0038

United States Department of Agriculture
Forest Service
Manti-La Sal National Forest
Supervisor's Office
599 West Price River Drive
Price, UT 84501
Phone # (435) 637-2817
Fax # (435) 637-4940

File Code: 2820-4
Date: December 9, 2003

Mary Ann Wright
Associate Director, Mining
Division of Oil, Gas, and Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Incoming
C/015/0032
Copy e-mail Sharon
Joe

Re: South Crandall Lease Revision, Genwal Resources, Inc., Crandall Canyon Mine, C/015/0032

Dear Ms. Wright:

We have completed our review of the South Crandall Lease Revision for the Crandall Canyon Mine. Enclosed are the comments that need to be addressed before the Forest Service can consent/concur with the proposed action. A copy of the Federal Coal Lease UTU-78953 is also enclosed for your reference.

If you have any questions, please feel free to contact either Karl Boyer or Carter Reed at the above address and telephone number.

Sincerely,

for ALICE B. CARLTON
Forest Supervisor

Enclosures

cc:
D-2/3
Sally Wisely, BLM, Utah State Director

RECEIVED
DEC 12 2003
DIV. OF OIL, GAS & MINING

Forest Service Comments
South Crandall Lease Revision
12/4/03

1. Chapter 3.
   The Biology chapter must include the following maps (accompanied with a discussion) for the South Crandall tract:

   a) Deer Habitat Map (showing summer and winter range).
   b) Elk Habitat Map (showing summer and winter range).

   A vegetation monitoring plan must be discussed for the South Crandall tract.

2. Chapter 3, Section 3.22.21.
   The Threatened and Endangered Species list on page 3-8 needs to be updated and the narrative should be changed to accurately reflect the changes.

   a) The Peregrine Falcon is no longer an endangered specie; it is now classified as a sensitive specie.
   b) The Yellow-billed Cuckoo should be added as a candidate specie.
   c) The Winkler Pincushion Cactus should be added as a threatened specie.
   d) The Mexican Spotted Owl should be added as a threatened specie.
   e) The Southwestern Willow Flycatcher should be added as an endangered specie.
   f) Colorado Squawfish should be changed to Colorado Pikeminnow.

3. Chapter 3, page 3-8.
   The letter from UDWR referenced as being in Appendix 3-17 is not there.
   It should be presented in the Revision.

4. Chapter 3, page 3-9.
   The Peregrine Falcon should be added to the Sensitive Species list.

5. Chapter 3, page 3-9, 2d paragraph.
   The trout in Crandall Canyon are hybrids, not pure Colorado Cutthroats.

6. Chapter 5.
   Include the following:

   a) Overburden map for each coal seam.
   b) Isopach map for each coal seam.
   c) Structural contour maps for both coal seams.
   d) Interburden map depicting the rock thickness between the two coal seams.
   e) Geologic cross-sections (2) through the South Crandall tract; one oriented east-west and one oriented north-south. Geologic formations depicted should include the North Horn down to the Mancos shale.

7. Chapter 5.
There should be a Section 5.23 presented in the Revision that explains the mining methods to be used in the South Crandall tract. It should detail the different mining methods to be used in different areas of the tract; especially with regard to Little Bear Canyon.

8. Subsidence Control Plan, Page 5-21.
The mine plan revision must clearly demonstrate that areas of Little Bear Canyon with overburden less than 600 feet will not be subsided. The last sentence on page 5-21 should be supported by the following additional information:

a) A map showing predicted subsidence zones in the South Crandall Lease tract.

b) Delineate, on maps, the 600 foot overburden contour in Little Bear Canyon for each coal seam. Available data indicate that the interburden between the two coal seams is less than 100 feet. Therefore, the 600 foot contours depicted on the overburden maps should not be far apart.

c) Plates 5-2 H and 5-2 BC indicate that longwall mining is planned beneath areas of Little Bear Canyon with less than 600 feet of overburden. Correct the plates to show that only first mining will occur beneath Little Bear Canyon in areas with less than 600 feet of overburden as required in Special Coal Lease Stipulation #9 and add some narrative to the discussion to make this point very clear.

9. Subsidence Control Plan.
The means of protecting the powerline that crosses part of the South Crandall Lease (Sections 5 and 8, T.16 S. R.7 E.) must be discussed and the powerline route must be depicted on the maps presented in Chapter 5. The ground beneath the powerline cannot be subsided.

10. Subsidence Monitoring, Page 5-25.
A new Plate 5-5 must be included in the revision that shows the ground control stations that will be used for subsidence monitoring in the South Crandall Tract.

11. Subsidence Monitoring, Page 5-26a and Alternative Water Source Information, Page 7-29.
A copy of the Water Replacement Agreement arranged between Castle Valley Special Services District and Genwal is not provided in Appendix 7-51 as stated in the mine plan revision. The Agreement needs to be presented in the Lease Revision. It needs to demonstrate that Genwal will meet the requirements of Special Coal Lease Stipulation #17. As stated in Stipulation #17, the provisions of the Agreement must be implemented prior to mining in two areas of the tract (as identified in Stipulation #17) or an additional mining plan must be submitted to the Authorized Officer that identifies measures to be taken by the Lessee that will ensure that Little Bear Spring would not be impacted by mining.

12. Chapter 7, General.
The critical questions associated with the South Crandall Tract are whether mining will affect the quantity and quality of water from Little Bear Spring and whether there is an effective mechanism to ensure a continuing supply of culinary water in spite of this uncertainty.

Chapter 7 and Appendix 7-15, Probable Hydrologic Consequences Determination, do not adequately present a summary of the hydrologic investigations done to date.

It is not clear that Special Coal Lease Stipulations #9 or #17 have been fully incorporated into the proposed Lease Revision.

In a 26 November 2003 phone conversation with Mr. Darrel Leamaster, the manager of the Castle Valley Special Services District, he expressed his understanding and expectation that the water treatment plant will be built prior to mining in the areas of concern. To that end, Mr. Leamaster stated that GENWAL and Energy West are cooperating on the agreement and have concurrently hired an engineer to begin designing the treatment plant. A draft of the agreement is to be presented at the next Special District Board meeting in December. Darrel expects construction to begin in June 2004 and to be completed in September or October.

13. Mine Plan Area Aquifers, Pages 7-5 to 7-6.
Past hydrologic studies have not conclusively determined that Little Bear Spring is recharged primarily from water losses in Mill Fork Canyon. The pre-1998 studies concurred on only a few points, one of which was that the source area for Little Bear Spring was to the north and west. More recent studies have indicated that there is a component of flow reaching Little Bear Spring from both the north and the south. The dye tracer study performed in summer 2001 only demonstrated that there is a component of flow from Mill Fork Canyon to Little Bear Spring; a volume of flow cannot be quantified from the study. The Lease Revision should reflect these findings.

14. Mine Plan Area Aquifers, Page 7-6, next to last paragraph.
Encountering perched (or otherwise isolated) zones of the Star Point sandstone while mining through the coal of the Blackhawk Formation may have little potential for affecting springs in the area that rely on perched water, but it should be kept in mind that the only major spring in the tract is Little Bear Spring. This spring is fault related; it is not related to perched water conditions. If mining contacted a fault supplying water to Little Bear Spring, it could have a direct adverse impact to the water quality and quantity at the spring. A discussion addressing this possibility needs to be included in the Lease Revision.

15. Effects of Mining Operation on Groundwater, page 7-13, first paragraph.
Mine dewatering is probably not the primary mechanism affecting groundwater systems and it is certainly not the only one. This section and the previous one have a seemingly thorough and repetitive description of the existing condition of the

regional aquifer and the more localized ones supporting springs and seeps. However, it does not address any consequences associated with subsidence fracturing of the source areas of these springs and seeps. In fact, no information is provided about the probable source areas of these springs and seeps.

16. Mitigation and Control Plan, Page 7-14 and Groundwater Monitoring Plan, Page 7-28.
When discussing mining related impacts to Little Bear Spring Pages 7-14 and 7-29 of the Lease Revision state, respectively, "Should it be necessary to develop alternate water supplies due to unexpected diminution or interruption of flows as a direct result of mining activities..." and "Mitigation for potential disruption to Little Bear Spring will be accomplished through the construction of a water treatment plant ... if mining activity in the South Crandall lease tract affects the quality or quantity of the spring". These two statements are not compatible with the intent of Special Coal Lease Stipulation #17 which is to ensure an uninterrupted supply of culinary water prior to mining in the two identified areas irrespective of whether mining can be conclusively shown to have affected the spring. Therefore, language should be incorporated in the Lease Revision that is consistent with Stipulation #17 and the understanding of Castle Valley Special Services District.

17. Regional Surface Water Hydrology, Page 7-16.
The statement that "There are no perennial drainages in the proposed South Crandall Lease area" is consistent with the 1997 EA. However, Page 4 of the Decision Notice points out that there are areas of Little Bear Creek with riparian vegetation and that these areas are supported by segments of perennial sub-alluvial flow. Thus, Little Bear Creek must be identified as a perennially functioning stream.

18. Mine Plan Area Surface Hydrology, Page 7-17, 2d paragraph.
Comment #17, pertaining to the perennially functioning status of Little Bear Canyon, also applies to this section.

19. Page 7-26a which seems to come after 7-29, Hydrologic balance protection.
The measures described in detail for mining near the Joe's Valley Fault (pertaining to pilot borings and geologic mapping based upon the data gained from the borings) should also be required for the two buffer zones around Little Bear Spring described in Special Coal Lease Stipulation #17.

20. Groundwater Monitoring Plan, Pages 7-29 and 7-36.
a) Table 7-10 (monitoring protocol for springs and creeks) is not presented.

b) Include a geologic structure map of the South Crandall tract and surrounding areas with the spring and stream monitoring locations plotted on it. Stiff diagrams plotted at the locations would be helpful to show trends of the data.
c) Baseline data for all monitoring locations in the South Crandall tract should be presented.

21. Probable Hydrologic Consequences Determination, Pages 3, 4,and 5, Appendix 7-15. Comments #13, #14, #15, and #17 also apply to the hydrologic interpretation in this section.

22. Appendix 7-15, Probable Hydrologic Consequences Determination, Interception, Page 2.
The 600 foot overburden observance and the perennially functioning status of Little Bear Creek needs to be addressed.

23. Chapter 7, Methodology, Page 7-3, 3rd paragraph.
An updated version of Plate 7-12 should be presented in the Revision. It should at least have the same information as Figure 1 in Appendix 7-58.

Form 3400-12
(April 1986)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

COAL LEASE

Serial Number

UTU-78953

PART I. LEASE RIGHTS GRANTED

This lease, entered into by and between the UNITED STATES OF AMERICA, hereinafter called lessor, through the Bureau of Land Management, and *(Name and Address)*

ANDALEX Resources, Inc. (50%)
45 West 10000 South, Suite 401
Sandy, Utah 84070

Intermountain Power Agency (50%)
10653 S. River Front Parkway, Suite 120
South Jordan, Utah 84095

hereinafter called lessee, is effective *(date)* AUG 1 2003, for a period of 20 years and for so long thereafter as coal is produced in commercial quantities from the leased lands, subject to readjustment of lease terms at the end of the 20th lease year and each 10-year period thereafter.

Sec. 1. This lease is issued pursuant and subject to the terms and provisions of the:

☒ Mineral Lands Leasing Act of 1920, Act of February 25, 1920, as amended, 41 Stat. 437, 30 U.S.C. 181-287, hereinafter referred to as the Act;

☐ Mineral Leasing Act for Acquired Lands, Act of August 7, 1947, 61 Stat. 913, 30 U.S.C. 351-359;

and to the regulations and formal orders of the Secretary of the Interior which are now or hereafter in force, when not inconsistent with the express and specific provisions herein.

Sec. 2. Lessor, in consideration of any bonuses, rents, and royalties to be paid, and the conditions and covenants to be observed as herein set forth, hereby grants and leases to lessee the exclusive right and privilege to drill for, mine, extract, remove, or otherwise process and dispose of the coal deposits in, upon, or under the following described lands:

T. 16 S., R. 7 E., SLM, UT
Sec. 4, W2SW, S2SWNW;
Sec. 5, SE, S2SENE;
Sec. 8, E2, NENW, S2NW;
Sec. 9, NW.

containing 880.00 acres, more or less, together with the right to construct such works, buildings, plants, structures, equipment and appliances and the right to use such on-lease rights-of-way which may be necessary and convenient in the exercise of the rights and privileges granted, subject to the conditions herein provided.

PART II. TERMS AND CONDITIONS

Sec. 1. (a) RENTAL RATE - Lessee shall pay lessor rental annually and in advance for each acre or fraction thereof during the continuance of the lease at the rate of $ 3.00 for each lease year.

(b) RENTAL CREDITS - Rental shall not be credited against either production or advance royalties for any year.

Sec. 2. (a) PRODUCTION ROYALTIES - The royalty shall be 8 percent of the value of the coal as set forth in the regulations. Royalties are due to lessor the final day of the month succeeding the calendar month in which the royalty obligation accrues.

(b) ADVANCE ROYALTIES - Upon request by the lessee, the authorized officer may accept, for a total of not more than 10 years, the payment of advance royalties in lieu of continued operation, consistent with the regulations. The advance royalty shall be based on a percent of the value of a minimum number of tons determined in the manner established by the advance royalty regulations in effect at the time the lessee requests approval to pay advance royalties in lieu of continued operation.

Sec. 3. BONDS - Lessee shall maintain in the proper office a lease bond in the amount of $ 5,255,000 The authorized officer may require an increase in this amount when additional coverage is determined appropriate.

Sec. 4. DILIGENCE - This lease is subject to the conditions of diligent development and continued operation, except that these conditions are excused when operations under the lease are interrupted by strikes, the elements, or casualties not attributable to the lessee. The lessor, in the public interest, may suspend the condition of continued operation upon payment of advance royalties in accordance with the regulations in existence at the time of the suspension. Lessee's failure to produce coal in commercial quantities at the end of 10 years shall terminate the lease. Lessee shall submit an operation and reclamation plan pursuant to Section 7 of the Act not later than 3 years after lease issuance.

The lessor reserves the power to assent to or order the suspension of the terms and conditions of this lease in accordance with, inter alia, Section 39 of the Mineral Leasing Act, 30 U.S.C. 209.

Sec. 5. LOGICAL MINING UNIT (LMU) - Either upon approval by the lessor of the lessee's application or at the direction of the lessor, this lease shall become an LMU or part of an LMU, subject to the provisions set forth in the regulations.

The stipulations established in an LMU approval in effect at the time of LMU approval will supersede the relevant inconsistent terms of this lease so long as the lease remains committed to the LMU. If the LMU of which this lease is a part is dissolved, the lease shall then be subject to the lease terms which would have been applied if the lease had not been included in an LMU.

Sec. 6. DOCUMENTS, EVIDENCE AND INSPE ON - At such times and in such form as lessor may prescribe, lessee shall furnish detailed statements showing the amounts and quality of all products removed and sold from the lease, the proceeds therefrom, and the amount used for production purposes or unavoidably lost.

Lessee shall keep open at all reasonable times for the inspection of any duly authorized officer of lessor, the leased premises and all surface and underground improvements, works, machinery, ore stockpiles, equipment, and all books, accounts, maps, and records relative to operations, surveys, or investigations on or under the leased lands.

Lessee shall allow lessor access to and copying of documents reasonably necessary to verify lessee compliance with terms and conditions of the lease.

While this lease remains in effect, information obtained under this section shall be closed to inspection by the public in accordance with the Freedom of Information Act (5 U.S.C. 552).

Sec. 7. DAMAGES TO PROPERTY AND CONDUCT OF OPERATIONS - Lessee shall comply at its own expense with all reasonable orders of the Secretary, respecting diligent operations, prevention of waste, and protection of other resources.

Lessee shall not conduct exploration operations, other than casual use, without an approved exploration plan. All exploration plans prior to the commencement of mining operations within an approved mining permit area shall be submitted to the authorized officer.

Lessee shall carry on all operations in accordance with approved methods and practices as provided in the operating regulations, having due regard for the prevention of injury to life, health, or property, and prevention of waste, damage or degradation to any land, air, water, cultural, biological, visual, and other resources, including mineral deposits and formations of mineral deposits not leased hereunder, and to other land uses or users. Lessee shall take measures deemed necessary by lessor to accomplish the intent of this lease term. Such measures may include, but are not limited to, modification to proposed siting or design of facilities, timing of operations, and specification of interim and final reclamation procedures. Lessor reserves to itself the right to lease, sell, or otherwise dispose of the surface or other mineral deposits in the lands and the right to continue existing uses and to authorize future uses upon or in the leased lands, including issuing leases for mineral deposits not covered hereunder and approving easements or rights-of-way. Lessor shall condition such uses to prevent unnecessary or unreasonable interference with rights of lessee as may be consistent with concepts of multiple use and multiple mineral development.

Sec. 8. PROTECTION OF DIVERSE INTERESTS, AND EQUAL OPPORTUNITY - Lessee shall: pay when due all taxes legally assessed and levied under the laws of the State or the United States; accord all employees complete freedom of purchase; pay all wages at lease twice each month in lawful money of the United States; maintain a safe working environment in accordance with standard industry practices; restrict the workday to not more than 8 hours in any one day for underground workers, except in emergencies; and take measures necessary to protect the health and safety of the public. No person under the age of 16 years shall be employed in any mine below the surface. To the extent that laws of the State in which the lands are situated are more restrictive than the provisions in this paragraph, then the State laws apply.

Lessee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and the rules, regulations, and relevant orders of the Secretary of Labor. Neither lessee nor lessee's subcontractors shall maintain segregated facilities.

Sec. 9. (a) TRANSI 3

☒ This lease may be transferred in whole or in part to any person, association or corporation qualified to hold such lease interest.

☐ This lease may be transferred in whole or in part to another public body or to a person who will mine the coal on behalf of, and for the use of, the public body or to a person who for the limited purpose of creating a security interest in favor of a lender agrees to be obligated to mine the coal on behalf of the public body.

☐ This lease may only be transferred in whole or in part to another small business qualified under 13 CFR 121.

Transfers of record title, working or royalty interest *must* be approved in accordance with the regulations.

(b) RELINQUISHMENT - The lessee may relinquish in writing at any time all rights under this lease or any portion thereof as provided in the regulations. Upon lessor's acceptance of the relinquishment, lessee shall be relieved of all future obligations under the lease or the relinquished portion thereof, whichever is applicable.

Sec. 10. DELIVERY OF PREMISES, REMOVAL OF MACHINERY, EQUIPMENT, ETC. - At such time as all portions of this lease are returned to lessor, lessee shall deliver up to lessor the land leased, underground timbering, and such other supports and structures necessary for the preservation of the mine workings on the leased premises or deposits and place all workings in condition for suspension or abandonment. Within 180 days thereof, lessee shall remove from the premises all other structures, machinery, equipment, tools, and materials that it elects to or as required by the authorized officer. Any such structures, machinery, equipment, tools, and materials remaining on the leased lands beyond 180 days, or approved extension thereof, shall become the property of the lessor, but lessee shall either remove any or all such property or shall continue to be liable for the cost of removal and disposal in the amount actually incurred by the lessor. If the surface is owned by third parties, lessor shall waive the requirement for removal, provided the third parties do not object to such waiver. Lessee shall, prior to the termination of bond liability or at any other time when required and in accordance with all applicable laws and regulations, reclaim all lands the surface of which has been disturbed, dispose of all debris or solid waste, repair the offsite and onsite damage caused by lessee's activity or activities incidental thereto, and reclaim access roads or trails.

Sec. 11. PROCEEDINGS IN CASE OF DEFAULT - If lessee fails to comply with applicable laws, existing regulations, or the terms, conditions and stipulations of this lease, and the noncompliance continues for 30 days after written notice thereof, this lease shall be subject to cancellation by the lessor only by judicial proceedings. This provision shall not be construed to prevent the exercise by lessor of any other legal and equitable remedy, including waiver of the default. Any such remedy or waiver shall not prevent later cancellation for the same default occurring at any other time.

Sec. 12. HEIRS AND SUCCESSORS-IN-INTEREST - Each obligation of this lease shall extend to and be binding upon, and every benefit hereof shall inure to, the heirs, executors, administrators, successors, or assigns of the respective parties hereto.

Sec. 13. INDEMNIFICATION - Lessee shall indemnify and hold harmless the United States from any and all claims arising out of the lessee's activities and operations under this lease.

Sec. 14. SPECIAL STATUTES - This lease is subject to the Clean Water Act (33 U.S.C. 1252 et. seq.), the Clean Air Act (42 U.S.C. 4274 et. seq.), and to all other applicable laws pertaining to exploration activities, mining operations and reclamation, including the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 et. seq.).

Sec. 15. SPECIAL STIPULATIONS -

This coal lease is subject to termination if the lessee is determined at the time of issuance to be in noncompliance with Section 2(a)(2)(A) of the Mineral Leasing Act.

Sec. 15. SPECIAL STIPULATIONS (Cont'd.)

SEE ATTACHED STIPULATIONS

ANDALEX Resources, Inc.
Company or Lessee Name

(Signature of Lessee)

Douglas H. Smith, President
(Title)

July 8, 2003
(Date)

Intermountain Power Agencey
Company or Lessee Name

Reed J. Searle
(Signature of Lessee)

Gen. Manager
(Title)

7-14-03
(Date)

THE UNITED STATES OF AMERICA
Department of the Interior
Bureau of Land Management
Utah State Office

By

(Signing Officer)

Chief, Branch of Minerals Adjudication
(Title)

JUL 30 2003
(Date)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

This form does not constitute an information collection as defined by 44 U.S.C. 3502 and therefore does not require OMB approval.

SPECIAL COAL LEASE STIPULATIONS

Federal Regulations 43 CFR 3400 pertaining to Coal Management make provisions for the Surface Management Agency, the surface of which is under the jurisdiction of any Federal agency other than the Department of Interior, to consent to leasing and to prescribe conditions to insure the use and protection of the lands. All or part of this lease contain lands the surface of which are managed by the United States Department of Agriculture, Forest Service, Manti-La Sal National Forest.

The following stipulations pertain to the Lessee responsibility for mining operations on the lease area and on adjacent areas as may be specifically designated on National Forest System lands.

Stipulation #1

Before undertaking activities that may disturb the surface of previously undisturbed leased lands, the Lessee may be required to conduct a cultural resource inventory and a paleontological appraisal of the areas to be disturbed. These studies shall be conducted by qualified professional cultural resource specialists or qualified paleontologists, as appropriate, and a report prepared itemizing the findings. A plan will then be submitted making recommendations for the protection of, or measures to be taken to mitigate impacts for identified cultural or paleontological resources.

If cultural resources or paleontological remains (fossils) of significant scientific interest are discovered during operations under this lease, the Lessee prior to disturbance shall immediately bring them to the attention of the appropriate authority. Paleontological remains of significant scientific interest do not include leaves, ferns or dinosaur tracks commonly encountered during underground mining operations.

The cost of conducting the inventory, preparing reports, and carrying out mitigating measures shall be borne by the Lessee.

Stipulation #2

If there is reason to believe that Threatened or Endangered (T&E) species of plants or animals, or migratory bird species of high Federal interest occur in the area, the Lessee shall be required to conduct an intensive field inventory of the area to be disturbed and/or impacted. The inventory shall be conducted by a qualified specialist and a report of findings will be prepared. A plan will be prepared making recommendations for the protection of these species or action necessary to mitigate the disturbance.

The cost of conducting the inventory, preparing reports and carrying out mitigating measures shall be borne by the Lessee.

Stipulation #3
The Lessee shall be required to perform a study to secure adequate baseline data to quantify the existing surface resources on and adjacent to the lease area. Existing data may be used if such data are adequate for the intended purposes. The study shall be adequate to locate, quantify, and demonstrate the interrelationship of the geology, topography, surface and ground water hydrology, vegetation and wildlife. Baseline data will be established so that future programs of observation can be incorporated at regular intervals for comparison.

Stipulation #4
Powerlines used in conjunction with the mining of coal from this lease shall be constructed so as to provide adequate protection for raptors and other large birds. When feasible, powerlines will be located at least 100 yards from public roads.

Stipulation #5
The limited area available for mine facilities at the coal outcrop, steep topography, adverse winter weather, and physical limitations on the size and design of access roads, are factors which will determine the ultimate size of the surface area utilized for the mine. A site-specific environmental analysis will be prepared for each new mine site development and for major improvements to existing developments to examine alternatives and mitigate conflicts.

Stipulation #6
Consideration will be given to site selection to reduce adverse visual impacts. Where alternative sites are available, and each alternative is technically feasible, the alternative involving the least damage to the scenery and other resources shall be selected. Permanent structures and facilities will be designed, and screening techniques employed to reduce visual impacts and, where possible, achieve a final landscape compatible with the natural surroundings. The creation of unusual, objectionable, or unnatural landforms and vegetative landscape features will be avoided.

Stipulation #7
The Lessee shall be required to establish a monitoring system to locate, measure and quantify the progressive and final effects of underground mining activities on the topographic surface, underground and surface hydrology and vegetation. The monitoring system shall utilize techniques which will provide a continuing record of change over time and an analytical method for location and measurement of a number of points over the lease area. The monitoring shall incorporate and be an extension of the baseline data.

Stipulation #8
The Lessee shall provide for the suppression and control of fugitive dust on haul roads and at coal handling and storage facilities. On Forest Service Roads (FSR), Lessees may perform their share of road maintenance by a commensurate share agreement if a significant degree of traffic is generated that is not related to their activities.

Stipulation #9
Except at locations specifically approved by the Authorized Officer, with concurrence of the surface management agency, underground mining operations shall be conducted in such a manner so as to prevent surface subsidence that would: (1) cause the creation of hazardous conditions such as potential escarpment failure and landslides, (2) cause damage to existing surface structures, and (3) damage or alter the flow of perennial streams. The Lessee shall provide specific measures for the protection of escarpments, and determine corrective measures to assure that hazardous conditions are not created, and perennial streams are not damaged.

Mining must be conducted in a manner necessary to prevent subsidence in the Little Bear Canyon area of the lease with overburden less than 600 feet, unless it can be demonstrated to the satisfaction of the Authorized Officer, with concurrence of the surface management agency, that the effects of subsidence to Little Bear Creek and the associated ecosystem would be negligible. This requirement shall apply to each seam mined.

Stipulation #10
In order to avoid surface disturbance on steep canyon slopes and to preclude the need for surface access, all surface breakouts for ventilation tunnels shall be constructed from inside the mine, except at specific approved locations.

Stipulation #11
If removal of timber is required for clearing of construction sites, etc., such timber shall be removed in accordance with the regulations of the surface management agency.

Stipulation #12
The coal contained within, and authorized for mining under this lease shall be extracted only by underground mining methods.

Stipulation #13
Existing Forest Service owned or permitted surface improvements will need to be protected, restored, or replaced to provide for the continuance of current land uses.

Stipulation #14
In order to protect big-game wintering areas, elk calving and deer fawning areas, sagegrouse strutting areas, and other key wildlife habitat and/or activities, specific surface uses outside the mine development area may be curtailed during specified periods of the year.

Stipulation #15
Support facilities, structures, equipment, and similar developments will be removed from the lease area within two years after the final termination of use of such facilities. This provision shall apply unless the requirement of Section 10 of the lease form is applicable. Disturbed areas and those areas previously occupied by such facilities will be stabilized and rehabilitated, drainages re-established, and the areas returned to a premining land use.

Stipulation #16
The Lessee, at the conclusion of the mining operation, or at other times as surface disturbance related to mining may occur, will replace all damaged, disturbed or displaced corner monuments (section corners, 1/4 corners, etc.), their accessories and appendages (witness trees, bearing trees, etc.), or restore them to their original condition and location, or at other locations that meet the requirements of the rectangular surveying system. This work shall be conducted at the expense of the Lessee, by a professional land surveyor registered in the State of Utah, and to the standards and guidelines found in the Manual of Surveying Instructions, United States Department of the Interior.

Stipulation #17
The Lessee, at their expense, will be responsible to replace surface and/or developed groundwater sources identified for protection that may be lost or adversely affected by mining operations, with water from an alternative source in sufficient quantity, flow rate, and quality to maintain existing riparian habitat, fishery habitat, livestock and wildlife use, and other land uses (authorized by 36 CFR 251).

In order to adequately protect flow from Little Bear Spring, the Lessee must enter into a written agreement with the Castle Valley Special Services District (CVSSD) to assure an uninterrupted supply of culinary water equivalent to historical flows from the spring. The agreement must be in place prior to mining.

If the provisions of the agreement are not implemented and/or a replacement water source immediately available, before the Lessee begins mining in the areas described below, they must submit a plan to the Authorized Officer to identify measures to be taken by the Lessee to ensure that potential water sources for Little Bear Spring are not impacted by mining. If necessary, this additional plan will be required for mining in areas described as:

- Mill Fork Graben - Area within 1,000 feet of the southeast corner of the lease in Section 8 (corner of Sections 8, 9, 17, and 16 in T, 16 S., R. 7 E., SLM).

- North of Little Bear Spring (possible water-bearing fracture system) - Area within 1,000 feet of the southern boundary of the lease in Section 9, T. 16 S., R. 7 E., SLM).

Stipulation #18

STIPULATION FOR LANDS OF THE NATIONAL FOREST SYSTEM
UNDER JURISDICTION OF
THE DEPARTMENT OF AGRICULTURE

The licensee/permittee/lessee must comply with all the rules and regulations of the Secretary of Agriculture set forth at Title 36, Chapter II, of the Code of Federal Regulations governing the use and management of the National Forest System (NFS) when not inconsistent with the rights granted by the Secretary of the Interior in the license/permit/lease. The Secretary of Agriculture's rules and regulations must be complied with for (1) all use and occupancy of the NFS prior to approval of a permit/operation plan by the Secretary of Interior, (2) uses of all existing improvements, such as Forest Development Roads, within and outside the area licensed, permitted or leased by the Secretary of Interior, and (3) use and occupancy of the NFS not authorized by a permit/operating plan approved by the Secretary of the Interior.

All matters related to this stipulation are to be addressed to:

Forest Supervisor
Manti-La Sal National Forest
599 West Price River Drive
Price, Utah 84501

Telephone Number: 801-637-2817

who is the authorized representative of the Secretary of Agriculture

Douglas H. Smith
Anadarko Resources Inc

Douglas H. Smith, President

Reed J Searle IPA
Signature
Licensee/Permittee/Lessee

Stipulation #19

ABANDONMENT OF EQUIPMENT:

The lessee/operator is responsible for compliance and reporting regarding toxic and hazardous material and substances under Federal Law and all associated amendments and regulations for the handling of such materials on the land surface and in underground mine workings.

The lessee/operator must remove mine equipment and materials not needed for continued operations, roof support and mine safety from underground workings prior to abandonment of mine sections. Exceptions can be approved by the Authorized Officer (BLM) in consultation with the surface management agency. Any on-site disposal of non-coal waste must comply with 30CFR § 817.89 and must be approved by the regulatory authority responsible for the enforcement of the Surface Mining Control and Reclamation Act (30 U.S.C. 1201, et seq.). Creation of a situation that would prevent removal of such material and equipment by retreat or abandonment of mine sections, without prior authorization would be considered noncompliance with lease terms and conditions and subject to appropriate penalties under the lease.

All safe and accessible areas shall be inspected prior to being sealed. The lessee shall notify the Authorized Officer in writing 30 days prior to the sealing of any areas in the mine and state the reason for closure. Prior to seals being put into place, the lessee shall inspect the area and certify through documentation any equipment/machinery, hazardous substances, and used oil that is intended to be left underground. The Authorized Officer may participate in this inspection. The purpose of this inspection will be: (1) to provide documentation for compliance with 42 U.S.C. 9620 section 120 (h) and State Management Rule R-315-15, and to assure that certification will be meaningful at the time of lease relinquishment, (2) to document the inspection with a mine map showing location of equipment/machinery (model, type of fluid, amount remaining, batteries, etc.) that is proposed to be left underground. In addition, these items will be photographed at the lessee's expense and shall be submitted to the Authorized Officer as part of the certification.

Stipulation #20
WASTE CERTIFICATION:
The lessee shall provide on a yearly basis and prior to lease relinquishment, certification to the lessor that, based upon a complete search of all the operator's records for the mine and upon their knowledge of past operations, there has been no hazardous subanances defined as per (40 CFR 302.4) or used oil as per Utah State Management Rule R-315-15, deposited within the lease, either on the surface or underground, or that all remedial action necessary has been taken to protect human health and the environment with respect to any such substances remaining on the property. The back-up documentation to be provided shall be described by the lessor prior to the first certification and shall include all documentation applicable to the Emergency Planning and Community Right-to-know Act (EPCRA, Public Law 99-499), Title III of the Superfund Amendments and Reauthorization Act of 1986 or equivalent.

Stipulation #21
MAXIMUM ECONOMIC RECOVERY
Notwithstanding the approval of a resource recovery and protection plan (R2P2) by the BLM, Lessor reserves the right to seek damages against the operator/lessee in the event (1) the operator/lessee fails to achieve maximum economic recovery (MER) [as defined at 43 CFR § 3480.0-5(21) of the recoverable coal reserves or (2) the operator/lessee is determined to have caused a wasting of recoverable coal reserves. Damages shall be measured on the basis of the royalty that would have been payable on the wasted or unrecovered coal.

The parties recognize that under an approved R2P2, conditions may require a modification by the operator/lessee of that plan. In the event a coal bed or portion thereof is not to be mined or is rendered unminable by the operation, the operator shall submit appropriate justification to obtain approval by the AO to leave such reserves unmined. Upon approval by the AO, such coal beds or portions thereof shall not be subject to damages as described above. Further, nothing in this section shall prevent the operator/lessee from exercising its right to relinquish all or a portion of the lease as authorized by statute and regulation.

In the event the AO determines that the R2P2 as approved will not attain MER as the result of changed conditions, the AO will give proper notice to the operator/lessee as required under applicable regulations. The AO will order a modification if necessary, identifying additional reserves to be mined in order to attain MER. Upon a final administrative or judicial ruling upholding such an ordered modification, any reserves left unmined (wasted) under that plan will be subject to damages as described in the first paragraph under this section.

Subject to the right of appeal hereinafter set forth, payment of the value of the royalty on such unmined recoverable coal reserves shall become due and payable upon determination by the AO that the coal reserves have been rendered unminable or at such time that the lessee has demonstrated an unwillingness to extract the coal.

The BLM may enforce this provision either by issuing a written decision requiring payment of the MMS demand for such royalties, or by issuing a notice of non-compliance. A decision or notice of non-compliance issued by the Lessor that payment is due under this stipulation is appealable as allowed by law.