

Document Information Form

Mine Number: C/015/004

File Name: Incoming

To: DOGM

From:

Person N/A

Company N/A

Date Sent: July 10, 1979

Explanation:

Standard Stipulations

cc:

File in: C/015, 004, Incoming

Refer to:

- Confidential
- Shelf
- Expandable

Date _____ For additional information

015/004
file

Standard Stipulations

Attached to Departmental Approval of Coal Mining and Reclamation Plan
Huntington Canyon #4 Mine, Emery County, Utah, Federal Coal Leases
SL064903 and U-33454 and Coal Loadout Facility, Emery County, Utah

The approval to mine at the site(s) described in the referenced mine plan is subject to the following standard and special conditions and stipulations. This approval shall be revocable at the discretion of the Director, Office of Surface Mining, if the operator fails to comply with any condition or stipulation. The term "Regulatory Authority" as used herein means both the federal Office of Surface Mining and the Utah Division of Oil, Gas, and Mining, unless otherwise specified.

1. The operator agrees to be bound by the provisions of Section 517 of the Surface Mining Control and Reclamation Act of 1977, 30 USC 1267 (P.L. 95-87, hereinafter referred to as "Act"), and agrees to allow the authorized representatives of the Secretary, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to:

(A) Enter upon or through any surface coal mining and reclamation operations to:

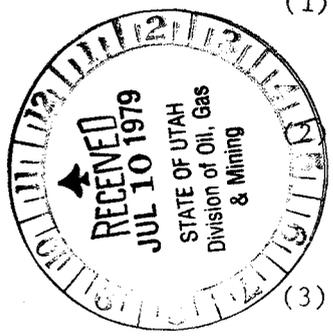
(1) Inspect any coal mining and reclamation operation, monitoring equipment, or procedure conducted pursuant to the permit;

Collect samples and other relevant information regarding air or water, fish and wildlife, soils, vegetation and other resources protected under the Act, this Chapter and the State program; and,

(3) Obtain access to any copy of any records required to be maintained under the terms and conditions of the permit or the regulatory program.

(B) Be accompanied by private persons for the purpose of conducting an inspection in accordance with Section 521(a) of the Act.

The term "authorized representative of the Secretary" as used in Section 517 and this paragraph shall be construed to include, but not be limited to, employees of the United States who are supervised by, or detailed or assigned to the Office of Surface Mining, any person under contract who is acting on behalf of the Secretary or any person employed by the State Regulatory Authority authorized to regulate surface coal mining lands; or any other person identified as authorized representative by a letter signed by the Director, Of



2. The operator shall comply at all times with Surface Mining Control and Reclamation Act Leasing Act of 1920, as amended, and the rule promulgated pursuant to said Acts, and such the Regulatory Authority shall promulgate by rule.

File in:
 Confidential
 Shelf
 Expandable
Refer to Record No 0012 Date 7-10-79
In C/ 015, 004, Incoming
For additional information

8/10/15/004
File

Standard Stipulations

Attached to Departmental Approval of Coal Mining and Reclamation Plan
Huntington Canyon #4 Mine, Emery County, Utah, Federal Coal Leases
SL064903 and U-33454 and Coal Loadout Facility, Emery County, Utah

The approval to mine at the site(s) described in the referenced mine plan is subject to the following standard and special conditions and stipulations. This approval shall be revocable at the discretion of the Director, Office of Surface Mining, if the operator fails to comply with any condition or stipulation. The term "Regulatory Authority" as used herein means both the federal Office of Surface Mining and the Utah Division of Oil, Gas, and Mining, unless otherwise specified.

1. The operator agrees to be bound by the provisions of Section 517 of the Surface Mining Control and Reclamation Act of 1977, 30 USC 1267 (P.L. 95-87, hereinafter referred to as "Act"), and agrees to allow the authorized representatives of the Secretary, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to:

(A) Enter upon or through any surface coal mining and reclamation operations to:

(1) Inspect any coal mining and reclamation operation, monitoring equipment, or procedure conducted pursuant to the permit;

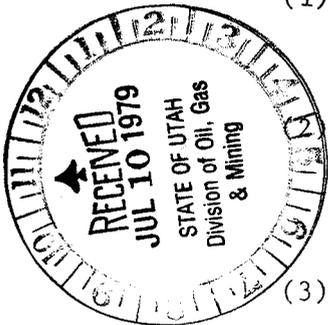
Collect samples and other relevant information regarding air or water, fish and wildlife, soils, vegetation and other resources protected under the Act, this Chapter and the State program; and,

(3) Obtain access to any copy of any records required to be maintained under the terms and conditions of the permit or the regulatory program.

(B) Be accompanied by private persons for the purpose of conducting an inspection in accordance with Section 521(a) of the Act.

The term "authorized representative of the Secretary" as used in Section 517 and this paragraph shall be construed to include, but not be limited to, employees of the United States who are supervised by, or detailed or assigned to the Office of Surface Mining, any person under contract who is acting on behalf of the Secretary or any person employed by the State Regulatory Authority if it is authorized to regulate surface coal mining operations on federal lands; or any other person identified as an authorized representative by a letter signed by the Director, Office of Surface Mining.

2. The operator shall comply at all times with the provisions of the Surface Mining Control and Reclamation Act of 1977, the Mineral Leasing Act of 1920, as amended, and the rules and regulations promulgated pursuant to said Acts, and such other requirements as the Regulatory Authority shall promulgate by rule.



3. The operator shall conduct surface mining and reclamation operations only on those lands specifically designated on the map(s) submitted and approved for the term of the permit, and only in the manner or with the processes and techniques described in the approved mining and reclamation plan.
4. The operator shall (a) install, maintain, and use any monitoring equipment required by the Regulatory Authority as a condition of this approval or required subsequent to approval during the life of the mine; (b) establish and maintain appropriate records of such monitoring; (c) evaluate the results in accordance with such methods, at such location, intervals, and in such manner as the Regulatory Authority shall prescribe; (d) make monthly reports of the results of monitoring to the Office of Surface Mining; and (e) provide such other information as the Regulatory Authority shall require.
5. The operator shall comply with the Surface Mining Control and Reclamation Act of 1977; the Federal Metal and Nonmetallic Mine Safety Act; the Federal Coal Mine Health and Safety Act of 1969; the Federal Water Pollution Control Act, as amended; the Clean Air Act, as amended; the Resource Conservation and Recycling Act, as amended; the Refuse Act of 1899; the Fish and Wildlife Coordination Act of 1934; the Mineral Leasing Act of 1920, as amended; and any regulation, performance standard, effluent limit, emission limit, water quality standard, or ambient air quality standard promulgated or approved thereunder, as well as all applicable state and local laws, ordinances, regulations, standards, and limitations.
6. Compliance with any design criteria, or technology requirement, even where design criteria or the technology has been approved by the Regulatory Authority, shall not relieve the operator of the duty to comply with any applicable effluent limitations, emission limitation, applicable performance standard, water quality standard, ambient air quality standard, or any order issued by the Regulatory Authority under Section 521 of the Surface Mining Control and Reclamation Act.
7. The operator shall file a request with the Regulatory Authority seeking the release of all or part of a performance bond only during those seasonal periods when it is possible for the Regulatory Authority to inspect the area subject to the proposed release and make a determination (a) regarding the completeness of reclamation; (b) the degree of difficulty to complete any remaining reclamation, including success of revegetation; (c) whether pollution of surface or subsurface water is occurring; and (d) the probability and estimated cost of abating such pollution or other applicable reclamation requirements.
8. Each of the mining, reclamation or monitoring procedures, techniques, methods or descriptions contained in the approved mining and reclamation plan or in any requirement, stipulation or condition established by the Regulatory Authority as part of any approval of a mining plan, or revision or modification thereof, or by order of the

Regional Director following such approval shall be deemed a "permit condition required by this Act" for the purposes of enforcement under Section 521 of the Act and "a condition of a permit issued pursuant to a Federal Lands Program" for the purposes of Section 518 of the Act.

9. The approval of this permit shall terminate six months following the date on which a completed permit application is required to be filed pursuant to the Federal Lands Program unless the requirement to obtain a new permit is deferred beyond such date in accordance with said Federal Lands Program. This approval shall not be construed as estopping the Federal Regulatory Authority from denying the permit application in accordance with the requirements of the Federal Lands Program then in effect.
10. Special Stipulations follow on additional pages (9 pages, 31 stipulations).

Swisher Coal Company
Special Stipulations

1. This approval is limited to those underground coal mining and reclamation activities proposed in the following Exhibits, listed by name, submitted to the Department of the Interior, Office of Surface Mining, by Swisher Coal, subject to additional stipulations attached to this Departmental approval. All prior approvals of mining and reclamation plans pertaining to the Huntington Canyon # 4 operation and given by the Department are revoked to the extent they are inconsistent with this approval.

- Exhibit 3 - "Map of the Surface Facilities"
- Exhibit 5 - "Dust Control"
- Exhibit 13 - "Certificate of Insurance"
- Exhibit 14 - "NPDES permits issued by the EPA"
- Exhibit 16 - "Agreement with City of Huntington"
- Exhibit 18 - "Special Use Permit for Pumping Facilities"
- Exhibit 19 - "Plan for Construction and Maintenance of Sedimentation Ponds and Diversion Structures (Revised)"
- Exhibit 20 - "Hydrologic Monitoring Plan"
- Exhibit 23 - "Detailed Subsidence Monitoring Plan (Revised)"
- Exhibit 24 - "Letter of Nonconcurrency from Forest Service about Subsidence Monitoring Plan"
- Exhibit 25 - "Map of Subsidence Monitoring Control Points"
- Exhibit 26 - "Cover Letter, USGS Mine Plan and Reclamation Approval"
- Exhibit 30 - "Mining Plan Check List"
- Exhibit 31 - "Mine Plan for Huntington Canyon #4 Mine added as supplement from mine plan submitted to USGS."
- Exhibit 32 - "November 22, 1978 Mining Plans and Typical Illustration for Huntington Canyon #4 Mine," subject to submission and approval of adequate information regarding surface disturbance and subsidence as a result of mining both seams.
- Exhibit 33 - "Response to Utah DOGM conditioned approval of Huntington Canyon #4 Mining and Reclamation Plan"
- Exhibit 37 - "Maps and Description of Additional Surface Facilities and/or Disturbance Anticipated Over Life of Mine"

Exhibit 38 - "Lower Seam Road Details"

Exhibit 42 - "Description and Sketch of Sign Design"

Exhibit 43 - "Land Use," subject to removal of "coal mining" from the post-mining land use.

Exhibit 44 - "Disposal of Spoil and Waste Materials," subject to compliance with applicable regulations regarding disposal of spoil or "gob" in underground mines.

Exhibit 45 - "Letter of Request to EPA to amend NPDES Permit UT 0023116. . ."

Exhibit 46 - "Ground Water System"

Exhibit 47 - "Hydrologic Impact of Roads"

Exhibit 48 - "Soils"

Exhibit 49 - "Vegetation"

2. This approval does not cover the following Exhibits, also submitted to OSM by Swisher Coal Company.

Exhibit 21 - "Road Reconstruction Information" (1).

Exhibit 28 - "Plan for Drainage and Dust Control at C. V. Spur Preparation and Loading Facility," as incomplete (1).

Exhibit 29 - "Map of Proposed Drainage Control at C. V. Spur (1).

Exhibit 39 - "Description of Final Configuration of Surface Areas (2).

Exhibit 40 - "Typical of Reclaimed Roads"

Exhibit 41 - "Typical of Reclaimed Pad Areas (2).

Exhibit 50 - "Wildlife" (2).

3. This approval indirectly includes the following Exhibits which are considered to be background information applicable to an approved mine plan.

Exhibit 1 - "Property Map"

Exhibit 2 - "Articles of Incorporation"

Exhibit 4 - "Lease Assignments"

(1) These Exhibits are not approved because the requirements of 30 CFR 211.10(c) and 30 CFR 211.40(b) are not satisfied in that the material submitted does not give adequate evidence of satisfying the applicable environmental performance standards.

(2) Requires further analysis by the applicant and a revision to comply with with OSM regulations.

- Exhibit 5 - "Report on the Hydrologic Impact. . .USGS"
- Exhibit 6 - "Hydrologic Report"
- Exhibit 7 - "Environmental Analysis Report"
- Exhibit 8 - "Topographic Map showing Property Boundaries"
- Exhibit 9 - "Cross-Section of Surface Showing Overburden....."
- Exhibit 10 - "Drill Hole Maps"
- Exhibit 11 - "Drill Hole Logs, Analysis Sheets"
- Exhibit 12 - "Reclamation Plan as Approved by Utah DOGM"
- Exhibit 15 - "Certificate of Water Shares"
- Exhibit 17 - "Approved Change in Point of Diversion"
- Exhibit 22 - "Notice of Hearing on Road Reconstruction"
- Exhibit 27 - "Cover Letter, Utah DOGM of Approval, 1977"
- Exhibit 34 - "Vicinity Map"
- Exhibit 35 - "Regional Features and Description"
- Exhibit 36 - "Wilderness Study Area"

4. Construction of portals for and mining of the lower Hiawatha Seam is not approved. Prior to initiation of coal mining operations at the Huntington Canyon #4 Mine which are designed to facilitate removal of coal from the lower coal seam, Swisher Coal Company must submit a plan showing all surface facilities proposed to support mining of the lower seam, areas proposed for storage or placement of earth materials removed during construction of the face up and roads, and coal conveyance systems, and which adequately discusses the proposed mining method, ventilation plan, work force, equipment requirements, and other pertinent information necessary in a complete plan.

5. Prior to resumption of mining, Swisher Coal Company shall submit a mine plan addendum to the regulatory authority describing the coal seam thickness, coal face height, and other appropriate mining dimensions such as mining phase (advance or retreat room, entry or pillar, etc.), roof rock type, roof support system, mining economics, mine safety factors, and other appropriate factors that permit the regulatory authority to determine when top coal should be left in the mine roof. Prior to leaving top coal, approvals of the regulatory agency and all other appropriate agencies shall be obtained by Swisher Coal Company.

6. Approval of this plan does not entitle Swisher Coal Company to undertake any drilling or blasting on the surface, any road building, any utility, office or shop construction, or construction of coal loading or handling facilities at the mine or at the processing plant, without further and specific approval of the proposed actions by the regulatory authority.

No additional structures, either permanent or temporary, including offices, bath house, or storage facilities, shall be constructed or emplaced in the mine plan area shown on Exhibit 3 until complete plans showing these facilities and the measures proposed to be taken to comply with all applicable regulations are submitted to and approved by the regulatory authority.

7. Unless otherwise demonstrated to the satisfaction of, and approved by, the regulatory authority, the permit area consists of the following, plus sufficient acreage in Section 21, T16S R1E to include the pumping facilities:

All of Section 16	T16S R1E	640 acres more or less
E 1/2 Section 17	"	320 acres more or less
SW 1/4 Section 8	"	160 acres more or less
S 1/2 SE 1/4 Section 8	"	80 acres more or less
S 1/2 S 1/2 less SE 1/4 SE 1/4 Section 9	"	<u>120</u> acres more or less
		1320 acres plus sufficient acreage to include the pumping facilities.

As presently shown generally in Exhibit 32 of the plan, the operator shall, no later than two weeks after receipt of this approval, submit to the regulatory authority an accurate mine plan boundary map showing these boundaries, or providing adequate evidence of the applicability of alternative boundaries, and an accurate accounting of the acreage involved. All surface coal mining and reclamation operations shall be conducted within the boundaries of the designated permit area.

8. Within one month of receipt of approval of the mine plan, the operator shall identify all existing and any currently proposed exploratory holes, shall identify whether existing holes are cased and sealed to prevent water pollution, whether the holes are plugged to ensure the safety of wildlife and the public, or whether the existing holes are protected in another, identified, manner. The operator shall not drill any additional exploratory holes until the regulatory authority is provided with and has approved a complete plan for casing, sealing, or otherwise managing new drill holes.

9. Prior to construction of the sedimentation ponds and prior to conducting any surface coal mining and reclamation operations, the operator shall submit, obtain the approval of, and implement a topsoil protection plan which shall identify, at a minimum, for the area disturbed by the sedimentation pond construction, the thicknesses of soils and unconsolidated materials to be disturbed, the amount of and area from which soils will be removed, the method of replacement, and the area of topsoil storage and the protection measures for the stockpiled materials. The operator shall submit this information to the regulatory authority, and shall obtain approval of the topsoil protection plan from the regulatory authority. The disturbed material remaining around the sedimentation ponds after construction shall be similarly identified, and a stabilization plan submitted to the regulatory authority prior to construction. The soil survey shall be the equivalent of an Order 1 soil survey. No soils shall be disturbed until approval of the regulatory authority is received. Other soils in the area shall be evaluated in compliance with special stipulation No. 10.

10. No later than August 1, 1980, the operator shall submit to the regulatory authority a detailed survey of the soils and unconsolidated materials located within and adjacent to the affected areas at the mine site not surveyed in

response to special stipulation No. 9. The survey shall provide sufficient site-specific information to support a plan to stabilize and revegetate all surface disturbed areas in the manner required by 30 CFR 817.111 through 817.117. The information shall be incorporated in and used to develop a specific plan to redistribute soil or other plant growth material after mining in a manner that satisfies the requirements of 30 CFR 817.21 through 817.25. The operator shall implement the approved topsoil protection plan. The operator shall include, where necessary to provide sufficient plant growth material to achieve vegetative stabilization, and an analysis of importation of suitable material if not otherwise available at the site.

11. A sedimentation and erosion control plan that conforms with 30 CFR 817.41 through 817.47 shall be submitted to, and the approval thereof obtained from, the regulatory authority prior to conducting surface coal mining operations. The plan shall include, at a minimum, the following:

a. A design for stable channels at the upstream edge of the upper sedimentation pond and along the channel between the two sedimentation ponds that will safely pass the design flows from the 25 yr., 24 hr. precipitation event through use of a critical velocity design flow acceptable to the regulatory authority such that erosion is controlled. The overflow channel shall be constantly maintained.

b. A design for sufficient sedimentation pond capacity to hold the runoff from the 10-year, 24-hour precipitation event plus a sediment yield of 0.1 acre feet per acre of disturbed area or other amount demonstrated to apply to the site specific circumstances. Appropriate riprap and revegetation of disturbed areas and fill slopes shall be incorporated in the design to stabilize against excessive erosion.

c. A topographic map showing the area draining into the sedimentation ponds of a scale of 1" = 400' or which provides more detail in order to accurately show and calculate the drainage area.

d. A plan detail which incorporates, wherever the sedimentation pond embankments abutt consolidated materials, joining of the embankment material to the consolidated materials in a manner that controls seepage and prevents failure. No rocks larger than 12 inches will be included in the construction of embankment fills. Identify the location of any borrow materials.

e. A detailed plan showing the proposed location of diversion ditches, the topography of the watershed located upstream of the diversions, the location of roads and associated drainage structures, the location of points of discharge from the diversion structures, the nature of the diversion channel material, and the locations where riprap will be placed. The diversion ditches will be placed upstream of disturbed areas. The diversion channel designs proposed shall be maintained to safely pass the runoff flow from the 10-year, 24-hour precipitation event at a minimum. Flow velocities over durable riprap and freshly exposed durable bedrock will be maintained at less than five feet per second. The plan shall provide sufficient detail to permit measurement of slopes and drainage areas, and correlation with soils, vegetation and geology. Discharges from diversions shall be directed and diffused so as not to increase erosion.

Swisher Coal Company
Special Stipulations

12. Buffer zone signs shall be installed between the access road and the Mill Fork in the immediate vicinity of the sedimentation ponds. The proposed locations shall be submitted for approval to the regulatory authority prior to commencement of surface coal mining operations and the signs emplaced at approved locations prior to mining.
13. Ground water monitoring shall be expanded by the operator if significant ground water is encountered during mining, or if mining of areas, in the judgment of the regulatory authority, adversely affect springs. Ground water encountered during mining shall be controlled and treated prior to discharge to comply with applicable requirements of 30 CFR Subchapter K. Gravity discharges will be controlled in accordance with 30 CFR 817.50.
14. No later than December 31, 1979 the operator shall submit to the regulatory authority, a complete description of all springs and surface water courses located within 1,000 horizontal feet of the intersection of a vertical line extended from the outside boundary of all underground workings and the surface. This description shall include the geology, typical channel dimensions, longitudinal profile of the drainages, identification of alluvial aquifers and descriptions of the ecological environment in the drainage areas.
15. The operator shall not void the existing agreement with the City of Huntington (Exhibit 16) regarding replenishment of the water supplied by, or contributory to, Little Bear Spring, unless approved by the regulatory authority. No later than December 31, 1979, the operator shall provide the regulatory authority with sufficient water quantity, water quality, and water availability information to demonstrate that an alternative water supply can be made available by Swisher Coal Company to the City of Huntington if the supply of Little Bear Spring is diminished.
16. No later than December 31, 1979, the operator shall submit a detailed post-mining backfilling and regrading plan which complies with the requirements of Sections 784.13, 817.101 and 817.102 of Title 30, Code of Federal Regulations for all surface disturbed areas of the mine site and adjacent roads. The proposed regrading of the benches and roads is rejected as incompatible with the Surface Mining Control and Reclamation Act of 1977. The detailed resubmission shall analyze, where necessary, the importation of acceptable material to achieve the appropriate, approvable post-mining contour. The post-mining topography must support the approved post-mining land use and any alternative to backfilling the disturbed areas shall be thoroughly analyzed in the resubmission in terms of stability and use of material from other locations for backfilling. The plan submitted must show how roads will be reclaimed by returning road areas to the approximate original contour, by completely closing access, and by revegetation.
17. All development or waste rock encountered during mining will be returned to the mine or retained in a manner that minimizes erosion and makes the material available to achieve the approximate original contour after mining unless otherwise approved by the regulatory authority.
18. No coal processing wastes shall be disposed of unless such disposal has been approved by the regulatory authority as in compliance with applicable regulations.

19. The lower access road tentatively proposed to gain access to the Hiawatha seam via the "Lower Seam Portal Yard" (Exhibits 37 and 38) is approved in concept only. Construction shall not be initiated on either this road or on the Portal Yard until the applicant has submitted plans, cross-sections, profiles, and typical details required by Special Stipulations No. 4 and 6 and adequate to show compliance with applicable Environmental Protection Performance Standards and has received approval from the regulatory authority.

20. The operator shall limit truck speeds to 25 miles per hour on unpaved roads, and shall cover loaded trucks in a manner that prevents wind spillage, unless sufficient freeboard is demonstrated to exist on all trucks to prevent spillage to the satisfaction of the regulatory authority. In addition, the operator shall submit to the regulatory authority within one month of receipt of this approval, a series of 7 1/2 minute topographic maps, or maps with more detail, showing the entire coal haul route from the mine to the C. V. Spur loadout facility. These maps shall be accompanied by appropriate descriptions of the effect of coal haulage on all roads located off the mine site and evidence of general acceptance by the appropriate highway authorities of the proposed truck haul activity.

21. The operator shall restrict coal haul truck traffic within the permit area to daylight hours (one hour after sunrise to one hour before sunset) to reduce the potential for big game road kills during those periods of the year when large game animals maybe concentrated in areas adjacent to the access and haul roads. The operator shall report all sightings of rare or endangered wildlife species (as annually listed in the Federal Register pursuant to the Endangered Species Act of 1973, as amended; e.g. 44FR3636-54) to the regulatory authority.

22. The vegetation seed mix identified in the plan (Exhibit 49) will be used on all temporarily disturbed areas prior to final grading, topsoiling, and revegetation and on topsoil stockpiles at a rate of 20 lbs. per acre (with proportionate increases in all species listed), raked into the prepared surface, and lightly tamped. The same seed mix will be applied to unconsolidated materials disturbed along the route of diversion ditches and along roads where slopes have less than the natural vegetative cover. Where slopes of unconsolidated disturbed materials exceed 20 percent (1v:5h), a mulch of burlap, jute, or equivalent will be correctly applied to enhance revegetation. Disturbed areas which are, in the judgement of the regulatory authority, not satisfactorily stabilized by vegetation will be reseeded, planted, and, if appropriate, supplemented by irrigation for short periods of time to establish vegetation.

No later than December 31, 1979, the operator will submit to, and obtain the approval of the regulatory authority for a proposed seed mix of native grasses, forbs, shrubs, and, where appropriate, trees, for use on lands permanently contoured and prepared for vegetation. The seeding mix shall be demonstrably successful. If the operator proposes to use other than native species then appropriate field trials must demonstrate that the species: are desirable and necessary to achieve a quick temporary and stabilizing cover that aids in controlling erosion, have been demonstrated to achieve the approved postmining land use, be compatible with the plant and animal species of the region, and shall not inhibit natural succession. This seed (and seedling) mix shall be designed to support the approved postmining land use. The mix shall be based

Swisher Coal Company
Special Stipulations

on actual vegetation measurements made in similar areas which have either not been subject to fire or have reestablished a ground cover consistent with that native to the area (after fires) and shall include vegetation required for wildlife habitat.

23. No later than December 31, 1979, the operator shall identify revegetation reference areas and provide to the regulatory authority quantitative vegetation survey data for these revegetation reference areas pursuant to 30 CFR 817.116. These data shall include species, ground cover, and productivity under representative natural and domesticated animal grazing (properly managed) conditions.

24. A post-mining land use for the permit area that includes coal mining is not approved.

25. The operator shall submit a plan for a wildlife survey for the mine plan and adjacent area within two months of approval and obtain approval of the regulatory authority prior to conducting any studies. No later than December 31, 1980, the operator shall submit a quantitative, site specific habitat survey that precisely identifies the wildlife use of the mine plan and adjacent areas and which is coordinated with State and Federal requirements.

26. No later than December 31, 1979, the operator shall submit for approval by the regulatory authority, a complete analysis of fugitive dust control measures which complies with the requirements of 30 CFR 817.95. The analysis shall address the frequency and type of dust suppression on roads, wetting of coal at all transfer points, wetting of coal stockpiles, and limiting travel over approved roads. The operator shall review and make use of available means of chemical dust suppressants.

27. The subsidence monitoring program must include: notification of mining and possible subsidence to the surface owners shown on Exhibit 1 of the application; measurement and recording of horizontal as well as vertical movement of monuments; submission of copies of the subsidence monitoring report to the regulatory authority; and submission of data, maps, and interpretations satisfactory to the regulatory authority in semi-annual reports.

28. No later than December 31, 1979, the operator shall submit, for approval by the regulatory authority, a Subsidence Monitoring Plan which will use aerial photogrammetric methods and will meet the following requirements:

a. Color aerial photography will be required initially for the proposed mine plan and adjacent area. This photography will be digitized and will provide a minimum resolution of one foot vertically and horizontally. This photography will provide a base to measure future surface subsidence. It will also provide the base to assist in documenting any changes to vegetation, topography, surface structures, and land and land uses within the mine plan and adjacent areas and affected by the operations.

b. Subsequent flights will be annual and will cover the mine plan and adjacent area. The adjacent area shall include all areas that could be affected by subsidence. The imagery shall achieve a minimum 30 percent overlap of flight lines and 65 percent overlap of imagery along the flight line. The photography will be digitized and, at a minimum, be of a scale of 1:4800. It will be evaluated each year to

determine the location and magnitude of subsidence. If required by the regulatory authority it will be supplemented by field surveys.

c. The aerial photography will aid in documenting changes to vegetation, topography, hydrology, recreational uses, wildlife use, range use, and any surface structures. Prints of the color aerial photography will be furnished to the regulatory authority and to the Forest Service.

d. The results of the surveys shall be reported to the regulatory authority annually.

e. Monuments established for the initial flight will be properly flagged each year prior to each annual flight.

f. The operator shall perform an on-the-ground visual inspection twice each year to assess the condition of the ground surface above all underground mine workings and any areas that may be affected by subsidence. This survey should identify and document the presence of changes in tension cracks, fissures, and structural offsets, and obvious subsidence damage to any buildings, roads, powerlines, pipelines, railroads, dams, reservoirs, or other cultural features. Photographs as well as written documentation, will be required. An annual field inspection of all faults, joints, and landslides will be made for evidence of renewed movement. These will be documented with photographs, written descriptions, and maps.

g. Documentation of natural seismic events will be maintained throughout the mine life. These data are available from State and Federal agencies.

29. Within two months after plan approval the applicant shall submit to the regulatory authority a detailed plan modification to conduct a survey for cultural resources over the mine plan area and adjacent area. The survey shall be in the form of a transect sample survey or shall be designed to specifically sample likely areas for cultural resource sites. The survey need not be conducted if the submission adequately demonstrates, to the satisfaction of the regulatory authority, that the probability of encountering culture resource sites is very low. An adequate demonstration should include results from intensive surveys in nearby areas with the same geologic, climatological, and biological conditions. The submission should also address the effect of the operations on paleontological resources. All surveys must be completed and submitted to the regulatory authority by August 1, 1980.

30. The applicant, prior to conducting any coal mining or reclamation operations, shall submit to the regulatory authority and to the State Director, Bureau of Land Management, for approval, a bond executed in the amount of \$221,000 to ensure adequate reclamation of the mine plan area.

31. Within one month of plan approval, Swisher Coal Company must submit a plan to show construction or modification of roads in the permit area to meet the design or performance standards of the Permanent Program. This approved plan must be fully implemented prior to December 31, 1979. The plan submitted must show how roads will be reclaimed by returning road areas to the approximate original contour, by completely closing access, and by revegetating.