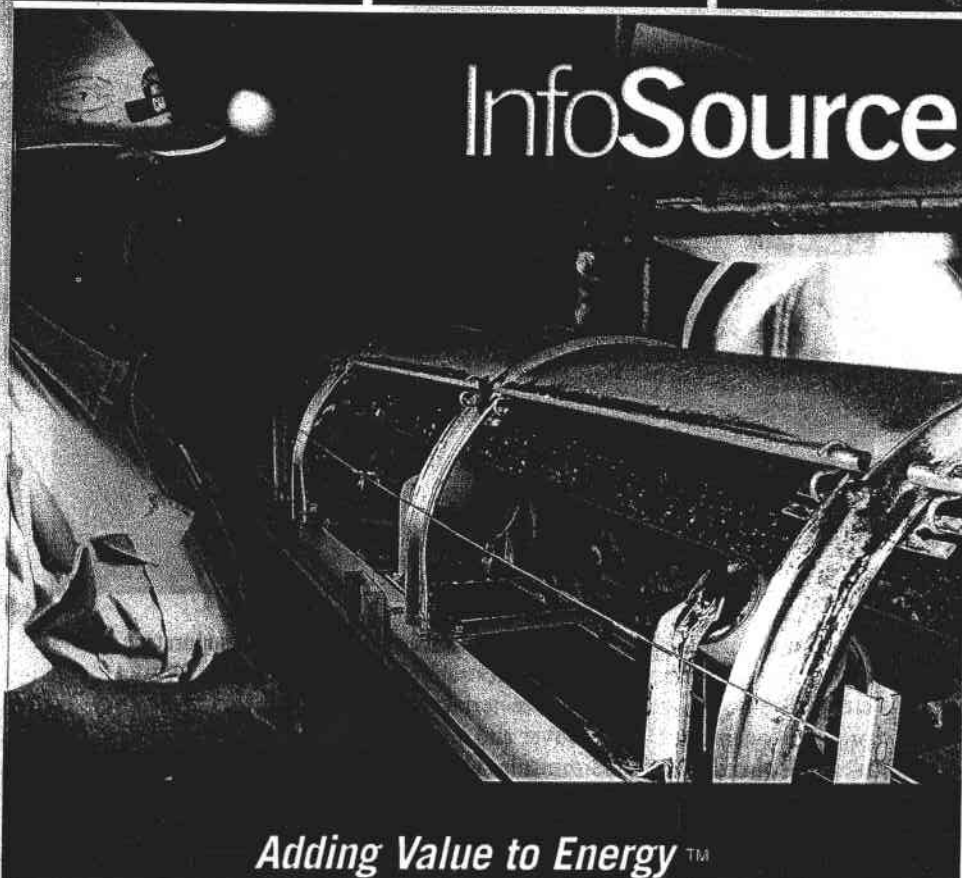
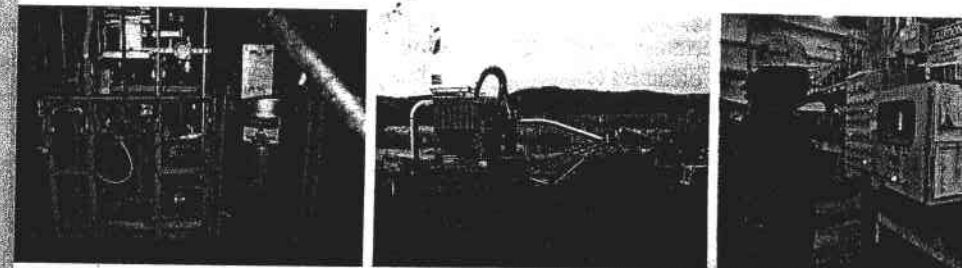
HEADWATERS

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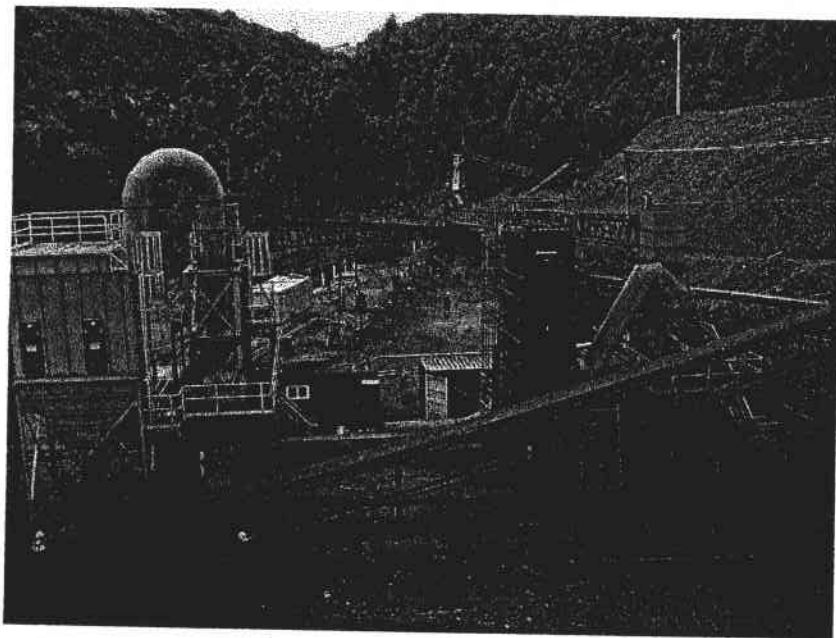


Adding Value to Energy™

Covol Dry Coal Cleaning - A low cost technology to remove unwanted ash, sulfur, and mercury from coal without adding moisture

It is estimated that there are approximately 100 million tons of new, unmarketable high ash waste coal generated annually. This is a valuable resource that is not only being wasted, but also presents an environmental liability. Now is the time to look to our future by using our resources with the greatest possible efficiency while reducing the impact to our environment, both in terms of emissions and waste pile generation.

Headwaters Energy Services, a subsidiary of Headwaters Incorporated has developed a proprietary method for upgrading coal that improves upon existing dry coal cleaning technologies. This technology produces cleaner, more consistent coal fuel, which reduces the amount of new waste coal generated annually, reduces undesirable pollutants such as sulfur and mercury, improves the heating value of the fuel, increases the use of natural resources, and improves the fuel combustion characteristics.



Dry coal cleaning has a number of benefits over typical wet separation technologies which make it more desirable in key applications. While alternative wet processes reject material smaller than ¼ inch, Covol's dry process system is able to recover and upgrade this fine-size material. Dry cleaning also does not add moisture to the fuel; in most cases it reduces existing moisture. These factors provide an economical recovery of marketable coal superior to wet processes.

In most coals, Headwaters' dry cleaning system will reduce sulfur and mercury levels. Cleaning can provide substantial reductions in sulfur and reduce the fuel cost for generating electricity due to the value of SO₂ allowances in the cap and trade program. Trends in emissions regulation indicate the likelihood of a cap and trade program for mercury being put in place in the near future. Coal cleaning may prove to be an effective and economical method for achieving mandated mercury reduction levels in many coals

Dry Coal Cleaning Technology highlights include:

- Increased Btu because water is not added, and in some cases, is removed by the process;
- Cleaning without generation of slurry ponds;
- Improved end user performance due to the elimination of rock and other ash-forming materials; and
- Reduced sulfur and mercury levels in the product.

Headwaters Energy Services is meeting with interested parties to present additional information on the technology and review the opportunities. Detailed disclosure of information and data can be provided under confidentiality agreements. In general, Headwaters Energy Services will build, own, and operate coal cleaning facilities in areas where the opportunity exists to process marginal quality fuel and produce an upgraded coal-based fuel.

Headwaters Incorporated provides technologies and services that maximize the value of fossil fuels while creating new and sustainable energy technologies for the future.

For more information, please contact:

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