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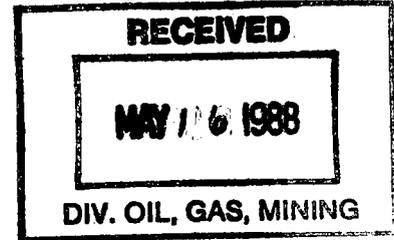


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file
PRD/007/033

May 16, 1988



Dr. Dianne Nielson
Director
State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
Suite 350, Triad III
355 West North Temple
Salt Lake City, Utah 84180-1203

Attn.: John Whitehead

Dear Ms. Nielson:

Attached hereto are two revised copies of the original fourteen copies of the PAP submitted by Andalex Resources for their Wildcat Loadout Facility, located in Carbon County, Utah (PRD 007/033). These revised copies are in response to the initial completeness review performed by your office and dated February 19, 1988.

In order for the Division to more easily address Andalex's response, this letter will serve to identify where each of the deficiencies outlined may now be found. First, I will address the deficiencies outlined in the completeness review and then those outlined in the section identified as "Technical Deficiencies". Any reference to 783 regulations are found in Chapter III; 784 regulations in Chapter IV.

Completeness

UMC 771.25 Permit Fees

Andalex has enclosed with this response a check in the amount of \$5.00 payable to the Utah Division of Oil, Gas, and Mining. This letter will serve as evidence of payment.

UMC 782.14 Compliance Information

In accordance with paragraph 771.14, Andalex has revised and updated its list of recent NOV's (3 years). Included in Appendix B is the current legible list which includes information on the rules violated, the nature of the violation, the abatement action taken, and the status.

UMC 782.18 Personal Injury and Property Damage Insurance Information

Appendix B now contains a copy of Andalex Resources' liability insurance (in Andalex's name) as required by UMC 800.60.

UMC 783.15 Ground Water Information

Please refer to Section 1.2-5 in Chapter III, Groundwater Monitoring.

UMC 783.16 Surface Water Information

Please refer to Chapter III, Section 1.2-1 regarding Regional Groundwater Hydrology. Also refer to Figure III-2.

(b) (1)

Information regarding baseline water quality information may be found in Chapter III, Section 1.2-5 and also in Chapter IV, Part K, Section 8. This baseline information will be incorporated into Appendix G as it becomes available. Also, continued operation monitoring data will be placed in Appendix G as it is accumulated.

UMC 783.19 Vegetation Information

(a)

The introduction into Part G of Chapter III discusses the vegetation sampling of the reference area. Since it is not yet the appropriate season to accomplish this, later this year the data will be collected as outlined in the guidelines and incorporated into Appendix I.

The area disturbed is referenced in Part G, Section 3 regarding Area to be Disturbed.

UMC 783.20 Fish and Wildlife Information

(a)

The Fish and Wildlife Resource Information found in Appendix F and the wildlife enhancement project are introduced in Chapter III, Part H, Section 6.

UMC 783.21 Soil Resource Information

(3)

Please refer to the new soils information provided in Appendix D which was performed by Earl Jensen, Consulting Soils Scientist. This information is introduced in Chapter III, Part I, Section 1.

(b)

A topsoil pile summary is included in Appendix D and also in Chapter IV, Part F, Section 3 regarding reclamation. The soil testing is discussed in Chapter III, Part I, Section 1. This quality data will be incorporated into Appendix D when it is received from the Utah State University Soils Testing Lab.

UMC 783.22 Land Use Information

The Wildcat PAP has been reviewed by the applicant thoroughly and any confusing reference to the Centennial Project has been eliminated.

Additionally, Part J introduces and discusses Land Use Changes (Section 5.2) which should clarify the confusion regarding land use during and after reclamation.

UMC 783.24 Maps: General Requirements

(a)

Plate 16 depicts surface and subsurface ownership within and adjacent to the permit area.

(b)

Plate 16 shows the extent of the B.L.M. rights-of-way and also the permit area.

(d)

The BCCC warehouse is the only building within 1,000 feet of the permit area and is depicted on Plates 1, 2, 8, and 9.

(e)

The permit area does not encroach onto the entire B.L.M. right-of-way 48027, particularly to the south and southeast. The access road right-of-way, 52065, is included in the permit area as is the truck loop. BCCC is aware of our operating on ground leased by them and have no objection. Coal fines deposition is

limited to the disturbed area as much as possible. Control of fugitive fines is discussed in Chapter IV, Part K, Section 9 and also Part V, Section 4. Disturbed acreages is discussed throughout Chapter IV and consists of 56 acres (not including the small area exemption, which will be revegetated once topsoil is redistributed. The total area to be revegetated is 66 acres).

UMC 783.25 Cross Sections, Maps, and Plans

(a) and (b)

The drill hole locations used for the foundation study are depicted on Plate 15. Two of the holes were left open and observed for the appearance of groundwater. They were not monitoring wells per se but observation wells. These are depicted on Plate 2 and are discussed in Chapter III, Part C, Section 1.2-3. All drill holes have been sealed and reclaimed.

(e)

There should be no reference to portals. Any such confusing reference has been eliminated. Previous mining would refer to previous loading activities. The entire north part of the facility has been previously impacted. Plate 1 depicts areas where topsoil was gathered. All other areas were previously impacted.

(g)

Plate 2 depicts the natural drainages, also Plate 15. There are no irrigation drainages in the vicinity.

(k)

Plate 2 has been redone to accurately depict topography. The plate now includes a scale (1" = 100').

UMC 783.27 Prime Farmland Investigation

Chapter III, Part M discusses the prime farmland investigation. The negative determination as evaluated by SCS is included in Appendix D.

UMC 784.11 Operation Plan: General Requirements

(b)

Part F of Chapter IV, Section 1.1 discusses the removal of all structures including ponds, coal pads, roads, etc., in detail as Phases I and II of final reclamation.

UMC 784.12 Operation Plan: Existing Structures

(a) Existing Structures

(1)

Photographs of existing structures are found in Chapter IV, Part E.

(2)

Part E, Section 2 discusses construction dates and completion dates.

(3)

Section 2 also discusses the performance standards regarding protection of environmental values, prevention of pollution, protection of wildlife, etc.

(4)

Section 2 of this part describes the structures' condition.

(a) (1)

All references to the Centennial Project which could be confused with Wildcat have been stricken. Contemporaneous reclamation is discussed in Part A, Section 7.

(b) (1)

The revised reclamation timetable takes us through the complete process step by step. This is found in Part F, Section 1.1

(b) (2)

Section 2 of Part F gives a detailed accounting of the cost of reclamation including the unit costs and calculations. This estimate is based on actual mandays to be worked and actual equipment cost.

(b) (3)

A mass balance summary is included in Part F which indicates the volumes of material moved and to be moved back upon reclamation. This information was used in the bond estimate. Plate 9 now shows the cross section locations of Plate 10. Also, this has

been eliminated from the revised Plate 2 and a new Plate 14 has been included to show the location of the detailed cross sections used for mass balance.

(b) (4)

Part F, Sections 3 and 4 discuss the topsoil removal, storage, and replacement.

(b) (5) (ii)

Section 5 of Part F addresses a seed mixture which will tentatively be used by the applicant. This mixture may be revised somewhat once the vegetation inventory (Appendix I) has been completed.

(b) (5) (iv)

Part F, Section 5.6 discusses mulching techniques.

(b) (5) (vi)

A reference area for the sage-grass community is currently being reviewed by the Division in cooperation with the B.L.M. Once this is complete, the area will be depicted on Plate 1. At Andalex's request, the Division is reviewing the situation. Also, refer to Part F, Section 5.4. Section 5.8 of this same part discusses measures to determine the success of the revegetation including monitoring.

(b) (5) (vii)

Section 5.3 of Part F discusses a soil testing plan to determine suitability for reclamation. Also refer to Chapter III, Part I, Section 1 regarding Soil Resources Information.

(b) (7)

Part D of Chapter IV, Section 3.1 discusses the disposal of materials and defines what is meant by "small quantities".

UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance

(b) (1)

Part K of Chapter IV, Section 9 discusses other sediment control measures, including berms around topsoil piles. Section 1, the introduction into Part K addresses disturbed areas not reporting to ponds (small area exemption). Sediment control is discussed in this section.

(c)

Andalex is currently performing a leachate test on stored materials including coal and coal processing waste. The results when received will be placed into Appendix G. These samples at this date are still in the laboratory and being tested for all parameters associated with surface water baseline monitoring (Table IV-10).

UMC 784.16 Reclamation Plan: Ponds, Impoundments, Banks, Dams, and Embankments

(a)(1)(7)

Appendix H contains certifications for each pond which state that each pond was constructed under design criteria outlined by a registered professional engineer (Part K, Section 2).

(a)(1)(iv)

Any mention of portals at this facility have been stricken. There is no potential for subsidence at this surface facility.

(b)(1)

Plate 2 has been corrected to more accurately depict topography and drainage areas. Pond and diversion calculations have been redone as necessary to demonstrate adequacy. No permanent water impoundments will remain. This is discussed in Part F, Section 1.1 regarding Reclamation Timetable and in Part K, Section 1.

UMC 784.18 Relocation or Use of Public Roads

Part T, Section 1.1 discusses road use and road maintenance. The public road to the Loadout Facility is maintained by Carbon County. All Class I and II roads within the permit area are maintained by Andalex.

UMC 784.21 Fish and Wildlife Plan

(a)(1)

The Wildlife Enhancement Project is now Appendix E and includes sufficient introduction to describe the project.

(b)

Mitigative measures described by the UDWR in the Fish and Wildlife Resources Plan (Appendix F) to be implemented by Andalex are discussed in Part Q of Chapter IV. Also, hazards to

big game are discussed here. Part Q also discusses reporting of T&E species, use of pesticides, fires, and etc. Justification for not implementing the USF&W recommendation is included.

UMC 784.22 Diversions

All diversions including interior ditches, sediment pond outlets from spillways to natural drainage, the undisturbed diversions, the diversion north of the scale house which services BCCC warehouse pad, and the undisturbed diversions west of the tracks are all discussed in Part K. Drainage maps as well as typical diversions, spillway designs, and sizes runoff calculations, velocities, energy dissipators, are included in the MRP and discussed in detail in the revised Part K.

Section 4.1 of Part K specifically addresses undisturbed drainages and discusses the permanent outcome of the drainage west of the stockpile area.

Part K indicates that erosion control is not needed because of very low velocities, etc.; however, a general plan of erosion protection including the use of check dams, straw dikes, and the like are discussed in Section 5 of Part K. Diversion designs suggest the use of energy dissipators according to 817.43 (c) and (f)(1)-(5).

Plate 2 has been upgraded and revised to clearly depict drainage areas accurately. Plate 15 has also been added to assist in the determination of various watersheds.

UMC 784.23 Operation Plan: Maps and Plans

(b)(2)

The proposed permit area does not include the entire right-of-way as previously mentioned. It does however, include the truck loops and the road into the facility. The permit area revised is depicted on several plates including Plate 1.

(b)(3)

The PRO 007/033 permit area which is outlined on several plates including Plate 1, is the same configuration as the bonded area. The small area exemption is included in the bonded area also, as costs associated with revegetation and monitoring will be involved in this area. The bonded area is shown on Plate 1.

(b)(13)

No sedimentation ponds are left following Phase II reclamation. See Part K, Section 1.

UMC 784.24 Transportation Facilities

Part T, Section 1.1 discusses requirements of Class I roads including widths, gradients, culverts, and other requirements of 817.150-.156.

UMC 784.26 Air Pollution Control Plan

An approval order dated July of 1982 is included in Appendix B. Andalex is not familiar with an approval order dated January 23, 1987 and has contacted the Division of Environmental Health to clear up this confusion.

Technical Deficiencies

UMC 817.13-.15 Casing and Sealing of Exposed Underground Openings

All test holes referenced in the text have been sealed. This was accomplished using a cement grout to the surface. Please refer to Chapter IV, Part H, Section 1.

UMC 817.21 Topsoil: General

(1)

The samples outlined in this part have been taken and have been sent to the Utah State University Soils Lab. They will be tested for the outlined parameters and when complete, will be incorporated into Appendix D. Please see Part I, Section 1.

(2)

Part I, Section 1 also discusses methods for topsoil salvaging. The topsoil pile summary can be found here and in Appendix D.

(3)

Section 3 (Removal) and Section 4 (Storage) of Topsoil in Part F discusses protection of the topsoil from wind and water erosion, and;

(4)

a plan for redistribution, including proposed depths, using additional topsoil substitute material.

(5)

Section 4 of Part F discusses soils amendment. Andalex has already committed to this and more will be known once the analyses of the five topsoil piles has been completed.

UMC 817.46 Sedimentation Ponds

(b) (1)

Plate 2 has been revised to show accurate drainage areas using topographic and mechanical divides. Calculations in Part K have been redone as necessary.

(c), (h), (r), (t), (u)

Section 1, the introduction to Part K of Chapter IV, addresses each of these technical problems outlined in the comments. Information is included on detention time, measuring sediment levels, certifications (Appendix H), pond inspections, and pond removal.

UMC 817.47 Discharge Structures

Table IV-9 addresses the culvert discharges from the sedimentation ponds. This table takes headwater into account. Outlet protection for pond discharges was determined unnecessary do to low velocities. Pond inlet protection is discussed in Part K, Section 5. This section also described erosion protection on outlets even though it is not required. It would primarily involve energy dissipators.

UMC 817.48 Hydrologic Balance: Acid-Forming and Toxic-Forming Materials

Section 2 of Part O discusses the existance of acid or toxic-forming materials. As previously discussed, leachate testing is now occurring and the results will be submitted as soon as they are available. They are being performed by CT&E Company here in Price. Also, samples of bone and coal material have been collected and are currently being tested for the parameters outlined in this comment. Results will be submitted promptly.

UMC 817.49 Permanent and Temporary Impoundments

See response to UMC 784.16(b)(1)

UMC 817.52 Hydrologic Balance: Surface and Groundwater Monitoring

Please refer to Chapter III, Section 1.2-5 of Part C regarding groundwater monitoring and leachate testing (784.14(c)). Refer also to Section 1.2-2 of the same part for information on the existance of groundwater and the observations which were made of the two "monitoring" wells recommended by the consulting engineers. Naturally, Andalex does not deem groundwater monitoring necessary where it does not exist.

Surface water monitoring will occur according to the plans outlined in Part K of Chapter IV, Section 8. This includes information on baseline as well as operational monitoring. See also Part L, Section 4.

UMC 817.56 Hydrologic Balance: Postmining Rehabilitation of Sediment Ponds, Impoundments, and Treatment Facilities

The undisturbed drainage west of the loadout facility will be permanently diverted around the reclaimed area. The basis and reasons for this are outlined in Part K, Section 4.1. This undisturbed drainage was originally interrupted by the Utah Railroad construction. Since this will remain following reclamation by Andalex, Andalex cannot restore the natural drainage. It is reasonable to maintain a permanent diversion instead.

Plate 8, which shows the Phase I hydrology, depicts redirected disturbed area drainage. This plate depicts the drainage on the west side of the tracks to Pond F. The modified sediment control plan, as depicted by the sediment pond summary shown on Tables IV-6 and IV-7, depict the excess capacities in Ponds A, C, D, and F and clearly show that they will accomodate the extra runoff once ponds B and E are removed. Please refer to Part L, Section 3 of Chapter IV.

UMC 817.71 Disposal of Underground Development and Excess Spoil and Non-Acid and Non-Toxic Forming Coal Processing Waste

Please refer to Part O, Section 1.1 regarding Coal Processing Waste. Please bear in mind that tests are as yet incomplete although they are currently being run. Both a materials test and a leachate test are being run on the two types of materials being stored here (bone reject and coal). A contingency plan is described (burial or relocation of material) if it is determined acid or toxic forming (Section 2 of Part O).

UMC 817.89 Disposal of Non-Coal Waste

Please refer to Part O, Sections 3 and 3.1 regarding incidental trash and prevention of sustained combustion.

UMC 817.95 Air Resources Protection

Wind blown coal fines cannot be controlled entirely. Wherever coal is stockpiled, wind will pick up some of the fines material inevitably. Part V of Chapter IV, Section 4, describes certain measures employed by Andalex to keep this problem as minimal as possible. Andalex feels that the inclusion of the sediment protection described in this section will help a great deal.

UMC 817.100 Contemporaneous Reclamation

Part A, Section 7 of Chapter IV addresses this regulation.

UMC 817.103 Backfilling and Grading: Covering Coal and Acid- and Toxic-Forming Materials

Please refer to Part D, Sections 1 thru 3.1 regarding disposal of various material. Also, refer to Part F, Section 1.1, Phase I reclamation with regards to disposal of coal storage pad material.

UMC 817.106 Regrading or Stabilizing Rills and Gullies

Please see Part F, Section 4.

UMC 817.131 Cessation of Operations (Temporary)

Section 8.1 of Part A, Chapter IV, addresses this performance standard.

UMC 817.132 Cessation of Operations (Permanent)

Section 8.2 of Part A, Chapter IV, addresses this performance standard. Notification to the Division will precede the reclamation activities.

UMC 817.150-.156 Roads: Class I

Part T of Chapter IV, Section 1.1 discusses questions outlined in this comment. This section clarifies which Class I roads are within the permit area and which are not (re: maintenance). This section discusses certification by a registered professional engineer as to construction specs and also the reclamation of the road.

UMC 817.160-.166 Roads: Class II

Part T, Section 1.2 addresses all of the regulations pertaining to Class II roads, including locations, environmental protection, physical characteristics, drainages, maintenance, and reclamation.

I hope this information is helpful in your review of Andalex's PAF document. Two revised copies of the plan were submitted to the Price office of the DOGM on May 16, 1988.

As mentioned in various places throughout the response, when lab tests results are received, they will be arranged in a fashion for simple insertion into the various appendices. It is our understanding that these test results are forthcoming.

If any questions arise during your review, please don't hesitate to call me.

Sincerely,



Michael W. Glasson
Senior Geologist

MWG/as

Enclosures

cc: File