APPENDIX 5

DRAFT TRANSPORTATION PLAN

PURPOSE

This transportation plan provides direction for future road development and use in the Jack Morrow Hills planning area and provides a basis for future exploration, development, and production transportation activities, including oil and gas related activities, within the planning area. Information on existing road networks and potential impacts to the existing transportation system are described in the Draft Environmental Impact Statement for the Jack Morrow Hills Coordinated Activity Plan.

The transportation planning area includes the planning area plus adjacent areas that include roads which may be used to access the planning area (Map 64). The transportation planning area includes U.S. Highway 191, Wyoming Highway 28, several county, BLM, and undeveloped roads/routes within and adjacent to the area.

The use of existing roads and proposed road corridors for local and collector roads would be described in a Transportation Planning Technical Support Document developed for specific projects. Applicable transportation standards would be used in the localized planning efforts for each new well location, new facility, and associated access. Annual operational updates to the technical support document would be made, as necessary, to detail specific localized transportation networks. All new or upgraded roads in the transportation planning area would conform to the general provisions of this document.

A technical support document also outlines the procedures for site specific application of transportation plan development in relation to specific projects and activities. A project application would initiate the preparation of a site specific transportation plan. Procedures for developing this plan would include:

Identifying the geographic area involved with the transportation plan;

Identifying the existing road network and types of roads within this geographic area;

Identifying the transportation needs for the project proposal;

Notifying the public of the proposal and obtaining input from users and interested public;

Identifying the resources and issues of concern in relation to the project proposal;

Identifying the JMHCAP objectives and actions that would guide transportation plan development; and

Application of the measures listed below.

The contents of this transportation plan are listed.

- The issues and concerns raised during scoping and public workshops are identified.
- Existing roads in the transportation planning area which are preliminarily identified as potential project required collector and local roads are identified on maps. Resource, two-track, and other unimproved roads are also briefly discussed.
- The annual transportation planning/operational update process for a technical support document is described, and this description includes scheduling, roles, and responsibilities, and opportunities for public input.

SCOPE

The scope of this transportation plan includes a brief description/presentation of the existing road network (see Map 64), and the identification of proposed high traffic volume roads/corridors. Relevant requirements for road construction or reconstruction and the development of agreements for use, rights-of-way (ROWs), and maintenance are identified and outlined in a technical support document.

This transportation plan also applies to the transportation of gas, condensate, or water via pipelines and electric power transmission (buried power lines) with the planning area. Pipelines and buried power lines generally would be located adjacent to roads to reduce new surface disturbance. In some instances, paralleling roads and lines may lead to increased environmental impacts, in which case pipelines and power lines may be located along alternative routes, and these alternative routes would evaluated and sited to minimize environmental impacts.

Some existing roads to and within the planning area are under jurisdiction of the governmental agencies (e.g., BLM, State, Sweetwater County) who approved their designs and require their maintenance. Roads across private lands would require an easement between the operator and private landowner. Private easements may not have maintenance requirements or agreements. In addition, there are many non-facility (oil and gas) roads/routes that are not maintained. Map 64 in the JMHCAP Draft EIS illustrates the general location of roads in the area. Oil and gas field roads may also be under the jurisdiction of government agencies; however, maintenance of these roads is generally conducted by operators. Maintenance responsibilities are discussed in the transportation plan for a project. Operators would provide the BLM and county officials with copies of road maintenance agreements that include the name of the operators' designated contact person. Non-oil and gas roads would be maintained as appropriate by the BLM or other right-of-way holder.

ACCESS ROAD LIMITATIONS

The condition (e.g., road design, upgrading requirements) and maintenance status (e.g., plowed) of existing roads and

casual use routes (e.g., two tracks) in the transportation planning area are generally identified on maps available for review with the technical support document at the BLM offices. Existing collector roads into parts of the planning area have been upgraded to meet minimum road standards. Some existing roads may not be passable during inclement weather or during winter months. All additional roads developed and required for this project would need upgrading, maintenance, and, where applicable, winter snow removal. Some roads would remain closed once snow accumulations close them. Specific road upgrading, snow removal, and maintenance responsibilities would be identified in annual operational updates to a technical support document.

Some existing two track or other roads within the transportation planning area may not have public access agreements in place with the BLM, State, and/or private landowner. Except those identified as state or county roads, access may require agreements with private landowners.

The transportation network described in this document is focused on local and collector roads and potential road corridors; however, existing low traffic volume resource roads and unimproved roads are identified on the detailed maps available for review with the technical support document at the Rock Springs Field Office.

THE EXISTING NETWORK

U.S. Highway 191 and Wyoming Highway 28 are the primary paved accesses to the planning area. From these highways, unpaved county road access (gravel, aggregate surfaced) is provided by the Superior Cutoff Road (#4-18), Eden Area Roads (#4-12), Chilton Road (#4-17), Freighter Gap Road (#4-83), Bar X Road (#4-21), Oregon Buttes Road (#4-74 and #10-446), and Nine Mile Road (#4-15). Other improved roads providing access to the planning area include BLM road Tri- Territory Road (#4102 and #4115). Most of these roads have some degree of gravel or aggregate surface and are periodically maintained. Some of these unpaved roads become impassable when wet and during winter, and, if these roads are used as access for this project, would require improvements and increased maintenance including snow removal. County roads (arterial roads) are maintained but in many cases there is no snow removal. County roads provide public access across private land; however, BLM roads or other roads which cross private lands may not have legal public access across them. The Superior Cutoff, Chilton, and Bar X County Roads would receive high volume traffic with implementation of the JMHCAP. The BLM and County Roads require rights-of-way for access and may require improvement or reconstruction before project use. In addition, some realignment of these routes may be necessary to minimize impacts to sensitive resources, ensure safety, and maximize traffic flow efficiency. Map 64 shows the existing and proposed locations of high-volume roads and/or corridors within the planning area (i.e., arterial roads and other potential collector and local roads routes with high initial traffic volumes).

Four classifications of roads are associated with development, particularly well field development: arterial, collectors, local, and resource. The definition of each follows.

Arterial Roads - These are state highways or county roads that provide primary access to the project area. These roads are high traffic volume roads.

Collector Roads - These are BLM roads that provide primary access to large blocks of land, and connect with or are extensions of a public road system. Collector roads accommodate mixed traffic and serve many uses. They receive the highest traffic volume of all the roads in the BLM road system. User cost, safety, comfort, and travel time are primary road management considerations. Collector roads usually require application of the highest standards used by the BLM.

Local Roads - These roads occur mostly on BLM-administered lands, and normally serve a smaller area than collector roads, and connect to collectors of public road system. In the planning area, these are two-lane or single lane roads with inter-visible turnouts that provide the internal access network to multiple well locations within the natural gas field. Local roads receive lower volumes of traffic, carry fewer traffic types, and generally serve fewer uses. User cost, comfort, and travel time are secondary to construction and maintenance cost considerations. Low volume local roads in mountainous terrain, where operating speed is reduced by terrain, may be single lane roads with turnouts. Environmental impacts from construction of local roads would be reduced through road designs for the steeper grades, sharper curves, and lower design speeds.

Resource Roads - These roads occur mostly on BLM-administered lands and normally are spur roads that provide point access and connect to local roads or collector roads. In the planning area, these are the single lane roads to the individual well location. They carry very low volume traffic and accommodate only one or two types of use. Use restrictions are applied to prevent conflicts between users needing the road and users attracted to the road. The location and design of these roads are governed by environmental compatibility and minimizing BLM costs, with minimal consideration for user cost, comfort, or travel time.

Additional new access roads would be constructed as specified in the annual operational updates to a technical support document. Where these new roads duplicate existing two-track roads/routes, the existing two-track roads may be reclaimed. At project or field abandonment, many newly constructed local and resource roads would be reclaimed unless there is an identified need for the road by other area users. Reclamation activities would be addressed during annual planning and corresponding updates to a technical support document.

The existing transportation network within the planning area is generally shown on Map 64, and roads/routes are briefly described in a technical support document. This system includes state, county, and BLM access roads. His-

toric use of the roads has been primarily by livestock operators, recreationists, and mineral developers. This mix would continue with a substantial increase in development (particularly mineral development related) traffic.

In the future, two-track roads/routes may also be used to access the area. These routes presently are used primarily by grazing permittees and recreationists. Grazing permittees use the routes to access water developments and other range improvements. Recreationists use the routes for hunting, sight-seeing, rock hounding, and wildlife and wild horse viewing.

There are several pipelines in the area to transport the natural gas from the project area to processing plants for transport to markets. Further detailed information regarding the location of pipelines within the planning area can be found on the detailed maps available for review with a technical support document located in the Rock Springs Field Office.

PROPOSED NETWORK USE/ MODIFICATION

The traffic flow transition stages of a typical trip into the planning area transportation system are as follows:

1) Travel via U.S. 191 or Wyoming 28 to project area arterial or collector road turnoff (e.g., workers, supply trucks, drill rigs, etc. with destinations within the well field).

2) Transition from arterial or collector road to local and/or resource road to access a well site or central production facility destination.

Transportation Within the Core Area

Specific guidelines for transportation in the core area is described in the following paragraphs.

Greater Sand Dunes ACEC

Roads, pipelines, or other rights-of-way would not be built in the relatively pristine portion of the eastern area (approximately 8,800 acres), including the base of Steamboat Mountain.

Road construction and new access would only be allowed on existing access and rights-of-ways. New pipelines would follow existing pipeline corridors. Alternative access methods could be used such as helicopters and freezing water on active dunes as long as conflicts with big game or ACEC values can be avoided.

New linear facilities such as pipelines and power lines in areas of ongoing development may be laid on the surface, or buried adjacent to access roads or within existing concentration areas containing such lines. Pipelines in the stabilized dune areas would be installed as surface lines to avoid unnecessary disturbance of vegetation. Surface gas pipelines would be monitored by the operators to identify potential hazards to ORV users. Identified hazards would be marked to improve visibility.

Any proposed activity or use that involves surface disturbance would require appropriate engineering design, geotechnical analysis, and mitigation planning.

Abandoned pipelines and other unnecessary facilities (e.g., snow fence) in unstabilized dune areas would be removed.

Plowing of snow would be restricted on BLM-administered roads.

Steamboat Mountain ACEC

Roads, pipelines, and other rights-of-way would be allowed on the Box Canyon Road. The Box Canyon route would allow access to those areas leased on Steamboat Rim. Pipelines and other linear facilities would be placed above ground following the Box Canyon access route. Remote control operations and centralizing locations for condensate would be used to minimize impacts from human disturbance in the parturition and crucial winter periods. The locations of these facilities should be close to the Freighter Gap Road.

Roads, pipelines, and other rights-of-way would be allowed from the Freighter Gap Road up LaFonte and Johnson Canyons to where the last producing well is located. These developments would not connect to the road and facilities on Steamboat Rim to minimize fragmentation of habitats and protect parturition and crucial winter grounds. Remote control operations and centralizing locations for condensate would be used to minimize impacts from human disturbance in the parturition and crucial winter ranges. These locations should be close to the Freighter Gap Road.

Because of safety reasons and resource concerns industry traffic would not be allowed on the switchback on BLM Road # 4012, Tri -Territory Road. Access into Blind Canyon and Jack Morrow Creek would be from the north side of the Freighter Gap road near Bush Rim.

Plowing of snow would be restricted on BLM-administered roads. Winter access would be restricted to ensure protection of sensitive resources.

White Mountain

Access to White Mountain would be from U.S. Highway 191, using the existing route to the communication site. Pipelines and other rights-of-way would be placed on the surface to minimize impacts to crucial wildlife habitats. Condensate tanks should be centralized to minimize trips to well locations during crucial winter periods.

Pipelines and any other new disturbance would avoid Native American respected places.

Plowing of snow would be restricted on BLM-administered roads. Winter access would be restricted to ensure protection of sensitive resources.

General Area

Access to these areas would generally follow county roads. Plowing of snow would be restricted on BLM-administered roads.