

## **APPENDIX C**

# **APPLICANT VOLUNTARILY COMMITTED PROJECT-WIDE MITIGATION MEASURES AND PROCEDURES**

## **Project-Wide Mitigation Measures and Procedures**

The Town of Saratoga (the Town) has voluntarily agreed to use and comply with measures and procedures to avoid or mitigate impacts to resources or other land uses. These measures and procedures will be referred to as best management practices (BMPs) throughout this document.

## **Preconstruction Planning, Design, and Compliance Measures**

1. The Town will designate a qualified representative to serve as compliance coordinator. This person would be responsible for ensuring that all requirements of the Plan of Development (e.g., conditions of approval and/or terms and conditions) are followed.
2. New roads would be constructed and maintained in the project area in accordance with the standards in BLM Manual 9113.
3. Roads would be crowned with a 0.3-ft to 0.5-ft crown and ditched. The topsoil would be graded over the cut slope so no berm is left at the top of the cut slope.
4. Culverts would be covered with a minimum of 12 inches of fill or ½ the diameter of the pipe, whichever is greater. The inlet and outlet would be set flush with existing ground and aligned in the center of any drainage. Before the area is backfilled, the bottom of the pipe would be bedded on stable ground that does not contain expansive or clay soils, protruding rocks that could damage the pipe, or unevenly sized material that would not form a good seat for the pipe. The area would be backfilled with unfrozen material and rocks no larger than 2 inches in diameter. Care would be exercised to thoroughly compact the backfill under the culvert and would be raised evenly in 6-inch layers on both sides of the culvert.
5. Additional culverts would be installed as needed or as directed by the BLM.
6. The access/maintenance road would be surfaced with an appropriate grade of aggregate or gravel to a depth of 4 inches before the construction equipment is moved to the well field.
7. The access/maintenance road would be maintained in a safe and usable condition. A regular maintenance program would include, but is not limited to, blading, ditching, installing or cleaning culverts, and surfacing.
8. Snow removal will not be allowed outside of the access/maintenance road ROW.
9. Wing ditches would be constructed, as necessary, to divert water from roadside ditches.

## **Resource-Specific Requirements**

The Town proposes to implement the following resource-specific mitigation measures, procedures, and BLM management requirements on public lands:

### **Geology, Minerals, and Paleontology**

Mitigation measures presented in the sections of this EA pertaining to soil and water resources would avoid or minimize potential impacts to surface mineral resources. The BLM policies on casing and cementing would protect subsurface mineral resources from adverse impacts.

Scientifically valuable paleontological resources that may occur in the project area would be protected through the following mitigation measures:

1. Project personnel will make contingency plans for the accidental discovery of scientifically valuable fossils. If construction personnel discover fossils during

implementation of the Proposed Action, the BLM will be notified immediately. If the fossils could be adversely affected, construction would be redirected until a qualified paleontologist has assessed the importance of the uncovered fossils and the extent of the fossiliferous deposits and has implemented recommendations for further mitigation.

2. No specific data currently exists on deposits of high or undetermined paleontologic potential in the project area. For that reason, field surveys for paleontologic resources will be conducted, if necessary, on a case-by-case basis and may result in identification of additional mitigation measures to reduce adverse impacts to fossil resources. This mitigation may include collection of additional data or representative samples of fossil material, monitoring excavation, or avoidance. In some cases, no action beyond measures taken during the field surveys may be necessary.
3. A report will be submitted to the BLM after each field survey is complete. The report will describe in detail the results of the survey with a list of fossils collected, if any, and may recommend additional mitigation measures. If scientifically valuable fossils are collected, the report must document the curation of specimens into the collection of an acceptable museum repository and must contain appropriate geologic records for the specimens.

### **Air Quality**

1. All activities conducted or authorized by the BLM must comply with applicable local, state, Tribal, and federal air quality regulations and standards. The Town will adhere to all applicable ambient air quality standards, permit requirements (including preconstruction, testing, and operating permits), standards for motorized equipment, and other regulations, as required by the Wyoming Department of Environmental Quality (WDEQ) – Air Quality Division (AQD).
2. The Town would not allow garbage or refuse to be burned.
3. On federal land, the Town would immediately abate fugitive dust by application of water, chemical dust suppressants, or other measures when air quality is impaired, soil is lost, or safety concerns are identified by the BLM or the WDEQ-AQD. These concerns include, but are not limited to, actions that exceed applicable air quality standards. The BLM will approve the control measure, location, and application rates. If watering is the approved control measure, the Town must obtain the water from state-approved sources.

### **Soil and Water Resources**

1. The Town will avoid using frozen or saturated soils as construction material.
2. The Town will selectively strip and salvage topsoil from all disturbed areas. Topsoil will be removed and conserved to a minimum depth of 6 inches and a maximum depth of 12 inches from all disturbances, unless otherwise agreed to by the BLM and the Town.
3. Where possible, disturbance to vegetated cuts and fills will be minimized on existing improved roads.
4. Drainage crossings will be designed to carry the 25-year discharge event, or as otherwise directed by the BLM.
5. The Town will maintain a 100-ft wide buffer of natural vegetation (not including wetland vegetation) between construction and ephemeral and intermittent stream channels.
6. The Town will include adequate drainage control devices and measures in the design of roads (e.g., berms and drainage ditches, diversion ditches, cross drains, culverts, out-sloping, and energy dissipaters). These devices and measures would be located at

sufficient intervals and intensities to adequately control and direct surface runoff above, below, and within the road to avoid erosive, concentrated flows. In conjunction with surface runoff or drainage control measures, the Town would use erosion control devices and measures such as temporary barriers, ditch blocks, erosion stops, mats, mulches, and vegetative covers. In addition, the Town would implement a revegetation program as soon as possible to re-establish the soil protection afforded by vegetation.

7. When construction that is not specifically required for production operations is complete, the Town will restore topography to near pre-existing contours at the well field and along the access/maintenance road and transmission line. The Town also will replace up to 6 inches of topsoil or suitable plant growth material over all disturbed surfaces.
8. The Town will limit construction of all drainage crossings to no-flow or low-flow periods.
9. The area of disturbance would be minimized within all stream channels.
10. The Town will design channel crossings to minimize changes in channel geometry and subsequent alterations in flow hydraulics.
11. Interceptor ditches, sediment traps, water bars, silt fences, and other revegetation and soil stabilization measures would be designed and constructed, as needed.
12. The Town will construct channel crossings by pipelines such that the pipe is buried a minimum of 4 ft below the channel bottom.
13. Disturbed stream beds would be re-graded to the original geometric configuration and would contain the same or similar bed material.
14. Well casing and cementing must be of adequate integrity to contain all fluids under high pressure during drilling and well completion. Furthermore, wells will adhere to the appropriate BLM cementing policy.
15. Hydrostatic test water used in conjunction with pipeline testing and all water used during construction must be extracted from sources that contain sufficient water quantities and with appropriation permits approved by the State of Wyoming.
16. The Town will develop and implement a pollution prevention plan for storm water runoff as required by WDEQ permit requirements.
17. The Town will exercise stringent precautions against potential accidental discharges of oil or hazardous chemicals into adjacent streams. If liquid petroleum products are stored on-site in sufficient quantities (per the criteria contained in Title 40 Code of Federal Regulations [CFR] Part 112, dated December 1973 and updated in July 2002), a Spill Prevention Control and Countermeasures (SPCC) plan will be developed.
18. The Town will coordinate all crossings or encroachments of waters of the U.S. with the U.S. Army Corps of Engineers (USACE).

### **Vegetation, Wetlands, and Noxious/Invasive Weeds**

1. An approved Pesticide Use Proposal would be obtained before pesticides are applied to control weeds on BLM surface ownership lands.
2. Disturbed areas would be seeded and stabilized in accordance with BLM-approved reclamation guidelines.
3. The Town shall initiate a weed monitoring and control effort upon authorization. The Town shall, at least annually, provide a report to the BLM with (1) a map of the facilities reviewed; (2) a map of any identified weed populations, labeled by species; and (3) a plan for treatment and control (including documentation of previous control efforts).

4. Initiate interim reclamation (e.g., recontouring, ripping, spreading topsoil, seeding, and weed control) for areas unnecessary for production operations as soon as possible after construction is complete, but within no more than one year from completion of construction.

### **Range Resources/Land Use**

1. The Town will coordinate with affected livestock operators to ensure that livestock control structures remain functional (as directed by the livestock operator) during construction, and to coordinate the timing of activities.
2. Traffic control and speed limits would be used to limit potential conflicts between operators and livestock.

### **Wildlife**

1. During reclamation, the Town would establish a variety of forage species that would return the land to a condition that approximates its state before disturbance. In the short-term, grasses would be established and, in the long-term, shrub and forb species would naturally establish.
2. The Town will prohibit unnecessary off-site activities of operational personnel. The Town also will inform all project employees of applicable wildlife laws and penalties associated with unlawful take and harassment.
3. Construction will not be allowed during critical nesting season (February 1-July 31) near active raptor nests. Seasonal timing restrictions within a “buffer zone” around nests to avoid disturbance to nesting raptors would reduce the impact from construction activities. In addition, all facilities requiring a repeated human presence would not be constructed within 825 ft of raptor nests, except ferruginous hawks, where the restriction would be 1,200 ft (restriction generally excludes surface disturbance). Exception requests may be granted if nests are found to be inactive, or modified if there is visual screening of the nest that is determined by the BLM to be sufficient to minimize impacts.
4. Surface disturbing activities will not be allowed within 0.25 mile of the perimeter of identified active or occupied greater sage-grouse leks. Human activity would be avoided between 6:00 p.m. and 9:00 a.m. from March 1 to May 20 within 0.25 mile of the perimeter of occupied leks; surface disturbance and other actions that create permanent and high-profile structures such as buildings, storage tanks, and overhead power lines will not be constructed within 0.25 mile of the perimeter of leks, as determined on a case-by-case basis. Surface disturbing and disruptive activities will not be allowed between November 15 and April 30 in delineated winter concentration areas and the Town will minimize noise disturbances to strutting or dancing grouse. Noise would not exceed 10 decibels on the A-weighted scale (dBA) above background noise. Other techniques and/or equipment can be utilized when it is demonstrated that they result in similar or increased noise reduction. Additional noise reduction techniques may be required if research shows that current techniques are not adequate.
5. The Town will protect greater sage-grouse nesting habitat during the breeding, egg-laying, incubation, and early brood-rearing period (March 1-July 15) by restricting construction within a 2-mile radius of active leks for greater sage-grouse. Exceptions may be granted if the activity will not interfere with greater sage-grouse nesting activity.

6. All white-tailed prairie dog colonies in the project area would be avoided, where practical.
7. No construction activities or prolonged maintenance actions would be conducted within big game crucial winter range during the crucial winter period of November 15-April 30.

### **Recreation**

1. The Town will minimize conflicts between project vehicles/equipment and recreation traffic by posting warning signs, implementing operator safety training, and requiring project vehicles to adhere to low speed limits.

### **Visual Resources**

1. The Town will use existing topography to screen from view the proposed access/maintenance road, transmission line/power line corridor, wellheads, and production facilities as well as drilling rigs.
2. The Town will paint well field facilities with flat colors (such as Carlsbad Canyon or Shale Green) that blend with the adjacent undisturbed terrain and would be a color specified by the BLM. This measure does not apply to structures that require safety coloration in accordance with the requirements of the Occupational Safety and Health Administration (OSHA).

### **Cultural Resources**

1. Avoidance is the preferred method for mitigating adverse effects to a property that is considered eligible for listing, or is already listed in, the National Register of Historic Places (NRHP).
2. Adverse effects to cultural or historical properties that cannot be avoided would be mitigated by implementing a cultural resources mitigation plan (including a data recovery plan).
3. If cultural resources are discovered at any time during construction, all construction would cease and the BLM would be immediately notified. Work would not resume until the BLM issues a Notice to Proceed.

### **Socioeconomics**

1. Project activities must be coordinated with ranching operations to minimize conflicts that involve movement of livestock or other ranch operations. Coordination would include scheduling project activities to minimize potential disturbance of large-scale livestock movements. The Town would establish effective and frequent communication with affected ranchers to monitor and correct problems and coordinate scheduling.

### **Transportation**

1. Permits are required from Carbon County for any access to or across a county road or for any pipeline that crosses a county road. These permits would be acquired before additional roads are built. All newly constructed roads on public lands that are not required for operation and maintenance of the well field would be permanently blocked, reclaimed, and revegetated. Newly constructed roads on private lands would be treated in a similar manner, depending on the desires of the landowner.

2. The Town will be responsible for preventive and corrective maintenance of roads in the project area throughout the duration of the project. Maintenance may include blading, cleaning ditches and drainage facilities, abating dust, controlling weeds, or other requirements as directed by the BLM or the Carbon County Road and Bridge Department.
3. Except in emergencies, access to the project area would be limited to drier conditions to prevent severe rutting of road surfaces. Culverts would be installed where needed to allow drainage in all draws and areas of natural drainage. Low water crossings will be used where applicable. On-site reviews will be conducted with BLM personnel for approval of proposed access before any construction begins.

### **Health and Safety**

1. Sanitation facilities will be approved by the WDEQ.
2. To minimize undue exposure to hazardous situations, the Town will comply with all applicable rules and regulations (such as OSHA requirements) that would prevent the public from entering hazardous areas and the Town will post warning signs to alert the public of truck traffic.
3. The Town will haul all garbage from the well field to a state-approved sanitary landfill for disposal. In addition, the Town will collect and store any garbage or refuse on-site until it can be transported in containers approved by the BLM.

### **Hazardous Materials**

1. SPCC plans will be written and implemented, as necessary, in accordance with 40 CFR Part 112 to prevent discharge into navigable waters of the U.S.
2. If quantities that exceed 10,000 pounds or the threshold planning quantity, as designated by the RFO, are to be produced or stored in association with the Proposed Action, chemical and hazardous materials would be inventoried and reported in accordance with the toxic release inventory requirements set forth in Title III of the Superfund Amendments and Reauthorization Act (SARA) and codified at 40 CFR Part 335. The required Section 311 and 312 forms would be submitted at the specified times to the state and county emergency management coordinators as well as to local fire departments.
3. Any hazardous wastes, as defined by the Resource Conservation and Recovery Act (RCRA), would be transported and disposed of in accordance with all applicable federal, state, and local regulations.
4. All facilities installed on-site that have the potential to leak or spill oil, glycol, produced water, or other fluids that may constitute a hazard to public health or safety shall be placed within an appropriate containment or diversionary structure sufficient to hold at least 110 percent of the largest container within the facility. The structure shall be impervious to any oil, glycol, produced water, or other hazardous fluid for 72 hours. In addition, the structure will be constructed so that any discharge from a primary containment system will not drain to, infiltrate, or otherwise escape to groundwater, surface water, or navigable waters before cleanup is completed.
5. The Town shall maintain a hazardous materials release contingency response plan that applies to the Proposed Action, and shall provide the BLM with a copy of the current plan and any subsequent changes made to the plan.

**Noise**

1. The Town will muffle and maintain all motorized equipment according to manufacturer's specifications.
2. The BLM will require that noise levels be limited to no more than 10 dBA above background levels, as measured at greater sage-grouse leks.