0018

Document Information Form

Mine Number: C/007/022

File Name: Incoming

To: DOGM

From:

Person N/A

Company N/A

Date Sent: April 18, 1983

Explanation:

NEW TRUCK DUMP AND RAW COAL HANDLING SYSTEM

cc:

File in:
C/007/022, 1983 Incoming
Refer to:
- ☐ **Confidential**
- ☐ **Shelf**
- ☐ **Expandable**

Date _____ For additional information

0018

ACT/007/022

#3

NEW TRUCK DUMP

and

RAW COAL HANDLING SYSTEM

The new truck dump and raw coal handling system was constructed to handle the Trail Mountain coal for shipment to Nevada Power Company.

The construction contract was let on 7/22/80, construction started in October, 1980, and the system was completed in March, 1981. Roberts and Schaefer, Inc. (Salt Lake City) was responsible for all design and construction of the facility.

The construction was performed under approval from the State of Utah Bureau of Air Quality and the Office of Surface Mining. Since OSM had attached a stipulation (#6) to the Huntington Canyon No. 4 Mine Plan approval which prevented construction at CV Spur, it was necessary to obtain their concurrence on our plans. We had been advised that if we placed a complete M&R Plan for CV Spur on Mr. John Hardaway's desk, this approval would be granted. (It should be noted here that there was at this time, pending litigation in Federal Court that questioned the authority of Surface Mining Agencies on remote processing plants such as CV Spur.) The plan was given to OSM as well as the State of Utah DOGM on August 8, 1980. Prior to that submittal, ARCO Coal had applied to the Utah Division of Health (Air Quality) for an approval to construct (7/17/80). This approval was issued on 8/21/80. The OSM also issued a "no objection" letter on 8/18/80, with a stipulation for air monitoring. ARCO's acceptance of this stipulation was issued on 8/25/80. Copies of all the above referenced letters, as well as some interagency correspondence are attached.

to Air Qual

The design and construction details for the facility are also enclosed, along with a location map.

No topsoil was salvaged from this area prior to construction, since the area was located within land poor disturbed by the original raw and clean coal storage and the original refuse road as well as an area with soil FAIR unsuitable for salvage. KmB fair 80% var 20% suitable: 6" ChC fair/poor 80% fair 10% var 10% :6" Sa poor 90% var 10% :0 Table 16

Borrow material for the construction of the truck dump was taken from a State of Utah-owned pit located on "Four Mile Hill" approximately one mile northwest of CV Spur. Arrangements for the use of this pit were made through Mr. Albert Spensko, DOT District Four, in Price and the payment was made to the State Land Board in Salt Lake City.

Plans for the operation and reclamation of this facility are also enclosed with this submittal.

File in:
- Confidential
- Shelf
- Expandable

Refer to Record No 0018 Date 4-18-83
In C/007/022, 1983 Incoming
For additional information

RECEIVED
APR 18 1983
DIVISION OF
OIL, GAS & MINING

Scott M. Matheson
Governor

STATE OF UTAH
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110

RECEIVED
JUL 21 1980
COAL OPERATIONS

Alvin E. Rickers, Director
Room 426 801-533-6121

James O. Mason, M.D., Dr.P.H.
Executive Director
801-533-6111

DIVISIONS
Community Health Services
Environmental Health
Family Health Services
Health Care Financing and Standards

OFFICES
Administrative Services
Health Planning and Policy Development
Medical Examiner
State Health Laboratory

533-6108

July 16, 1980

Honorable Board of County Commissioners
Carbon County Courthouse
Price, UT 84501

Gentlemen:

Attached for your information is a notice of public comment period which was published by the Executive Secretary, Utah Air Conservation Committee, in the Salt Lake Tribune and Deseret News on Friday, July 18, 2980.

Sincerely,

Brent C. Bradford
Executive Secretary
Utah Air Conservation Committee

jl

Attachment

cc: Southeastern District Health Dept.
EPA/Region VIII
ARCO Coal Company

An Equal Opportunity Employer

Scott M. Matheson
Governor

STATE OF UT
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110

CC: CENTRAL FILES

James O. Mason, M.D., Dr.P.H.
Executive Director
801-533-6111

DIVISIONS
Community Health Services
Environmental Health
Family Health Services
Health Care Financing and Standards

OFFICES
Administrative Services
Health Planning and Policy Development
Medical Examiner
State Health Laboratory

Alvin E. Rickers, Director
Room 426 801-533-6121

533-6108
July 17, 1980

RECEIVED
JUL 24 1980
COAL OPERATIONS

John Hardaway
Office of Surface Mining
Brooks Towers - 2nd Floor
1020 15th Street
Denver, Colorado 80202

Re: Beaver Creek Coal Co.-ARCO Coal Co. proposed new coal handling facilities at C.V. Spur Plant in Carbon Co.

Dear Mr. Hardaway:

Enclosed is our notification to ARCO, the owner/operator of the coal handling facilities at the C.V. Spur coal preparation plant in Carbon County, State of Utah, that we intend to approve their proposed new construction, which will reduce particulate air pollution emissions by approximately 80 tons/year. The required 30 day public comment period will end on August 17, 1980. If no adverse comments are received, construction could begin on/about August 18. It is our desire that it begin as soon as possible after that date.

Sincerely,

Brent C. Bradford
Executive Secretary
Utah Air Conservation Committee

MRK:job

Enclosure

Scott M. Matheson
Governor

STATE OF UTAH
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110

CC: CENTRAL FILES

James O. Mason, M.D., Dr.P.H.
Executive Director
801-533-6111

DIVISIONS
Community Health Services
Environmental Health
Family Health Services
Health Care Financing and Standards

OFFICES
Administrative Services
Health Planning and Policy Development
Medical Examiner
State Health Laboratory

Alvin E. Rickers, Director
Room 426 801-533-6121

533-6108
July 17, 1980

RECEIVED
JUL 23 1980
COAL OPERATIONS

Jeffrey A. Holligan
Coordinator - Permits and Compliance
ARCO Coal Company
P.O. Box 5300
Denver, Colorado 80217

Re: Air Quality Intent to Approve Coal Handling Operations at C.V. Spur (Carbon County).

Dear Mr. Holligan:

Plans and specifications for your proposal to construct additional coal handling operations at the C.V. Spur Coal preparation plant in Carbon County have been evaluated and have been found to be consistent with the requirements of the Utah Air Conservation Regulations and the Utah Air Conservation Act. Since the proposal would reduce annual TSP emissions by approximately 80 tons, you will not require a PSD review from EPA.

The Executive Secretary will publish notice of intent to issue an approval order in the Salt Lake Tribune and Deseret News on July 18, 1980.

A thirty-day period following the publishing date will be allowed during which your proposal and the Executive Secretary's evaluation of the impact on air quality will be available for review and comment. If within 15 days of publication of notice anyone so requests, a hearing will be held. Any comments received must be evaluated and a final determination will be made by the Executive Secretary.

You may not proceed with any of the proposed construction/modification or installation of the air pollution sources or control facilities until you have received an approval from the Executive Secretary. The proposed conditions upon which the approval will be given are:

1. The coal handling operation shall consist of an enclosed truck hopper discharge feeder, stacking tube conveyor, stacking tube with window dust flaps, enclosed reclaim feeders, and an extension to the existing reclaim conveyor.

An Equal Opportunity Employer

2. The operation shall include a dust suppression water spray system with spray heads at each coal transfer point and be used as dry conditions warrant.

3. Spray system shall be maintained in good operating condition, including the optimum positioning of each set of sprays for effective wetting.

4. Stacking conveyor skirt boards shall be properly positioned when transferring coal and to be replaced as necessary.

5. Stacking tube dust flaps shall be replaced as needed.

6. Any unpaved sections of the coal truck unloading loop road shall be sprinkled or otherwise surface treated as dry conditions warrant or as deemed necessary by the Executive Secretary to minimize fugitive dusts. A record/log of sprinkling (days and amounts) shall be maintained and be available to the Executive Secretary upon demand.

7. Visible emissions from any point source shall not exceed 20% opacity.

Sincerely,

Brent C. Bradford
Executive Secretary
Utah Air Conservation

CAN:job

cc: Southeastern District Health Dept.
EPA/Region VIII (N. Huey)
Office of Surface Mining/Denver

ARCO Coal Company
Permits and Compliance Group
555 Seventeenth Street
Mailing Address: Box 5300
Denver, Colorado 80217
Telephone 303 575 7500

August 8, 1980

Mr. Donald A. Crane
Director, Region V
Office of Surface Mining
2nd Floor, Brooks Towers
1020-15th Street
Denver, Colorado 80202

Dear Mr. Crane:

Enclosed please find Beaver Creek Coal Company's Mining and Reclamation Plan for its C.V. Spur Coal Preparation and Loadout Facility located in Carbon County, Utah.

This Mining and Reclamation Plan is being filed in compliance with the Utah Coal Mining and Reclamation Regulations, Permanent Program and the Federal Surface Mining Control and Reclamation Act of 1977, Permanent Regulatory Program.

The document is being filed at this time in order to obtain construction approval for a new Truck Dump and Stacking Tube Facilities at C.V. Spur.

A formal submission of the C.V. Spur Mining and Reclamation Plan to both the Office of Surface Mining and the State of Utah, Division of Oil, Gas, and Mining will be made within two weeks of the date of this submission. At that time, a copy of the document will be placed on display in the Carbon County courthouse and a newspaper advertisement run in Price, Utah.

With submission of this document, Beaver Creek Coal Company, a wholly owned subsidiary of Atlantic Richfield Company, does not, and does not intend to waive or forego any of the legal or administrative rights or remedies available to it to contest OSM's jurisdiction of such facility (C.V. Spur) under the interim program or to in any way abandon the pursuit of its appeal of that Notice of Violation #N79-5-529 (N500446) issued September 20, 1979, for allegedly operating without an approved mining permit.

Sincerely yours,

J. A. Holligan

J. A. Holligan
Coordinator
Permits and Compliance

JAH:an
Enclosures

CC: CENTRAL FILE

United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

OFFICE OF THE REGIONAL DIRECTOR

RECEIVED
AUG 20 1980
PERMITS & COMPLIANCE

AUG 18 1980

Mr. Brent C. Bradford
Executive Secretary
Utah Air Conservation Committee
Department of Health
Division of Environmental Health
150 West North Temple
P. O. Box 2500
Salt Lake City, Utah 84110

Dear Mr. Bradford:

Since receiving your letter of July 17, 1980, we met with ARCO Coal Company regarding the C.V. Spur and obtained a partial submission of a plan for the operation of the coal processing and loadout facility. On August 8 we received a copy of the application to your Bureau for the proposed extensions to the truck dump, coal storage and reclaim system. In view of the fact that the proposed facilities enhance pollution controls for the track dump and coal surge piles, we have no objection to their installation provided ARCO agrees to the following:

> The operator of the C.V. Spur shall install, maintain, operate and report total suspended particulate data for a representative period at locations upwind and downwind of the coal surge pile. The type of data and length of record shall be agreed to by the regulatory authority. The data shall be used to indicate whether additional controls are required to protect environmental values.

We would require evidence of acceptance of this stipulation in order to find the proposed operation to be approvable.

Sincerely,

DONALD A. CRANE

cc: Jeffery A. Holligan, ARCO
Ron Daniels, Dept. of Natural Resources, SLC

Scott M. Matheson
Governor

James O. Mason, M.D., Dr.P.H.
Executive Director
801-533-6111

DIVISIONS
Community Health Services
Environmental Health
Family Health Services
Health Care Financing and Standards

OFFICES
Administrative Services
Health Planning and Policy Development
Medical Examiner
State Health Laboratory

STATE OF UTAH
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110

Alvin E. Rickers, Director
Room 426 801-533-6121

533-6108
August 21, 1980

RECEIVED
AUG 25 1980
PERMITS & COMPLIANCE

Jeffrey A. Holligan
Coordinator - Permits and Compliance
ARCO Coal Company
P.O. Box 5300
Denver CO 80217

Re: Air Quality Approval Order for Coal Handling Facilities in Carbon County

Dear Mr. Holligan:

On July 18, 1980 the Executive Secretary published a notice of intent to approve your proposed coal handling facilities. The 30-day public comment period expired August 17, 1980 and no comments were received.

This air quality approval order authorizes the construction and operation of the coal handling facilities at your C.V. Spur coal preparation plant in Carbon County as proposed in your notice of intent dated June 10, 1980, with the following conditions:

1. The coal handling operation shall consist of an enclosed truck hopper discharge feeder, stacking tube conveyor, stacking tube with window dust flaps, enclosed reclaim feeders, and an extension to the existing reclaim conveyor.

2. The operation shall include a dust suppression water spray system with spray heads at each coal transfer point and be used as dry conditions warrant or as determined necessary by the Executive Secretary.

3. Spray system shall be maintained in good operating condition, including the optimum positioning of each set of sprays for effective wetting.

4. Stacking conveyor skirt boards shall be properly positioned when transferring coal and to be replaced as necessary.

5. Stacking tube dust flaps shall be replaced as needed.

6. Any unpaved sections of the coal truck unloading loop road shall be sprinkled or otherwise surface treated as dry conditions warrant or as determined necessary by the Executive Secretary to minimize fugitive dusts. A record/log of sprinkling (days and amounts) shall be maintained and be available to the Executive Secretary upon request.

7. Visible emissions from any point source shall not exceed 20% opacity.

8. An initial compliance inspection shall be required. Notify us when your installation/construction is initiated and 30 days prior to completion (ph. 533-6108) so an inspection can be performed.

Sincerely,

for Burnell Cordner
Brent C. Bradford
Executive Secretary
Utah Air Conservation Committee

LCB:job

cc: Southeastern District Health Dept.
EPA/Region VIII (N. Huey)
Office of Surface Mining/Denver

ARCO Coal Company
Permits and Compliance Group
555 Seventeenth Street
Mailing Address: Box 5300
Denver, Colorado 80217
Telephone 303 575 7500

August 25, 1980

Mr. Donald A. Crane
Regional Director
Office of Surface Mining
Brooks Towers
1020 15th Street
Denver, Colorado 80202

Dear Mr. Crane:

This letter is in response to the stipulation for air quality monitoring described in your letter of August 18, 1980, to Mr. Brent C. Bradford with the Utah Air Conservation Committee. The stipulation was in regard to the C. V. Spur coal processing and loadout facility owned by Beaver Creek Coal Company, a Subsidiary of Atlantic Richfield Company, located near Price, Utah.

In the spirit of environmental responsibility, it is the intention of Beaver Creek Coal Company to install, maintain, and operate a small air monitoring network for total suspended particulate matter (TSP) for a limited period of time following the completion of new construction. The rational for the monitoring is to provide the company with data with which to evaluate the effectiveness of the installation of extensions to the truck dump, coal storage and reclaim system in controlling fugitive dust. Beaver Creek Coal Company desires to secure particulate data for its in-house use; however, we are willing to report our findings to the Utah Air Conservation Committee even though they did not require monitoring in their approval of the air permit to construct the proposed facilities.

This commitment to conduct air monitoring in no way should be construed as recognition on our part of any authority on the part of OSM to require air monitoring. On the contrary, it is our understanding in light of the recent suspension of Sections 816.95 and 817.95 of the Permanent Regulatory Program (30 CFR), that OSM does not currently have the authority to require air monitoring.

The proposed monitoring network will consist of two (2) high-volume air samples which will collect 24-hour samples of total suspended particulate matter. Sampling will be conducted every sixth day following the national TSP monitoring schedule for a period of four (4) months following the completion of construction

on the new truck dump, coal storage and reclaim system. The samplers will be positioned so that one will be located upwind and the other downwind of the coal surge pile.

This letter should provide the requested evidence of a commitment to perform air monitoring at the C. V. Spur. Based on discussions held between Mr. John Hardaway of your office and Mr. Jeff Holligan of ARCO Coal Company, it is our understanding that we will be able to commence construction on the proposed facilities upon OSM concurrence with the Beaver Creek Coal Company acceptance of air monitoring.

Should you have any questions regarding this matter, please contact Mr. Jeffery A. Holligan (303-575-7524) or Mr. Jim Ives (303-575-7504).

Sincerely,

Benjamin Costello III
Manager
Permits and Compliance
ARCO Coal Company

on behalf of Beaver Creek Coal Company

BC/egp

Scott M. Matheson
Governor

STATE OF UTAH
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
150 West North Temple, P.O. Box 2500, Salt Lake City, Utah 84110

James O. Mason, M.D., Dr.P.H.
Executive Director
801-533-6111

DIVISIONS
Community Health Services
Environmental Health
Family Health Services
Health Care Financing and Standards

OFFICES
Administrative Services
Health Planning and Policy Development
Medical Examiner
State Health Laboratory

Alvin E. Rickers, Director
Room 426 801-533-6121

533-6108

September 26, 1980

RECEIVED
OCT 2 1980
PERMITS & COMPLIANCE

Donald A. Crane
Office of Surface Mining
Reclamation and Enforcement
Brooks Towers
1020 - 15th Street
Denver, CO 80202

Re: Air Monitoring Requirement for ARCO Coal Company CV Spur (Your Letter Dated 8/16/80 and ARCO's Letter to You Dated 8/25/80)

Dear Mr. Crane:

We do not understand and seriously question your stipulation basing your approval of ARCO Coal Company's modification of their CV Spur operation upon a company acceptance of an air monitoring requirement. As far as we are concerned, the requirement is not justified. We cite as our reason for questioning, the following:

1. The proposed modification of facilities will result in an estimated 80 tons of particulate per year decrease.

2. Our engineering/air quality impact review considered the need for monitoring, as we do in each review. Monitoring was not deemed necessary because of the reduction of emissions, the size of the modification proposal (classed as a minor source), and the availability of meteorological and ambient air data considered representative of the area.

3. Computer modeling results of proposed emissions showed no exceedance of any particulate ambient concentration standard.

4. The rationale for the requirement is unclear, i.e., "...to indicate whether additional controls are required to protect environmental values." If monitoring is necessary, it normally is conducted prior to construction/modification to assess the current situation. With that information, the amount of control to be required to meet ambient air standards is then planned for. To wait until after modifications are made results in retrofit controls which are usually costly.

5. The required monitoring is inconsistant with the requirements of the Clean Air Act and Federal Regulations dealing with Prevention of Significant Deterioration of Air Quality.

An Equal Opportunity Employer

We would appreciate knowing why you did require the monitoring in the ARCO case. What air quality agency was contacted? This is important since it appears we will be working with your office on future, similar type projects, at least until the local Oil, Gas and Mining Division has primacy in these type matters.

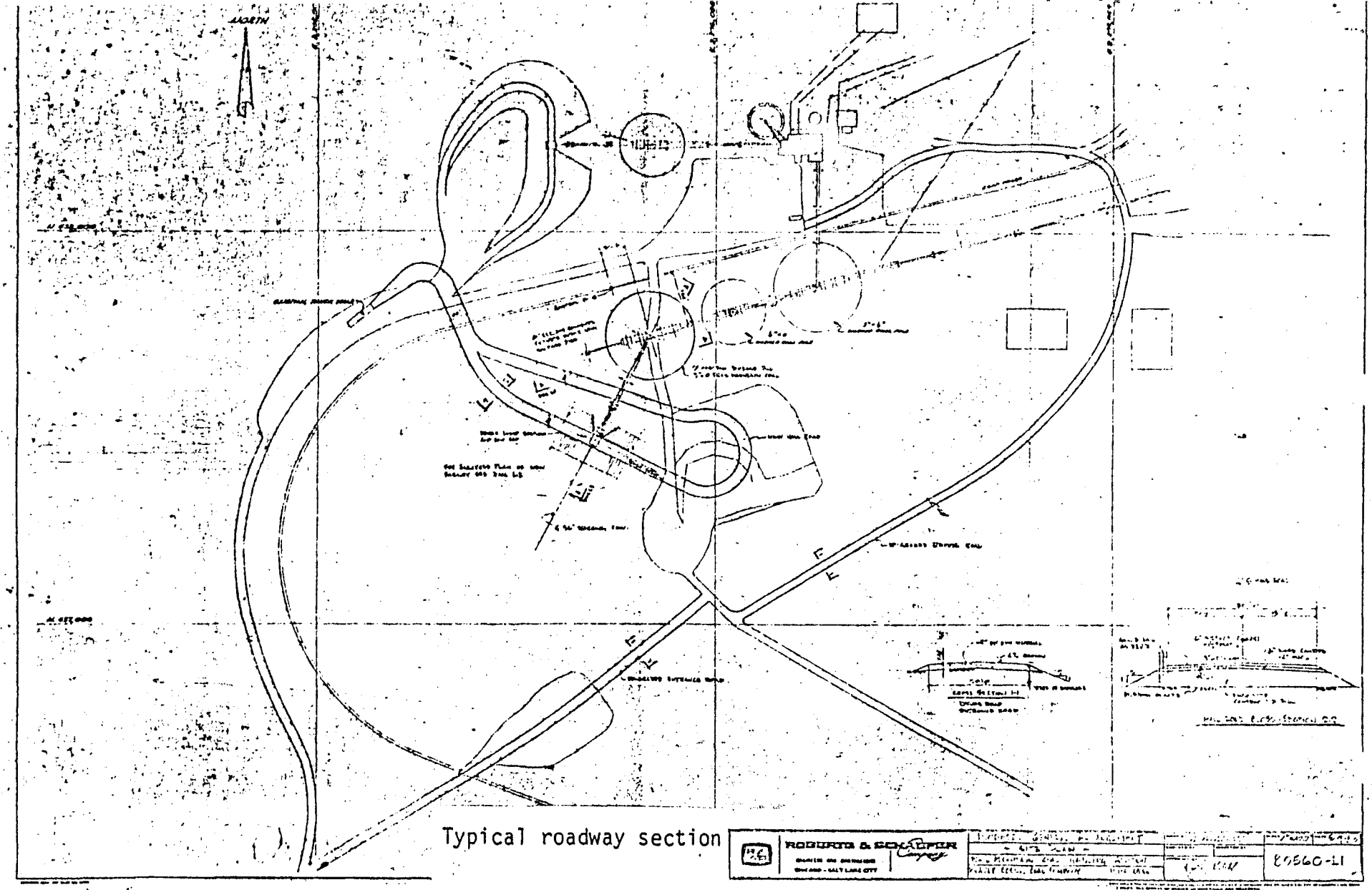
Since ARCO (Beaver Creek Coal Company) has agreed to do the monitoring, you have evidence of acceptance of your stipulation. Concerning the special purpose monitoring effort, we will address several desirable monitoring plan conditions directly to ARCO, which if followed will help to insure the acceptability and useability of the gathered data.

Sincerely,

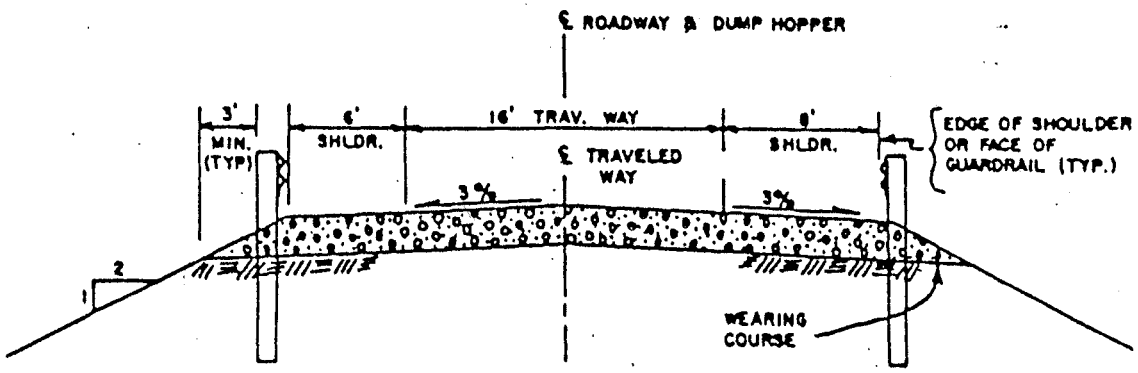
Brent C. Bradford
Executive Secretary
Utah Air Conservation Committee

MRK:il

cc: Utah Division of Oil, Gas & Mining (J. Smith)
ARCO Coal Company (J. A. Holligan)
Southeastern District Health Dept.
EPA/Region VIII (N. Huey)



Typical roadway section



3.0 Equipment and Construction Details.

3.1 One truck dump heavy steel reinforced plate hopper having a capacity of 60 tons of 2" x 0 coal and designed for 50 pound per cubic foot weight (volume) and a 60 pound weight (loading). The pocket liner plates will be 3/16"A.R. and will weigh 4600 pounds.

3.2 One 48" McNally standard reciprocating feeder with reducer and drive matching an existing unit, having a capacity of 600 tph and 20 Hp, 1750 RPM motor. Note: Unless McNally improves its delivery of the feeder a unit equal in all features manufactured by Kanawha is proposed.

3.3 An Eriez model 7630 tramp iron magnet having a 10K41, or equal, rectifier will be furnished. It will have magnetic strength to remove a 1" iron cube from 2" x 0 coal on a conveyor having a speed of 465 feet per minute. It will operate at ambient temperatures of -20°F to +100°F, and an altitude of 5550'.

3.4 A heavy duty plain trolley of 7500 pound capacity having steel axles, equalizing pins and chilled wheels for holding the magnet, Section 3.3.

3.5 An Eriez Model ST-8, or equal, electromagnet having a capacity of 1000 pounds for holding the trolley, Section 3.4, and the tramp iron magnet in position during non-interrupted power supply.

3.6 A Foote-Jones Model 80 DHC, or equal, 1000 pound capacity mechanical winch with a 30:1 reduction, and drive motor rated for 4 Hp capacity of 1000 pounds for positioning the trolley. Section 3.4.

3.7 A stacking tube conveyor having a 36" belt and capacity to convey 2" x 0 coal weighing 50#/cf at a belt speed of 465 fpm at a rate of 600 tph. The conveyor will be driven by an existing 100 hp motor, direct coupled to the Jeffrey Model 1103-HLE parallel shaft reducer presently installed on the existing reclaim conveyor.

3.7.1 The drive pulley will be a Dodge 38"dia. x 42"crown face complete with Dodge K50 taper-lock hubs, 4-15/16" diameter x 84" steel shaft having 4 keys and 1/2" vulcanized rubber lagging with herringbone surface and SKF, or equal, spherical roller bearing pillow blocks.

3.7.2 One snub and one bend pulley, Dodge 20" dia. x 42" face complete with 1/2" thick vulcanized rubber lagging, Dodge K35 taper-lock hubs 3-7/16" dia. x 60" steel shaft, and SKF, or equal, spherical bearing pillow blocks.

3.7.3 One Dodge 20" dia. x 42" crown face gravity take-up pulley complete with Dodge K40 taper-lock hubs, 3-15/16" dia. x 65" steel shaft and SKF, or equal, spherical roller bearing pillow blocks.

3.7.4 A Dodge 20" dia. x 42"crown face tail pulley having Dodge K35 taper-lock hubs, 3-7/16" dia. x 64" steel shaft, and SKF, or equal, spherical roller bearing pillow blocks.

3.7.5 A gravity take-up assembly having a 10' vertical travel, double flanged guide rolls, approximately 7200# of concrete counterweight, and an MSHA approved safety stop.

3.7.6 A track mounted, or equal, belt cleaner with radial ratchet tensioner and overlapping blades for installation at the drive pulley and a return "V" type belt plow adjacent to the tail pulley.

3.7.7 The following Hewitt-Robins 2000 series, 36" conveyor idlers:

Two	20° troughing, model 2502
Five	35° impact, model 2553,
Three	35° aligning, model 2423,
Seventy six	35° troughing, model 2403
Thirty	flat return rolls, model 3660HD
Three	flat return aligning, model 3630 HD.

3.7.8 Approximately 730 lineal feet of 36" B. F. Goodrich conveyor belt having 3 ply flexseal fabric, 3/16" top rubber cover without breaker strip, 1/16" bottom rubber cover, RMA Grade II. The belt will be vulcanized endless in the field.

3.7.9 The conveyor discharge chute at the stacking tube will be fabricated of structural steel and plate. It will have approximately 800 pounds of 3/8" A.R. liner plate and will be provided with chute plugged switch.

3.8 One 14' I.D. x 80' high reinforced concrete stacking tube arranged with 22 discharge openings sized 4' x 4', steel framed, and reinforced rubber covered. A total of 100 yards of concrete will be placed for the tube and its footings.

3.9 The existing reclaim tunnel will be extended nominally 182' to provide for the new stacking tube and coal storage reclaim. The extended reclaim tunnel will physically duplicate the existing tunnel. It will have a reinforced concrete section serving as the foundation for the stacking tube and galvanized corrugated structural steel culvert sections, with all exterior surfaces bitumastic coated. The tunnel will be provided with five reclaim hoppers. These hoppers will be sized and supported as shown on drawing 80560-L4. The throat opening of the hoppers will be rectangular shaped and will be reinforced concrete. The hoppers will be a heavy reinforced structural steel and 1/2" plate weldments having 1/2"A.R. plate liners. The hoppers will be provided with 1/4" reinforced steel platework skirts, having 1/2" A.R. liners, for feeding five FMC Syntron XPMF-200B 42" x 96" reclaim vibrating feeders that reclaim coal and deliver to the extended reclaim conveyor. A cut-off gate will be provided in the skirtwork to each feeder. Skirts to contain coal discharging onto the extended reclaim conveyor will be 1/4" reinforced steel platework with 1/2" A.R. liners.

3.7.1 The drive pulley will be a Dodge 38"dia. x 42"crown face complete with Dodge K50 taper-lock hubs, 4-15/16" diameter x 84" steel shaft having 4 keys and 1/2" vulcanized rubber lagging with herringbone surface and SKF, or equal, spherical roller bearing pillow blocks.

3.7.2 One snub and one bend pulley, Dodge 20" dia. x 42" face complete with 1/2" thick vulcanized rubber lagging, Dodge K35 taper-lock hubs 3-7/16" dia. x 60" steel shaft, and SKF, or equal, spherical bearing pillow blocks.

3.7.3 One Dodge 20" dia. x 42" crown face gravity take-up pulley complete with Dodge K40 taper-lock hubs, 3-15/16" dia. x 65" steel shaft and SKR, or equal, spherical roller bearing pillow blocks.

3.7.4 A Dodge 20" dia. x 42"crown face tail pulley having Dodge K35 taper-lock hubs, 3-7/16" dia. x 64" steel shaft, and SKF, or equal, spherical roller bearing pillow blocks.

3.7.5 A gravity take-up assembly having a 10' vertical travel, double flanged guide rolls, approximately 7200# of concrete counterweight, and an OSHA approved safety stop.

3.7.6 A track mounted, or equal, belt cleaner with radial ratchet tensioner and overlapping blades for installation at the drive pulley and a return "V" type belt plow adjacent to the tail pulley.

3.9.1 The design for the feed and discharge chutes of the feeders will be improved over that existing whereby the discharge chute will have an expansion section to accommodate the vertical displacement (deflection) that occurs under varying conditions of loading by coal in storage. A detail of the design is shown by the enlarged section of drawing 80560-L4. This design will eliminate any need for the supplemental vertical supports that have been installed in the existing tunnel.

3.9.2 The tunnel extension will be provided with a combination escape tunnel-ventilation culvert 42" dia.at the closed end of the extended reclaim tunnel. The culvert will terminate in an above-grade exit 50' beyond the normal toe of the coal pile in its full condition. The exit section will contain an exhaust fan having a capacity of 2500 cfm, a 1-1/2 Hp motor, weather shutters, and a personnel exit. The section will be arranged as shown on drawing 80560-L4.

3.9.3 A washdown system will be provided in the extended tunnel and will be complete with hose sections, valves, automatic and manual drain valves, and all associated piping for a complete system. A dust suppression system will be provided with fittings by Aquadyne to extend the existing suppression system to stations at the feeder locations in the tunnel. The system will also be extended to the truck dump and to the discharge of the stacking tube conveyor. The extended system will be complete with the necessary nozzels, solenoid operated shut-off valves, control panel, sensing devices and relays.

3.9.4 The reclaim feeders will have 3/16" stainless steel liners, will each have a capacity of 450 tph when declined 6°, will be cable suspended, and will have safety slings.

3.7.7 The following Hewitt-Robins 2000 series, 36" conveyor idlers:

Two	20° troughing,model 2502
Five	35° impact, model 2553,
Three	35° aligning, model 2423,
Seventy six	35° troughing, model 2403
Thirty	flat return rolls,model 3660HD
Three	flat return aligning, model 3630 HD.

3.7.8 Approximately 730 lineal feet of 36" B. F. Goodrich conveyor belt having 3 ply flexseal fabric, 3/16" top rubber cover without breaker strip, 1/16" bottom rubber cover,RMA Grade II. The belt will be vulcanized endless in the field.

3.7.9 The conveyor discharge chute at the stacking tube will be fabricated of structural steel and plate. It will have approximately 800 pounds of 3/8" A.R. liner plate and will be provided with chute plugged switch.

3.8 One 14' I.D. x 80' high reinforced concrete stacking tube arranged with 22 discharge openings sized 4' x 4', steel framed, and reinforced rubber covered. A total of 100 yards of concrete will be placed for the tube and its footings.

3.9 The existing reclaim tunnel will be extended nominally 182' to provide for the new stacking tube and coal storage reclaim. The extended reclaim tunnel will physically duplicate the existing tunnel. It will have a reinforced concrete section serving as the foundation for the stacking tube and galvanized corrugated structural steel culvert sections, with all exterior surfaces bitumastic coated. The tunnel will be provided with five reclaim hoppers. These hoppers will be sized and supported as shown on drawing 80560-L4. The throat opening of the hoppers will be rectangular shaped and will be reinforced concrete. The hoppers will be a heavy reinforced structural steel and 1/2" plate weldments having 1/2"A.R. plate liners. The hoppers will be provided with 1/4" reinforced steel platework skirts with 1/2" A.R. liners for five FMC Syntron XPMF-200B 42" x 96" reclaim vibrating feeders that reclaim coal and deliver to an extended reclaim conveyor. A cut-off gate will be provided in the skirtwork to each feeder. Skirts to contain coal discharging onto the extended reclaim conveyor will be 1/4" reinforced steel platework with 1/2" A.R. liners.

3.9.5 The design of the reclaim feeder feed and discharge chutes described in Section 3.9.1 provides for vertical displacement (deflection) in the corrugated steel culvert sections. This displacement is normal in operations such as this where the culvert sections are subject to loads that vary. Here 14' diameter galvanized, corrugated steel culvert sections will be furnished in 7 gauge sections 40' in length and as 10 gauge sections for 126' for a total length of 166 lineal feet.

3.10 The existing 48" reclaim conveyor will be extended 250' lineal feet by providing new structural steel conveyor stringers, supports, and idlers; replacing the existing drive with a new and larger drive, and providing additional counterweight. The conveyor will operate at 400 fpm and will have a capacity of 1000 tph. A new belt will be provided for the extension, and it will be vulcanized endless. A belt scale will be installed on the extended portion to weigh coal delivered to the system from the new coal storage pile. It is anticipated that the change to the extended section can be completed in less than 84 hours working continuously.

3.10.1 The drive will be replaced with a new Foote-Jones model 1403 HLE reducer having an integral backstop, a Falk model 80T20 high speed coupling, a Falk model 140T20 low speed coupling, and a 125 Hp motor. The reducer and drive will be installed on reinforced and new structural supports.

3.10.2 The following 48" Hewitt-Robins 2000 series conveyor idlers will be installed on the extended portion of the reclaim conveyor.

Sixty seven	35° troughing,model 2503
Three	35° aligning idlers,model 2523
Twenty two	flat rubber disc,model 3660
Three	flat aligning return, model 3630

3.10.3 520' of 48" wide single ply Mineflex I fabric conveyor belt having a 3/16" top rubber cover without breaker strip, 3/32" bottom cover RMA Grade II, rated 275 pounds per inch of width. It will be vulcanized endless to the existing belting.

3.10.4 Approximately 2000# of cast concrete counterweight sections will be added, but no revisions will be made to any of the existing conveyor pulley, shaft, or bearing components. The existing tail pulley structural support will be relocated and reused for the conveyor extension.

3.10.5 The new belt scale will be a Merrick, Model 310E with #1411 test chain, motorized chain reel, and accessories. It will be provided with remote reading indication consisting of a totalizer, rate meter, recorder and printer at the reclaim system control panel. A totalizer and rate meter will also be provided at the wash plant control panel.

3.11 The electrical installation and wiring will include all of the following items and work. These activities and provisions will comply with the electrical standards accompanying the Request for Proposal.

3.11.1 Wire and cable will be furnished with all associated lugs, terminating devices, and miscellaneous hardware. Conduit with associated fittings, brackets, clamps and related hardware along with junction boxes, pull boxes and condulets will be installed to provide a complete raceway and support system in accordance with the requirements of MSHA for coal mines.

3.11.2 The Stacking Tube Conveyor will be installed with misalignment switches adjacent to the head and tail pulleys, a zero speed switch at the tailpulley, and an emergency pull chord having switches at both ends will be provided its entire length.

3.11.3 The reclaim conveyor will be installed using misalignment and zero speed switches relocated from the existing conveyor and mounted adjacent to the tail pulley. A pull chord having switches at both ends will be installed the extended length of the conveyor.

3.11.4 Plugged chute switches, duplicating the existing, will be installed with one in the chute at the discharge of the reciprocating feeder and one in each of the discharge chutes for the five reclaim feeders. A plugged chute type of switch will be provided at the discharge of the stacking tube conveyor to signal a high level in the coal storage pile.

3.11.5 The existing Femco communication system will be extended to the Truck Dump,and reclaim tunnel and two operator warning horns will be added.

3.11.6 Limit switches will be installed to indicate positioning of the tramp iron magnet.

3.11.7 Flood lighting will be installed at the truck dump duplicating the lighting at the existing station. Lighting, including lighting panels and transformers, elsewhere in the Facility will be identical to what is provided in the existing plant.

3.11.8 The power supply to the existing truck scale will be re-routed outside of the perimeter of the new storage pile in a direct burial power feeder.

3.11.9 Remote pushbutton stations will be supplied at the drive motor of each feeder and the stacking tube conveyor.

3.11.10 General Electric motor control centers will be added to existing lineups for providing power to the truck dump and reclaim areas. The wash plant operator's panel will be modified to accept truck dump controls. The wash plant and reclaim operator's panels will be modified to accept reclaim area controls. All controls will be identical to the existing facility.

3.12 All steel will be furnished in accordance with AISC standards for A36 grade steel.

3.12.1 Steel will be shop fabricated and painted with one standard prime coat of red-lead paint. It will be field painted with a single coat of paint matching in color and type the paint on the existing structures, and touch-up paint will be applied wherever paint is marred or discolored during field handling. There will be no field fabrication of steelwork.

3.12.2 Handrail will be shop fabricated using 1-1/4" pipe. The top rail will be 42" high, the mid-rail 24", posts will be on 9ft centers maximum, and toe plates will be 4" x 3/16" and welded. Floor plate will be 1/4" steel, welded in place, and floor grating will be 1-1/4" x 3/16", fastened with grating clips.

3.12.3 All steelwork will be shop assembled in the largest sized assemblies that can be shipped on public highways. All field connections will be welded or bolted with high strength bolts, nuts and washers.

3.12.4 The designs for the truck dump structures and bin, conveyor trusses and bents, chutework and skirts, conveyor stringers and supports, and stairways, platforms and walkways will duplicate as nearly as practicable the designs in the structures that are existing by using ARCO-supplied drawings of these facilities.

3.13 All field-placed concrete will have a minimum design strength of 3000 psi, and concrete samples will be taken for compression tests in the concrete placement of the lowering tube and its foundation, the truck dump slab and foundation, and the conveyor bent foundations. Aggregate and additives for concrete will meet the standards of the American Concrete Institute. All formed reinforcing bars and anchor bolts will be shop fabricated. Counterweights for conveyor gravity take-ups will be field-cast. The stacking tube will be constructed by a contractor who is experienced in the construction of stacking tube structures.

3.14 An ARMCO, or equal, galvanized steel bin-type retaining wall will be installed at the truck dump. It will be similar in all respects to the reclaiming wall at the existing truck dump.

3.14.1 The retaining wall will be constructed using the following sections, all in 10'-0" widths.

Two	5'-6" deep x 9'-4" high,
Two	7'-8" deep x 14'-8" high,
Two	9'-10" deep x 21-4" high,
Two	12'-1" deep x 28'-0" high, and
Two	16'-6" deep x 33'-4" high.

3.14.2 Face plates connecting the truck dump structure and retaining wall will be galvanized steel 7'-0" wide x 33'-4" high.

3.14.3 Fill in behind the retaining wall structure will be minus 1-1/2" select material compacted to 95% Proctor.

3.15 Plant roads and ramps will include an improved refuse road approximately 2450' long, improvements extending approximately 780' to the entrance road, and a new truck-dump roadway loop with ramp.

3.15.1 The refuse and entrance roads will be improved to a 20'width by surfacing with minus 4" material placed nominally 15" in thickness as shown by Section 1-1 of Drawing 80560-L1. The truck-dump roadway will be constructed from the existing truck scale to the truck-dump and loop in the alignment shown by Drawings 80560-L1 and 80560-L2. The roadway will have a 44' traveled width where traffic moves in two directions and a 30' width where traffic moves in only one direction.

3.15.2 All roadway side slopes including those of the ramps on each side of the truck dump will be 2:1. Subgrade will be minus 8" material compacted in lifts nominally 15" thick. Subgrade will be placed for the ramps and at all locations of the truck roadway where the road is below existing grade is below the roadway profile.

3.15.3 All roadsurfaces will be graded smooth and the traveled widths will be crowned 4% on the refuse and entrance roads and 3% on the truck roadway.

3.15.4 Two 24" dia CMP culverts will be furnished in the loop of the truck road. The area within the loop will be graded so that surface water within is directed to these culverts. Beyond the culverts the existing surface will be graded as shown by Drawing 80560-L2 such that surface water will be directed around the coal in storage to an existing culvert beneath the railroad. In the absence of contours of the site, excepting in the area of the truck loop and coal storage pile,it was not possible to determine the need for culverts beneath the entrance and refuse roads, and none are provided in the costs. The two 24" culverts will be installed with entrance and discharge sections.

3.15.5 Standard galvanized W-beam highway guard rail will be provided on both sides of the truck roadway where the roadway is more than 4' above grade. The guard rail will be installed on steel posts, and guard rails will be located outside the travelled width of the roadway in all locations.

TRAIL MOUNTAIN TRUCK DUMP

OPERATION AND RECLAMATION PLAN

Non-Washed Coal System

Contract coal from the Trail Mountain Mine is received in double trailer bottom dump and rear dump highway trucks. This coal is shipped without any preparation. Facilities used for this operation include a truck dump, transfer belt, stacking tube, and an extension of the reclaim belt and tunnel. Approximately 420,000 tons per year of coal is handled through this facility. About 300,000 tons per year is dumped and loaded out directly. The remaining 120,000 tons per year is blended with fine coal from the wash plant circuit and shipped.

Preservation of Soil Resources and Projected Impacts of Mining on Soil Resources

Soils of CV Spur were mapped and analyzed in July 1980. At that time natural occurring soil bodies were distinguished from disturbed land fill. The purpose of the survey was two-fold; (a) to identify soils and their stripping depths for salvaging and suitable natural prior to additional disturbance and (b) determine the amount of topsoil available for final reclamation.

Most of the disturbance at CV Spur occurred prior to enactment of P.L. 95-87 or the Utah Interim Program that established regulations for salvaging topsoil. This is displayed on the Soils Map, Plate 8-1, where areas mapped as disturbed land fill constitutes roads and pads for which no topsoil was salvaged. This is also displayed on Plate 3-2.

Due to the fact that topsoil was not salvaged for areas disturbed prior to the reclamation laws adopted in 1978, it becomes necessary to evaluate a substitute material for final reclamation. The chemical and physical analysis from the disturbed land fill indicate the material has a poor rating as topsoil material. However, since no other topsoil materials exist in the immediate vicinity of disturbance, Beaver Creek Coal Company proposes the use of disturbed land fill as a substitute for topsoil in final reclamation.

Protection of Vegetative Resources

A reclamation plan has been designed which will establish on all areas disturbed by surface operations and facilities a diverse, effective and permanent vegetative cover which will be capable of supporting the uses which the land was capable of supporting before mining. This plan is fully described in Section 3.5 of the CV Spur Mining and Reclamation Plan.

Areas to be planted will be "roughened" by raking (or other means) to help hold the seeds in place. The approved seed mixtures found in the M&R Plan will be spread either by drill seeder or hydroseeder. Mulch

will then be applied as necessary, either by machine and crimped in with a disc or stabilized onto the surface with a tackifyer. The re-vegetated area will be monitored and if success appears unlikely, alterations will be made until revegetation is successful.

All disturbed lands, will be seeded or planted to achieve a permanent vegetative cover of the same seasonal variety native to the area of disturbed land.

Backfilling and Grading Plans

With the termination of CV Spur operations, the surface area will be graded, except refuse disposal sites. The post-mining topography and drainage for the area is shown on the attached map. For the most part, reclamation backfilling and grading will be minimal since no overburden will be removed.

Final Abandonment

Upon final cessation of operations all surface structures and facilities for the operation will be removed. All salvageable materials will be recovered and removed for sale or re-use. Non-salvageable materials (concrete, gravel, etc.) will be placed to the extent possible in existing impoundment excavations and low areas as fill prior to final grading. Remaining material will be taken off site to an approved landfill. The scheudle and cost of removal is detailed in the following sheets.

3.5.6 Schedule of Reclamation

Upon completion of operations at CV Spur, the following approximate schedule will be followed for final reclamation. Time frames are approximate and may overlap, decreasing the overall time. The sequence of events may also be slightly altered. This procedure will begin within 180 days of termination of operations.

Procedure	Time Frame	Acc. Time
Remove Structures	44 weeks	44 weeks
Reclaim Areas	18 weeks	62 weeks
Topsoil and Soil Placement	4 weeks	66 weeks
Reseeding	2 weeks	68 weeks
Mulching	2 weeks	70 weeks

Cost of Reclamation

A detailed estimate of the cost of reclamation at CV Spur is presented below.

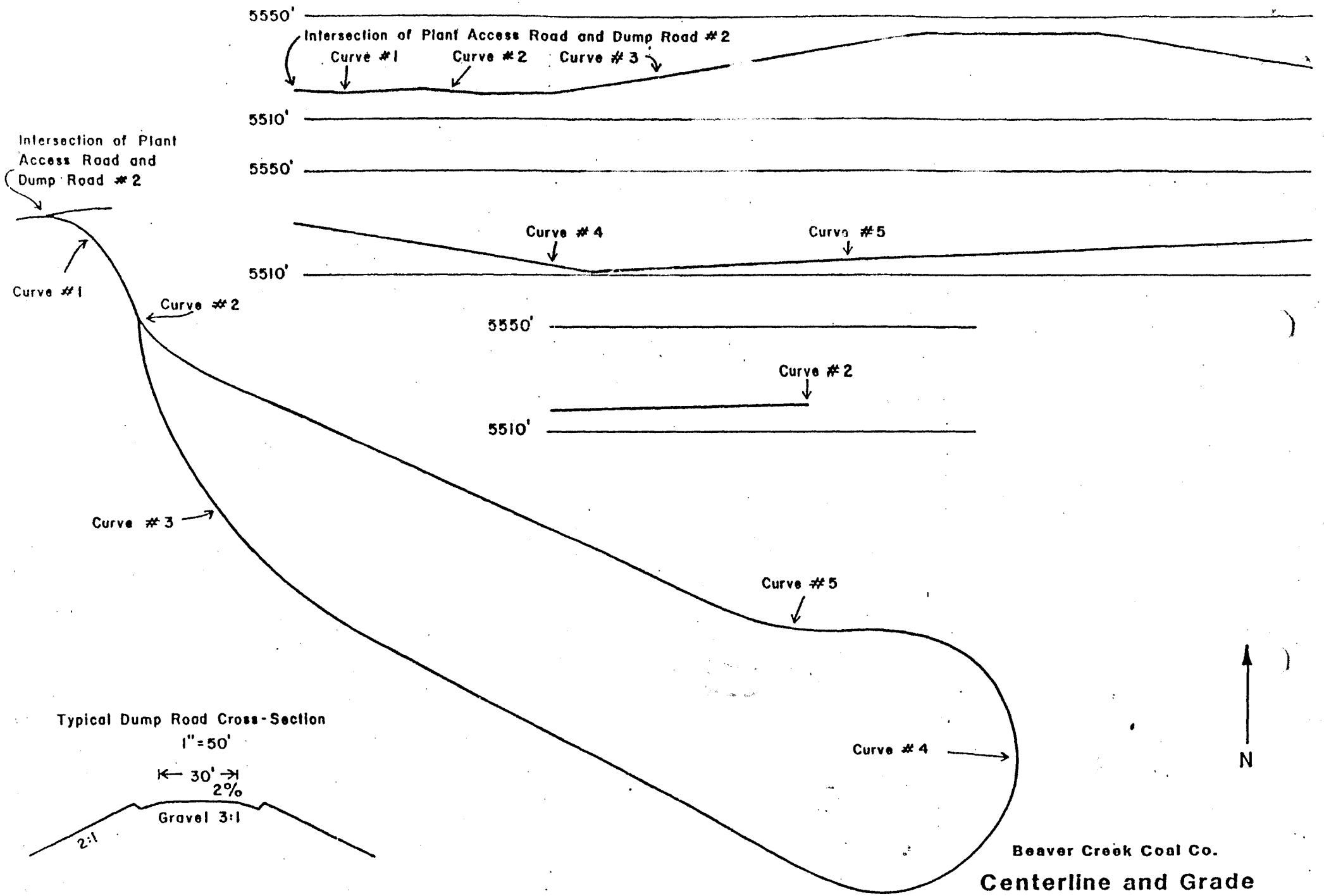
Cost Estimate for CV Spur Reclamation

Procedure

1.	Remove Structures	
a.	Silo	
	10 men - 30 days + hauling	$ 75,000
b.	Stacking Tubes (4)	
	10 men - 20 days + hauling	50,000
c.	Thickener	
	10 men - 10 days	20,000
d.	Plant	
	10 men - 60 days + hauling	150,000
e.	Conveyors (7)	
	6 men - 20 days + equipment	50,000
f.	Reclaim Tunnels (2)	
	6 men - 20 days + equipment	30,000
g.	Truck Dumps (2)	
	6 men - 16 days + equipment	20,000
h.	Railroad	
	5 men - 15 days + equipment	15,000
i.	Sample Building	
	5 men - 5 days + equipment	10,000
j.	Pump House	
	3 men - 5 days + equipment	3,000

	k.	River Pump System	
		3 men - 3 days + equipment	2,000
	l.	Water Tank	
		3 men - 3 days + equipment	2,000
	m.	Substation	
		3 men - 3 days + equipment	2,000
	n.	Subdrains	
		3 men - 5 days + equipment	4,000
			$433,000
2.	Grading and Ripping		
	a.	Refuse Piles	
		2 cats - 2 operators - 30 days	$ 60,000
	b.	Coal Storage Pads	
		2 cats - 2 operators - 10 days	20,000
	c.	Plant Area	
		1 cat - 1 operator - 5 days	5,000
	d.	Truck Dump Grade	
		2 cats - 2 operators - 10 days	20,000
	e.	Railroad Grade	
		2 cats - 2 operators - 20 days	40,000
	f.	Sediment Ponds (6)	
		1 cat - 1 operator - 15 days	15,000
			$160,000
3.	Revegetation Activities		
	a.	Topsoil and Soil Placement	
		2 loaders - 2 operators - 20 days	40,000
	b.	Seedbed Preparation (110 acres)	
		Estimate #30/acre	3,000
	c.	Seeding (110 acres)	
		Estimate #200/acre with labor	22,000
	d.	Mulching (if required (110 acres)	
		Estimate $200/acre	22,000
	e.	Fertilizing (110 acres)	
		Estimate $100/acre	11,000
	f.	Maintenance and Monitoring	
		5 years @ #3,000/year	15,000
			$113,000
		Subtotal	$706,000
		+ 10% Contingency	71,000
		Bond Estimate Total*	$777,000

Note: All figures based on 1983 dollars. Days are actual work days.
*The performance bond will be posted as a Surety Bond. The requirements of 30 CFR 806.12(e) will be met.



Beaver Creek Coal Co.

Centerline and Grade of Dump Road #2

C. V. Spur 1"= 100' July 1980

Conveyors

There are seven (7) separate conveyor runs at the CV Spur (see Figure 3-7).

Conveyor #1 - 36" x 250' long stacking conveyor from the truck dump to the raw coal stacking tube.

Conveyor #2 - 36" x 420' reclaim conveyor from raw coal pile into wash plant.

Conveyor(s) 3-31 - 36" x 365' clean fine and coarse coal conveyors from the plant to the clean coal stacking tube.

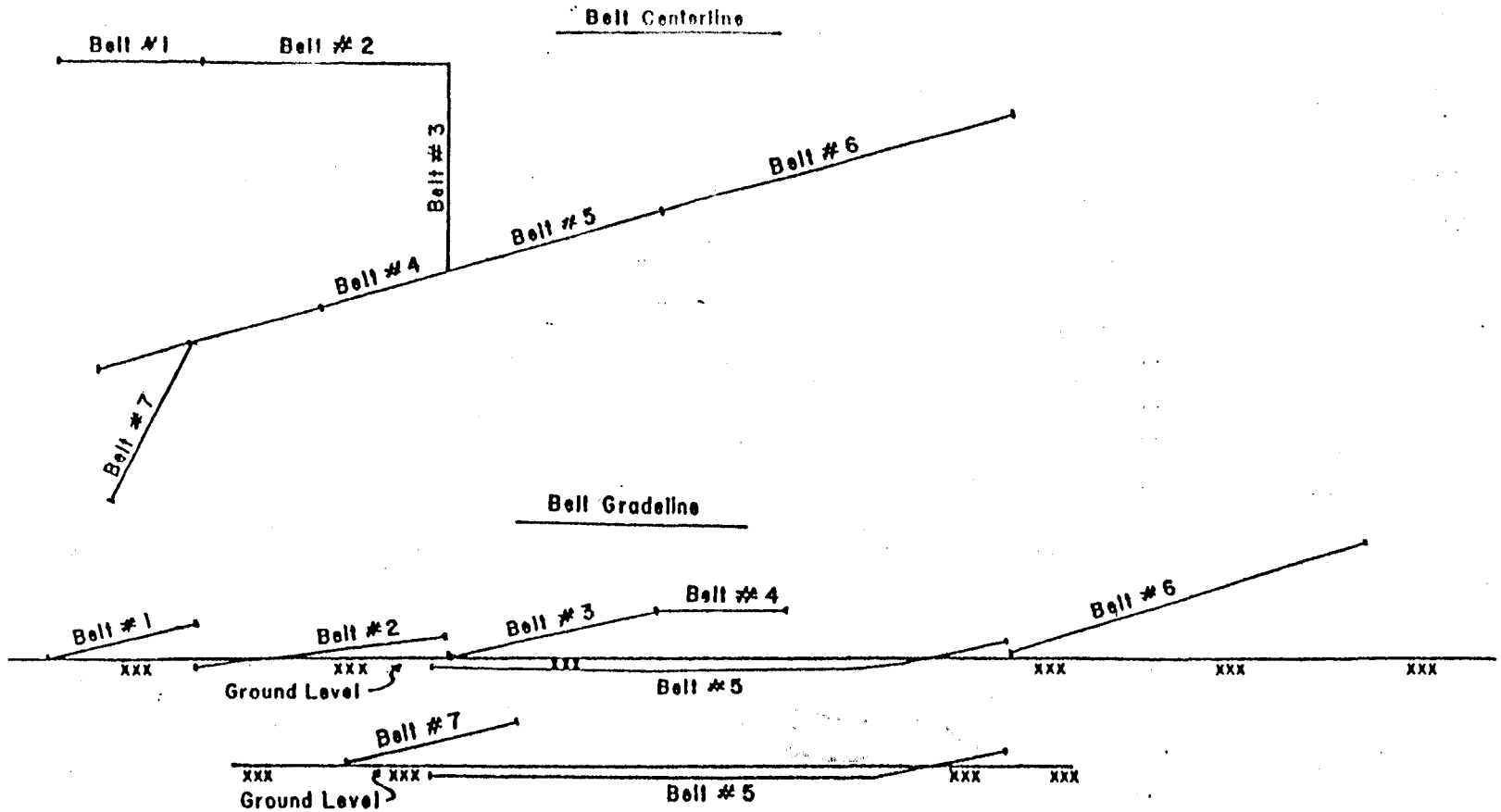
Conveyor #4 - 36" x 225' clean fine coal transfer conveyor from coarse coal stacking tube to fine coal stacking tube.

Conveyor #5 - 48" x 600' clean coal reclaim conveyor from clean coal piles to transfer in loadout sample building.

Conveyor #6 - 48" x 660' loading conveyor from transfer point in sample building to 10,000 ton silo.

Conveyor #7 - This conveyor is 36" x approximately 350' and runs from the new truck dump to a crushed coal stacking tube.

Grades of all conveyors are shown on Figure 3-7, "Conveyors - Loadout & Grades". All surface conveyors are covered and equipped with walkways. All conveyors will be used thorughout the CV Spur operational life.



Beaver Creek Coal Co.

Centerline and Grade of Belts

C. V. Spur 1" = 150' July 1980

FIGURE 3-7