

## **Appendix D – Stipulation Forms and Lease Notices**

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-01**  
**Very High Scenic Integrity Objective Areas**  
**Alternatives B, C, and D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within all lands designated as having a very high scenic integrity objective as shown on Figure 3.2-1. This prohibition includes all surface disturbing activities including, but not limited to, drill pads, roads, powerlines, pipelines, and other facilities.

**For the purpose of:**

Preserving the existing very high scenic integrity objectives of these areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104) if the operator can demonstrate in a surface use plan of operations that the objectives for scenery can be met.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-02**  
**High Scenic Integrity Objective Areas**  
**Alternatives B and C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within all lands designated as having a high scenic integrity objective as shown on Figure 3.2-1. This prohibition includes all surface disturbing activities including, but not limited to, drill pads, roads, powerlines, pipelines, and other facilities.

**For the purpose of:**

Preserving the high scenic integrity of these areas. These areas are managed as high scenic value because of their natural landscape variety and features in proximity to primary travel routes or use areas where users have a major concern for the aesthetics of the viewed landscape. Management activities should repeat form, line, color, and texture that are frequently found in the characteristic landscape. Changes should not be evident to the casual forest visitor, and all retention activities to restore the area to a naturally appearing condition should be accomplished either during the operation or immediately thereafter.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104) if the operator can demonstrate in a surface use plan of operations that the objectives for scenery can be met.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-03**  
**Inventoried Roadless Areas (IRAs)**  
**Alternative C, D1, and E1**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

All areas identified and mapped as Inventoried Roadless Areas and contained in Forest Service Roadless Area Conservation, Final Environmental Impact Statement, Volume 2, dated November 2000, as shown in Figure 3.3-1. This prohibition includes all surface disturbing activities including, but not limited to, drill pads, roads, powerlines, pipelines, and other facilities. No timber cutting is permitted

**For the purpose of:**

Protecting the roadless and wilderness characteristics, as well as undeveloped values of these lands.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-04**  
**Designated Dispersed Recreation Areas**  
**Alternative B**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Designated Dispersed Recreation Areas as shown on Figure 3.4-1. This prohibition includes all surface disturbing activities including, but not limited to, drill pads, roads, powerlines, pipelines, and other facilities.

**For the purpose of:**

Preventing conflicts with dispersed recreation opportunities in sites designated and managed for concentrations of dispersed recreation use.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-05**  
**Developed Sites and Administrative Sites**  
**Alternatives B and C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Developed sites and Administrative sites developed and managed for specific purposes such as recreation, administration, and other. This prohibition includes all surface disturbing activities including, but not limited to, drill pads, roads, powerlines, pipelines, and other facilities.

**For the purpose of:**

Preventing conflicts with the uses for which the sites were developed and are managed and to protect the capital investment and recreation uses associated with permitted recreation residences.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-06**  
**Recreation Residences**  
**Alternatives B, C, and D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within ¼ mile of recreation residences shown in Figure 3.4-1. This prohibition includes all surface disturbing activities including, but not limited to, drill pads, roads, powerlines, pipelines, and other facilities.

**For the purpose of:**

Preventing conflicts with the recreation uses of these areas including visual and auditory effects.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-07**  
**Primitive Recreation Opportunity Spectrum Areas**  
**Alternatives C and D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Primitive Recreation Opportunity Spectrum (ROS) Areas as shown in Figure 3.4-1. This prohibition includes all surface disturbing activities including, but not limited to, drill pads, roads, powerlines, pipelines, and other facilities.

**For the purpose of:**

Preventing conflicts with the Primitive recreation opportunities provided by these areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-08**  
**Semi-Primitive Non-Motorized Recreation Opportunity Spectrum Areas**  
**Alternatives B and C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Semi-primitive, non-motorized areas as shown in Figure 3.4-1. This prohibition includes all surface disturbing activities including, but not limited to, drill pads, roads, powerlines, pipelines, and other facilities.

**For the purpose of:**

Preventing conflicts with semi-primitive non-motorized recreation opportunities provided by these areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-09**  
**Sage Grouse Leks**  
**Alternative C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

As shown on Figure 3.6-2, within 1 mile of sage-grouse leks (all habitats), and between 1 and 2 miles of sage-grouse leks within sagebrush habitat only.

This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

Seismic activities, including blasting, would be limited during the lekking period: March 1 – May 15.

**For the purpose of:**

Protecting breeding and brood rearing sage grouse from predation, displacement, habitat fragmentation, and disturbance. Preventing any loss of viability to sage grouse populations.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-10**  
**Sage Grouse Leks**  
**Alternative D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within 1 mile of sage grouse leks as shown on Figure 3.6-2.

This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

**For the purpose of:**

Protecting breeding and brood rearing sage grouse from predation, displacement, habitat fragmentation, and disturbance. Preventing any loss of viability to sage grouse populations.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-11**  
**Goshawk Nest Areas**  
**Alternatives B and C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within 0.5 mile of active or occupied goshawk nests.

Prior to any surface disturbing activities in known or suspected nesting areas a two-year survey protocol would need to be completed between March 1 and September 30. If an occupied nest is found, no surface disturbing activities may take place within 0.5 mile of the nest(s). Known goshawk nest areas are confidential and are not shown on any of the maps in the EIS. Exceptions to this stipulation (i.e., a smaller buffer) can be made if topographic barriers or vegetation screening can be utilized to protect the nest site as determined by the Dixie National Forest.

**For the purpose of:**

Avoiding any loss of viability to goshawk populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-12**  
**Mexican Spotted Owl Protected Activity Centers (PACs)**  
**Alternatives B and C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Mexican spotted owl Protected Activity Centers shown in Figure 3.6-1.  
This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

**For the purpose of:**

Protecting habitat areas for Mexican spotted owl that are not fully protected by the Endangered Species Act, which include all non-Critical Habitat areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-13**  
**Utah Prairie Dog Colonies**  
**Alternatives B, C, and D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within 0.5 mile of Utah prairie dog colonies. This prohibition includes all facilities such as drill pads, roads, pipelines, powerlines, etc. The locations of Utah prairie dog colonies are confidential and are not shown on any of the maps in the EIS.

**For the purpose of:**

Avoiding any loss of viability to Utah prairie dog populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-14**  
**Bald Eagle Winter Concentration Areas**  
**Alternatives B and C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Bald eagle winter concentration areas shown in Figure 3.6-2.

This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities. The USFS will not approve any ground disturbing activity until its obligations are met under applicable requirements of the Bald and Golden Eagle Protection Act, 16 U.S.C. 668-668c.

**For the purpose of:**

Avoiding a loss of viability to bald eagle populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-15**  
**Peregrine Falcon Nests**  
**Alternatives B and C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within one mile of peregrine falcon nests. This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

Prior to any surface disturbing activity such as construction and drilling, in areas where peregrine falcon nests are known to occur, surveys would need to be completed. If active or occupied nests are found, construction and drilling activities would not be allowed within one mile of the nest.

Exceptions to this stipulation (i.e., a smaller buffer) can be made if topographic barriers or vegetation screening can be utilized to protect the nest site as determined by the Dixie National Forest.

**For the purpose of:**

Avoiding any loss of viability to peregrine falcon populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**

**NSO-16**

**Sensitive Species and Suitable Habitat; Including Pygmy Rabbit, Flammulated Owl,  
Three-toed Woodpecker, Sensitive Bats, Boreal Toad, Bighorn Sheep  
Alternative B**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Habitat areas for some sensitive species shown in Figure 3.6-2.

This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

**For the purpose of:**

Avoiding a loss of viability to populations of these sensitive species on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-17**  
**Fisheries Habitat**  
**Alternative C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within a 500-foot buffer zone from the high waterline of streams/lakes with occupied or suitable sensitive fisheries habitat shown in Figure 3.6-2.

“Suitable” habitats are all areas currently identified by Conservation Teams, UDWR, and/or the Forest as having the potential for reintroductions within the next ten years.

This stipulation applies to all surface disturbing activities, such as roads, pads, powerlines, and pipelines. This stipulation does not allow for perpendicular crossings such as needed for roads, pipelines, and power lines.

**For the purpose of:**

Avoiding a loss of viability to sensitive fish populations on the Dixie National Forest and to maintain quality habitat to contribute toward maintenance and/or recovery of sensitive fish species.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-18**  
**Lava Fields Over Sensitive Aquifers**  
**Alternative D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Lava fields over sensitive aquifers shown in Figure 3.7-2.

This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

**For the purpose of:**

Preventing any damage to water flow or water quality of these sensitive aquifers.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-19**  
**Streams, Lakes, Springs, Wetlands, and Riparian Areas – 500-foot Buffer**  
**Alternative B**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

A 500-foot buffer zone from the high water point of any perennial streams, lakes, springs, wetlands, and riparian areas. 100-year floodplains are not included in this stipulation. This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities. Some but not all of these features are mapped, so the actual areas of no surface occupancy would be determined based on actual ground conditions.

**For the purpose of:**

Minimizing the contributions of sediments to watercourses, and minimizing the potential for spills or leaks to contribute pollutants to streams or other water features.

This stipulation provides restrictions greater than in 36 CFR 228.108(j) under Standard Lease Terms due to the specific prohibition of surface occupancy within the buffer zone.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-20**  
**Streams, Lakes, Springs, Wetlands, and Riparian Areas – 300-foot Buffer**  
**Alternative C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

All areas within 300-foot buffer of the high water point of all perennial streams, lakes, springs, wetlands, and riparian areas. 100-year floodplains are not included in this stipulation.

This stipulation applies to all surface disturbing activities, such as roads, pads, powerlines, and pipelines, but allows for perpendicular or near-perpendicular crossings such as needed for linear features like roads, pipelines, and powerlines as long as they are designed to minimize effects.

**For the purpose of:**

Reducing the contributions of sediments to watercourses, and minimizing the potential for spills or leaks to contribute pollutants to streams or other water features.

This stipulation provides restrictions greater than in 36 CFR 228.108(j) under Standard Lease Terms due to the specific prohibition of surface occupancy within the buffer zone.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-21**  
**Municipal Watersheds**  
**Alternative C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Municipal watersheds shown in Figures 3.7-1 through 3.7-4.

This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

**For the purpose of:**

Preventing any effects to water flow and quality of municipal watersheds and associated water sources.

Preventing pollution and protecting the quality of drinking water.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-22**  
**Active Rockfall, Landslide, and Unstable Areas**  
**Alternatives B, C, and D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Active rockfall and landslide areas and unstable areas shown in Figure 3.8-1. This stipulation applies to all surface disturbing activities such as well pads, roads, pipelines, and powerlines. Exceptions to this stipulation can be considered if a survey is conducted by a qualified geologist/engineer and it is demonstrated to the responsible Forest Officer that operations can be located in stable areas or can be designed to prevent causing landslides and damage from natural soil creep and landslides.

**For the purpose of:**

Ensuring that proposed activities/facilities do not cause landslides and to prevent facilities from being damaged by landslides, rockfalls, soil creep, or avalanches which could result in hazardous conditions and spills or releases of potentially contaminating materials.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-23**  
**High Erosion Potential Areas and Steep Slopes (greater than 35 percent)**  
**Alternatives B and C**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Areas with highly erosive soils and slopes greater than 35 percent shown in Figure 3.8-1. Not all areas are mapped and there are variable conditions within the areas shown on the map. The applicability of this stipulation to individual locations would be determined based on actual on-ground conditions. This stipulation includes all surface disturbing activities such as well pads, roads, powerlines, and pipelines.

Exceptions to this stipulation can be considered if a survey is conducted by a qualified geologist/soil scientist and it is demonstrated to the responsible Forest Officer that operations can be located in stable areas or can be designed and constructed to prevent causing excessive soil loss, landslides, or damage from natural soil creep and landslides.

**For the purpose of:**

Preventing excessive soil erosion and loss of productivity.

Avoiding soil damage and creating unstable/hazardous conditions.

Avoid high risk of damage to facilities from natural soil movement and landslides.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-24**  
**Research Natural Areas**  
**Alternative D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Within Research Natural Areas as shown in Figure 3.9-2.

This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

**For the purpose of:**

Preventing alteration of the natural conditions managed for research and educational purposes.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-25**  
**Botanical and Geological Areas**  
**Alternatives B, C, and D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Botanical and geological areas shown in Figure 3.9-2 (i.e., the Red Canyon Botanical Area and Side Hollow Ponderosa Pine Study Area).

This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

**For the purpose of:**

Preventing alternation of the uncommon, special, or natural attributes of these areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-26**  
**Side Hollow Ponderosa Pine Provenance Study Area**  
**Alternatives B, C, and D**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Side Hollow Ponderosa Pine Provenance Study Area shown in Figure 3.9-2.  
This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

**For the purpose of:**

Preventing any alternation to the natural conditions of this area that is being used in a genetic study of ponderosa pine communities.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION**  
**NSO-27**  
**Sensitive Plant Species and Suitable Plant Habitat**  
**Alternative B**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Suitable habitat and occurrences of sensitive plant species as shown in Figure 3.6-3. This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities.

**For the purpose of:**

Maintaining viable populations of sensitive plant species on the Dixie National Forest. To provide more protections (i.e., a buffer) that can be used to avoid individuals, populations, or clusters of sensitive plant species.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION  
NSO-28**

**Mountain Meadows Historic Site, Long Hollow Historic District, and Boulder Area/Cedar  
Mtn. and Concentrated Sites Area  
Alternative B**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

The locations of these areas are confidential. The legal descriptions will be shown on the No Surface Occupancy stipulation forms for leases.

This prohibition includes all surface disturbing activities such as roads, well pads, and other facilities. The USFS will not approve any ground disturbing activity that may affect any such properties or resources until it completes its obligations under applicable requirements of the NHPA and other authorities.

**For the purpose of:**

Preventing effects to the cultural and historic significance, nature, and quality of these areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**NO SURFACE OCCUPANCY STIPULATION  
NSO-29  
Areas in Proximity to Bryce Canyon National Park**

**No surface occupancy or use is allowed on the lands described below (legal subdivision or other description).**

Areas in proximity to Bryce Canyon National Park (1,925 acres). No surface occupancy is permitted including all surface disturbing activities including, but not limited to, drill pads, roads, powerlines, pipelines, and other facilities.

**For the purpose of:**

Protecting the dark/night sky values, scenic vistas, solitude, and soundscapes for areas adjacent to Bryce Canyon National Park. Also to prevent conflicts with the National Park resource values named above and others such as recreation (egress) and vegetation (invasive species).

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-01**  
**High Scenic Integrity Objective Areas**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

Proposed oil and gas activity must be located to minimize intrusive sights and sounds from facilities and roads. Proposed facilities will be individually located on a case-by-case basis (within up to 0.25 mile of the original site) to take advantage of vegetative or topographic screening. Alterations should be visually subordinate to the overall landscape and structures will be designed to blend with the natural landscape.

**On the lands described below:**

Within all lands designated as having a high scenic integrity objective as shown on Figure 3.2-1.

**For the purpose of:**

Maintain the natural appearing landscapes in such a manner as the landscape character appears intact. Meet the scenic integrity objectives of these areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-02**  
**Moderate Scenic Integrity Objective Areas**  
**Alternatives B and C**

**Surface occupancy or use is subject to the following special operating constraints.**

Proposed oil and gas activity must be located to minimize intrusive sights and sounds from facilities and roads. Proposed facilities will be individually located on a case-by-case basis (within up to 0.25 mile of the original site) to take advantage of vegetative or topographic screening. Oil and gas-related features may make the landscape appear slightly altered, but should be visually subordinate to the overall landscape.

**On the lands described below:**

Within all lands designated as having a moderate scenic integrity objective as shown on Figure 3.2-1.

**For the purpose of:**

Maintain disturbances as visually subordinate in such a manner as the landscape character appears intact. Meet the scenic integrity objectives of these areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-03**  
**Unassigned Scenic Integrity Objective Areas**  
**Alternatives B, C, and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Proposed oil and gas activity must be located to minimize intrusive sights and sounds from facilities and roads. Proposed facilities will be individually located on a case-by-case basis (within up to 0.25 mile of the original site) to take advantage of vegetative or topographic screening. A visual analysis will be completed for areas of unassigned SIO and the appropriate Scenic Integrity Objective will be determined when when a specific project is proposed.

**On the lands described below:**

Within all lands designated as having “unassigned” scenic integrity objective as shown on Figure 3.2-1.

**For the purpose of:**

Protecting the scenic integrity of these areas. These areas will require a scenic integrity evaluation prior to any proposed disturbance in accordance with the Scenery Management System Amendment to the Dixie National Forest Land and Resource Management Plan (April 2000).

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-04**  
**Protection of Inventoried Roadless Areas**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

No new temporary or permanent roads, mechanical road construction or reconstruction (as defined in 36 CFR 294.11) may occur within the lands described below. This applies to all linear disturbance regardless of classification as “roads” or “construction zones.” Travel may occur only along designated roads,\* which may be cleared of vegetation to allow passage of trucks. Timber harvest would also be allowed.

\*Note that a “Designated road, trail, or area” is defined in 36 CFR 1212.1 (Subpart A, Definitions) as “A National Forest System road, a National Forest System trail, or an area on National Forest System lands that is designated for motor vehicle use pursuant to 212.51 on a motor vehicle use map.”

**On the lands described below:**

All Inventoried Roadless Areas on the Dixie National Forest as mapped and shown in Figure 3.3-1.

**For the purpose of:**

Protecting the undeveloped, unroaded characteristics and wilderness attributes of the areas classified as Inventoried Roadless Areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820). .

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-05**  
**Protection of Suitable Wild and Scenic Rivers**  
(Ref. FSM 2820)  
**Alternatives C and D**

**Surface occupancy or use is subject to the following special operating constraints (relative to potential Wild and Scenic Rivers classification).**

Proposed operations must be located or designed to maintain and protect the free-flowing character and the outstandingly remarkable values of the identified river. No new temporary roads, permanent roads, road construction or reconstruction may occur to protect the eligibility of these streams to be classified as wild. In addition, no power transmission lines or pipelines (i.e., oil, gas, water) may be constructed in accordance with direction in FSH 1909.12 Chapter 80.

**On the lands described below:**

Lands within one quarter mile of either bank of the suitable stream segments of the North Fork of the Virgin River, Mamie Creek, and Pine Creek. The location of these streams is shown in Figure 3.3-1.

**For the purpose of:**

Protection of streams to allow for suitability in the National Wild and Scenic River System as directed in FSH 1909.12 Chapter 80. To protect the free-flowing character and outstanding remarkable values of identified rivers.

A request for a waiver, exemption, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104). The objective and justification for the above stipulation, along with guidance on when a WEM would potentially be considered, are described in Section 1.8.5.9.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-06**  
**Developed Sites, Administrative Sites, and**  
**Designated Dispersed Recreation Sites**  
**Alternatives C and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Proposed oil and gas activity must be located to minimize intrusive sights and sounds from facilities and roads. Proposed facilities will be individually located on a case-by-case basis (within up to 0.25 mile of the original site) to take advantage of vegetative or topographic screening. Development and activity would be limited to a level that facilitates the dispersed recreation experience. Measures applied would include requiring noise reduction technologies and limiting operation and maintenance use on roads during holidays and high use periods.

**On the lands described below:**

Those areas established as Developed Recreation sites, Forest Service Administrative sites and those areas of Dixie National Forest which have been designated as dispersed camping areas. The areas mapped are shown in Figure 3.4-1.

**For the purpose of:**

To preclude surface occupancy and new surface disturbance within developed sites, recreation residences, administrative sites and designated dispersed recreation sites.

Minimizing conflicts with Developed Sites, Administrative Sites, and Dispersed Recreation Sites (most are 100-200 acres) and the associated recreation opportunities provided by these sites, including the visual and auditory environments.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-07**  
**Semi-Primitive Non-Motorized Areas**  
**As defined in USFS Recreation Opportunity Spectrum**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

Proposed oil and gas activity must be located to minimize intrusive sights and sounds from facilities and roads. Vehicular access is limited to established roadways. Proposed facilities will be individually located on a case-by-case basis (within up to one quarter mile of the original proposed site) to take advantage of vegetative or topographic screening.

**On the lands described below:**

Recreation Opportunity Spectrum: Semi-Primitive Non-Motorized areas shown on Figure 3.4-1.

**For the purpose of:**

Minimizing conflicts with the semi-primitive non-motorized character.

To maintain the natural appearing environment and unroaded nature of these areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-08**  
**Semi-Primitive Motorized and Roaded Natural Areas**  
**As defined by USFS Recreation Opportunity Spectrum**  
**Alternatives B, C, and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Proposed oil and gas activity must be located to minimize intrusive sights and sounds from facilities and roads. Proposed facilities will be individually located on a case-by-case basis (within 0.25 mile of the original proposed site) to take advantage of vegetative or topographic screening.

**On the lands described below:**

Recreation Opportunity Spectrum: Semi-Primitive Motorized areas and Roaded Natural Areas as shown on Figure 3.4-1.

**For the purpose of:**

Minimizing conflicts with the semi-primitive motorized and roaded natural characteristics.

Minimizing intrusive sights and sounds from facilities and roads.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**TIMING LIMITATION STIPULATION**  
**TL-01**  
**Sage Grouse Brood Rearing Habitat**  
**Alternative D**

**No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.**

May 1 to July 15. These dates may be adjusted by up to 14 days at each end of this period without a waiver, modification, or exception to this stipulation depending on local expertise (wildlife biologists).

Exceptions to this stipulation can be made if it is determined that the habitat is not being used by sage grouse due to seasonal variations or other conditions.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-2.

**For the purpose of:**

Prevent high-intensity oil and gas activities (i.e., construction and drilling) in brood rearing habitat during the primary season of use, which would otherwise decrease habitat capability and brood rearing success.

Avoiding a loss of viability to sage grouse populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-09**  
**Sage Grouse Brood Rearing Habitat**  
**Alternative C**

**Surface occupancy or use is subject to the following special operating constraints.**

No activities would be allowed from May 1 to July 15. Outside these dates, surface disturbance for oil and gas operations is limited to no more than 1 percent of total habitat (1% = 130 acres), including the areas of avoidance due to human activity (i.e., roads and well pads) with radius/buffer to be determined by the Dixie National Forest. Reclaimed oil and gas disturbance which has met reclamation requirements is not included in the disturbed/avoidance area calculation.

**On the lands described below:**

Sage grouse brood-rearing habitat. The habitat area for which this stipulation applies is shown in Figure 3.6-2.

**For the purpose of:**

To avoid a substantial loss of sage grouse brooding habitat and to ensure brood rearing success.

To avoid a loss of viability to sage grouse populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**TIMING LIMITATION STIPULATION**  
**TL-02**  
**Deer and Elk Winter Range – Crucial and Substantial**  
**Alternative D**

**No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.**

December 1 to April 15. These dates may be adjusted by up to 14 days at each end of this period without a waiver, modification, or exception to this stipulation depending on local expertise (wildlife biologists).

Exceptions to this stipulation can be made if it is determined that winter range is not being used by big game due to seasonal variations or other conditions.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-4.

**For the purpose of:**

Preventing high-intensity oil and gas activities (i.e., construction and drilling) in crucial and substantial winter range during the primary season of use, which would otherwise decrease habitat capability.

To minimize the potential that deer and elk would avoid the area and thus minimize the potential that those population objectives for UDWR hunt units on the Dixie National Forest would not be met.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**TIMING LIMITATION STIPULATION**  
**TL-03**  
**Deer and Elk Summer Range – Crucial and Substantial**  
**Alternatives C and D**

**No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.**

May 15 to July 5. These dates may be adjusted by up to 14 days at each end of this period without a waiver, modification, or exception to this stipulation depending on local expertise (wildlife biologists).

Exceptions to this stipulation can be made if it is determined that the range is not being used by big game due to seasonal variations or other conditions.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-4.

**For the purpose of:**

To prevent high-intensity oil and gas activities (i.e., construction and drilling) in crucial and substantial summer range during the primary season of use, which would otherwise decrease habitat capability.

To minimize the potential that deer and elk would avoid the area and thus minimize the potential that those population objectives for UDWR hunt units on the Dixie National Forest would not be met.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-10**  
**Deer and Elk Winter Range – Crucial and Substantial**  
**Alternative C**

**Surface occupancy or use is subject to the following special operating constraints.**

Surface disturbance for oil and gas operations is limited to no more than 1 percent of the total crucial and substantial deer and elk winter range in each ranger district. This restriction only applies to disturbed areas associated with oil and gas exploration and development and excludes reclaimed oil and gas sites where reclamation requirements have been met.

For production operations during the wintering season of use (December 1 – April 15), the operator must make all efforts to minimize maintenance activities and the number of trips to the site to those essential for assuring production and site integrity. Well maintenance should be planned in advance to avoid the need for workover rig operations during the restricted period.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-4.

**For the purpose of:**

Avoiding substantial loss of big game winter range.

To minimize the potential that deer and elk would avoid the area due to human presence and noise, and thus minimize the potential that population objectives for UDWR hunt units on the Dixie National Forest would not be met.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-11**  
**Active Raptor Nests**  
**Alternatives B, C, and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Raptor nest surveys are required in potentially suitable habitats for all raptors, including Threatened, Endangered, Sensitive and MIS species prior to the approval of surface disturbing activities at a specific location.

If active or occupied raptor nests are located, high intensity activities such as construction and drilling will be restricted surrounding the nest(s) within an influence zone. Influence zones and duration of restrictions would depend on the raptor species of concern as determined in the guidelines set forth by the US Fish and Wildlife Service for Utah species. Influence zones are line-of-sight to specified distances. If topography or vegetation provides adequate screening needed to maintain nest viability, the distance may be reduced (to be determined by the Dixie National Forest).

**On the lands described below:**

All areas with suitable raptor nesting habitat (e.g., cliffs, forested areas) for raptors within 0.5 mile of proposed operations, or 1.0 mile of proposed operations if peregrine falcon or bald eagle nests are suspected.

**For the purpose of:**

Protecting nesting raptors by maintaining solitude and ambient noise levels during the nesting season.

To provide protections to golden eagles beyond the Bald and Golden Eagle Protection Act by avoiding injury or mortality to nestlings and adults (take) through spatial and seasonal buffers.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-12**  
**Goshawk Nest Areas**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any surface disturbing activities in known goshawk nesting areas a two-year survey protocol would need to be completed between March 1 and September 30. If an occupied nest is found, any high intensity activity such as construction and drilling may be restricted within a 180-acre protection area (approximately 0.3-mile buffer).

Exceptions to this stipulation (i.e., a smaller buffer) can be made if topographic barriers or vegetation screening can be utilized to protect the nest site.

**On the lands described below:**

Goshawk nest locations are confidential. All known nest areas within the lease area would be surveyed if activities are proposed within these areas.

**For the purpose of:**

Protecting nesting potential for goshawks by maintaining solitude and ambient noise levels during the nesting season.

To avoid a loss of viability to goshawk populations on the Dixie National Forest.

To avoid mitigations that would be required for goshawk nest disturbance.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-13**  
**Goshawk Post Fledgling Areas (PFA)**  
**Alternatives B, C, and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any surface disturbing activity in a goshawk PFA, a two-year protocol survey would be required and would need to be completed between March 1 and September 30. If any occupied or active nests are found within the PFA, high intensity oil and gas activities such as construction and drilling may be restricted in the area of the PFA from 1 March to 30 September or until birds have fledged as determined by District Wildlife Staff.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-2.

**For the purpose of:**

Providing for goshawk fledgling survivorship by maintaining solitude and ambient noise levels during the fledgling period within the PFA.

To avoid a loss of viability to goshawk populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-14**  
**Mexican Spotted Owl Protected Activity Centers (PACs)**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any surface disturbing activity in a PAC area on the Dixie National Forest, surveys would need to be completed between March 1 and August 31. Mexican spotted owl surveys require 4 surveys each year for 2 consecutive years. If the PAC is occupied by Mexican spotted owls, high intensity activities such as construction and drilling may be limited between March 1 and August 31 within one half mile of the nest if surveys determine that proposed activities may have an adverse effect on nesting site capability.

**On the lands described below:**

The Protected Activity Center for which this stipulation applies is shown in Figure 3.6-1.

This stipulation would also apply to any new Protected Activity Centers discovered prior the issuance of the lease.

**For the purpose of:**

Protecting habitat areas for Mexican spotted owl that are not fully protected by the Endangered Species Act, which include all non-Critical Habitat areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-15**  
**Potential Mexican Spotted Owl Habitat**  
**Alternatives B, C, and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any surface disturbing activity in areas mapped as potentially suitable habitat, a site validation visit would need to be completed within 0.5 miles of proposed project activities.

If habitat is determined to be suitable, surveys would be conducted between March 1 and August 31 in accordance with Forest service protocol. If the habitat is occupied by Mexican spotted owls, construction and drilling activities will be limited within one half mile of the nest between March 1 and August 31 if surveys determine that proposed activities may have an adverse effect on nesting site capability.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-1.

**For the purpose of:**

To protect nesting habitat for Mexican spotted owl that are not fully protected by the Endangered Species Act, which include all non-Critical Habitat areas.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-16**  
**Migratory Birds**  
**Alternatives B and C**

**Surface occupancy or use is subject to the following special operating constraints.**

Surveys for migratory birds are required in all suitable habitats on the Dixie National Forest with particular emphasis placed on the following species:

Partners in Flight Priority Species (Parrish et al. 2002).

Utah Comprehensive Wildlife Conservation Strategy Tier I and II species (UDWR 2005).

USFWS Birds of Conservation Concern (USFWS 2002a).

Survey must be conducted between 1 March - 1 September, dependant on species and habitat type. If nests for the above species are found in the vicinity of proposed operations, high intensity activities such as construction and drilling may be restricted surrounding a migratory bird nest for the duration of the species' nesting season or until birds fledge from the nest. Influence zones and duration of restrictions would depend on the bird species and number and location of nests.

**On the lands described below:**

All areas with suitable habitat for migratory birds (e.g., forested areas, shrub steppe, grassland) within the zone of influence for oil and gas operations.

**For the purpose of:**

Providing additional protections to migratory birds beyond the requirements of the Migratory Bird Treaty Act on National Forest lands, which state that management should conserve migratory bird populations and habitats. This stipulation would provide some protection to individual nests of certain migratory bird species.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-17**  
**Bald Eagle Winter Concentration Areas**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

Proposed oil and gas activities in a winter concentration area would require surveys to be completed during the late fall and early winter months. If bald eagles are found in the area, high intensity activities such as construction and drilling may be restricted between December 1 and February 15 if birds are present. For production operations in concentration areas, the operator must make all efforts to minimize maintenance activities and the number of trips to the site to those essential for assuring production and site integrity. Well maintenance should be planned in advance to avoid the need for workover rig operations during the restricted period.

The USFS will not approve any ground disturbing activity until its obligations are met under applicable requirements of the Bald and Golden Eagle Protection Act, 16 U.S.C. 668-668c.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-2.

**For the purpose of:**

Avoiding a loss of viability to bald eagle populations on the Dixie National Forest.

To provide protections to bald eagles beyond those in the Bald and Golden Eagle Protection Act by implementing seasonal restrictions.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-18**  
**Peregrine Falcon Nests**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any high intensity activity, such as construction and drilling, in areas where peregrine falcon nests are known to occur, surveys for peregrine falcon would need to be completed between February 1 and August 31. If active or occupied nests are found, construction and drilling activities may be restricted from February 1 to August 31 within one mile of the nest.

**On the lands described below:**

Peregrine falcon nest locations are confidential. All known peregrine falcon nest areas would be surveyed prior to activities where operations are proposed within one mile of the nest.

**For the purpose of:**

Protecting nesting potential for peregrine falcons by maintaining solitude and ambient noise levels during the nesting season.

To avoid a loss of viability to peregrine falcon populations on the Dixie National Forest.

To avoid mitigations that would be required if a peregrine falcon nest were disturbed.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**TIMING LIMITATION STIPULATION**  
**TL-04**  
**California Condor (Experimental/Nonessential Population) and Peregrine Falcon Rim**  
**Habitat**  
**Alternative D**

**No surface use is allowed during the following time period(s). This stipulation does not apply to operation and maintenance of production facilities.**

1 February – 31 August. These dates may be adjusted by up to 14 days at each end of this period without a waiver, modification, or exception to this stipulation depending on local expertise (wildlife biologists).

Exceptions to this stipulation can be made if it is determined that the habitat is not being used by either California condors or peregrine falcons.

If California condors are located on the Pine Valley Ranger District, Endangered Species Act guidance must be followed (see Lease Notice). If California condors are located on the Cedar City, Powell, or Escalante Ranger Districts, Endangered Species Act guidance for experimental/nonessential population must be followed.

**On the lands described below:**

The habitat area for which this stipulation applies has been mapped and is shown in Figure 3.6-2.

**For the purpose of :**

Protecting California condor habitat areas not fully protected under the Endangered Species Act, which include all non-Critical Habitat areas.

To protect peregrine falcon habitat during the primary season of use and avoid a loss of viability to peregrine populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-19**  
**California Condor (Experimental/Nonessential Population) and**  
**Peregrine Falcon Rim Habitat**  
**Alternatives B and C**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any surface disturbing activities in rim habitat on the Dixie National Forest, surveys would need to be completed in accordance with Forest Service protocol. If active or occupied territories are located, surface disturbing activities may be limited between February 1 and August 31 within one mile of the territory if it is determined that proposed activities may have an adverse effect on nesting site capability.

If California condors are located on the Pine Valley Ranger District, Endangered Species Act guidance must be followed (see Lease Notice). If California condors are located on the Cedar City, Powell, or Escalante Ranger Districts, Endangered Species Act guidance for experimental/nonessential population must be followed.

**On the lands described below:**

The habitat described as potential rim habitat for California condor and peregrine falcon is shown in Figure 3.6-2.

**For the purpose of:**

Protecting habitat areas for California condor that are not fully protected under the Endangered Species Act, which include all non-Critical Habitat areas.

To protect peregrine falcon habitat and avoid a loss of viability to peregrine populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-20A**  
**Sensitive Bat Habitat**  
**Alternatives C and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any oil and gas activities within 0.25 miles of a cave, bat surveys would need to be completed between October 1 and May 1 in accordance with USFS protocol. If winter hibernacula (winter roost sites) are located, high intensity activities such as construction and drilling may be restricted from October 1 to May 1 within a 0.25-mile buffer around cave entrances.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-2.

**For the purpose of:**

Avoiding a loss of viability to sensitive bat populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-20B**  
**Pygmy Rabbit Habitat**  
**Alternatives C and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any oil and gas activities within suitable habitat for pygmy rabbit, surveys would need to be completed. If colonies are located, high intensity activities such as construction and drilling will be restricted year-round within a 100-meter buffer around the estimated center of the colony.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-2.

**For the purpose of:**

Avoiding a loss of viability to pygmy rabbit populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-20C**  
**Flammulated Owl Habitat**  
**Alternatives C and D**

**Surface occupancy or use is subject to the following special operating constraints.**

If any oil and gas activity is requested within suitable habitat for flammulated owl, surveys would need to be completed before oil and gas activities can occur in the area. If owls are detected or nests located, any high intensity activity such as construction and drilling may be restricted within a one half mile buffer around the estimated center of the territory from April 1 to September 30.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-2.

**For the purpose of:**

Avoiding a loss of viability to flammulated owl populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-20D**  
**Boreal Toad Habitat**  
**Alternatives C and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any oil and gas activities within suitable boreal toad habitat (see Figure 3.6-2), surveys would need to be completed. If boreal toads are located, high intensity activities such as construction and drilling will be restricted within the habitat between April 1 and July 31.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-2.

**For the purpose of:**

Avoiding a loss of viability to boreal toad populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-20E**  
**Bighorn Sheep Habitat**  
**Alternatives C and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any oil and gas activities within suitable bighorn sheep habitat, surveys for bighorn sheep would be completed. If bighorn sheep are located, high intensity activities such as construction and drilling may be restricted within the habitat if such activities would impact the viability of bighorn sheep populations.

**On the lands described below:**

Suitable habitat areas for bighorn sheep.

**For the purpose of:**

Avoiding a loss of viability to bighorn sheep populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-20F**  
**Three-toed woodpecker habitat**  
**Alternatives C and D**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to any oil and gas activities within suitable three-toed woodpecker habitat, surveys would be completed. If three-toed woodpeckers are located, high intensity activities such as construction and drilling may be restricted within the habitat if such activities would impact the viability of three-toed woodpecker populations.

**On the lands described below:**

Suitable habitat for three-toed woodpeckers.

**For the purpose of:**

Avoiding a loss of viability to three-toed woodpecker populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-21**  
**Fisheries Habitat**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

No surface disturbing activities (with the exception of perpendicular crossings for linear facilities such as roads, power lines, and pipelines) would be approved unless the operator demonstrates that they have taken all reasonable measures to minimize soil disturbance. Special conventions beyond normal operating practices may be required in these areas.

Perpendicular stream crossings would be designed to facilitate upstream and downstream fish passage with appropriate water velocity, water depth, height (drop) of structure, and natural bottom.

This stipulation applies within all occupied and suitable fisheries habitat mapped in Figure 3.6-2. "Suitable" habitats are all areas currently identified by Conservation Teams, UDWR, and/or the Forest as having the potential for reintroductions within the next ten years.

**On the lands described below:**

Streams that support or that may support sensitive fish populations. The habitat area for which this stipulation applies is shown in Figure 3.6-2:

**For the purpose of:**

Avoiding a loss of viability to sensitive fish populations on the Dixie National Forest.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-22**  
**Streams, Lakes, Springs, Wetlands, and Riparian Areas – 300-foot Buffer**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

Special measures may be required within 300 feet of the high waterline of perennial streams, lakes, springs, wetlands, and riparian areas to minimize soil disturbance.

Platforms or other stabilizing structures may need to be installed to avoid blading and minimize soil disturbance for the establishment of well pads, roads, and other facilities. In general, the manner in which development activities would be permitted would be more restricted than Standard Lease Terms permit. This stipulation is not intended to prohibit perpendicular or near perpendicular stream crossings for linear facilities such as roads, power lines, and pipelines which are adequately designed to minimize effects.

**On the lands described below:**

Within 300 feet of the high waterline of perennial streams, lakes, springs, wetlands, and riparian areas that occur across the Dixie National Forest as shown in Figures 3.7-1 through 3.7-4 and as found on the ground during evaluations of proposed activities.

**For the purpose of:**

This stipulation provides greater protections than under Standard Lease Terms. This stipulation would minimize soil disturbance within the buffer zone.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-23**  
**Municipal Watersheds**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints.**

No surface disturbing operations would be permitted unless the Dixie National Forest finds that the leasee has sustained its burden of proof that the proposed activities do not create a foreseeable and substantial risk of pollution or disruption to the municipal watershed. No operation will be approved unless the operator can demonstrate that they have taken all reasonable measures to minimize surface use. Special conventions beyond normal operating procedures may be required in these areas.

**On the lands described below:**

Municipal Watersheds as designated at the time of lease issuance.

**For the purpose of:**

Protecting drinking water sources from contaminants. To protect drinking water sources from physical disruption.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-24**  
**High Erosion Potential Areas and Areas With Slopes Greater Than 35 Percent**  
**Alternative D**

**Surface occupancy or use is subject to the following special operating constraints:**

(1) Well sites will be located to avoid areas defined as having high erosion potential and slopes greater than 35 percent., Exceptions can be made if the operator can demonstrate that specific areas are stable or can be stabilized by using specific design and construction measures.

(2) Special measures may be required to stabilize slopes and soil resources to prevent slope instability, excessive soil erosion and production of sediment. Measures could include construction slope support structures, sediment collection structures, water collection systems/sediment ponds, placement of gravel to prevent rutting by vehicles, use of dust suppressants, etc.

(3) Pads may be located adjacent to existing roads, projects may be routed in corridors and cut and fill may be minimized at the discretion of the USFS or BLM authorized officer. All soil identified as the O or A horizon must be salvaged to its full extent if less than one foot deep, or at least one foot depth if these soil horizons are deeper. All salvaged soil must be stockpiled to use for reclamation.

(4) Directional drilling from approved well pads may be required at the discretion of the USF/BLM authorized officer to reduce the need for additional roads and production infrastructure.

**On the lands described below:**

Areas identified on Figure 3.8-1 as having high erosion potential and slopes greater than 35 percent. Actual on-ground conditions will be used to determine stipulation applicability.

**For the purpose of:**

Protecting soil resources from excessive impacts.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-25**  
**Marginally Unstable Slopes**  
**Alternatives B and C**

**Surface occupancy or use is subject to the following special operating constraints:**

A survey must be conducted by a qualified geologist/engineer to determine if the areas proposed for surface disturbing operations are stable enough to accommodate the proposed facilities. The operator must demonstrate to the responsible Forest officer that operations can be located in stable areas or can be designed to prevent causing landslides and damage from natural soil creep and landslides.

**On the lands described below:**

Areas identified on Figure 3.8-1 as having marginally unstable slopes.

**For the purpose of:**

Protecting soil and water resources from excessive impacts that could result from damage to facilities from land/soil movement and failures.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-26**  
**Lava Tubes and Limestone (Karst) Cave Areas**  
**Alternatives B, C, and D**

**Surface occupancy or use is subject to the following special operating constraints:**

In areas with known or suspected caves, lava tubes, and karst features, surveys will be required to determine if they occur within or adjacent to the proposed project area. Surface disturbance will not be allowed within 300 meters of cave entrances, passages, or aspects of significant caves, lava tubes, or significant karst features. Waiver of this requirement will be considered when an approved plan of operations ensures the protection of lava or karst cave resources.

All casing and cementing programs must be designed to allow for a karst protection string and all strings of casing must be cemented to the surface. Upon abandonment of the well the wellbore will be cemented from the base of the cave/karst zone to the surface.

**On the lands described below:**

Areas identified as having potential to have lava tube or limestone cave resources below the surface. Most cave resources potential is in the Cedar City Ranger District; some areas have been mapped.

Cave resources are defined as any naturally formed void, cavity, recess, natural pit, sinkhole, or other feature that is large enough to permit a person to enter, whether or not the entrance is naturally formed or human-made. The term includes any extension or component of a cave or system of interconnected cave passages that occur beneath the surface of the earth or within a cliff or ledge, and/or natural subsurface water and drainage systems. Cave resources include any material or substance occurring naturally in caves, such as animal life, plant life, paleontological deposits, sediments, minerals, speleogens (relief features on the walls, ceiling, and floor of any cave that are part of the surrounding bedrock), and speleothems (any natural mineral formation or deposit occurring in a cave) is considered a Cave Resource.

**For the purpose of:**

Protecting Lava Caves and Karst Features and associated groundwater and spring resources.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-27**  
**Sensitive Plants and Suitable Habitat**  
**Alternative C**

**Surface occupancy or use is subject to the following special operating constraints.**

Prior to conducting any surface disturbing activities within suitable habitat for sensitive plants, surveys would need to be completed. If sensitive plants are found, ground disturbing activities may be restricted within a 300-meter buffer around plant populations that are essential to the persistence of the species on the Dixie National Forest.

**On the lands described below:**

The habitat area for which this stipulation applies is shown in Figure 3.6-3.

**For the purpose of:**

Locating and designing operations so as to not adversely affect viability of plant species so as to maintain viable populations of sensitive plant species on the Dixie National Forest.

To provide more protections (i.e., a buffer) that can be used to avoid individuals, populations, or clusters of sensitive plant species.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE  
CSU-28  
Mountain Meadows Historic Site  
Long Hollow Historic District  
Alternatives C and D**

**Surface occupancy or use is subject to the following special operating constraints:**

No new temporary or permanent roads, mechanical road construction or reconstruction (as defined in 36 CFR 294.11) may occur within the lands described below. This applies to all linear disturbance regardless of classification as "roads" or "construction zones." Travel may occur along existing roads. Proposed oil and gas activity must be located so as to minimize intrusive sights and sounds to the eligible . The USFS will not approve any ground disturbing activity that may affect any such properties or resources until it completes its obligations under applicable requirements of the NHPA and other authorities. The USFS may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized or mitigated. Oil and gas activities may need to be located outside the boundary of the areas listed on the National Register of Historic Sites.

**On the lands described below:**

Site listed as eligible on the National Register of Historic Places:

**Mountain Meadows Historic Site  
Long Hollow Historic District**

**For the purpose of:**

Protecting eligibility of site on the National Register of Historic Places.

Preventing effects to the historic significance, nature, and quality of these areas.

To minimize impacts to cultural and historic resources from surface disturbance associated with oil and gas activities.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820).

**CONTROLLED SURFACE USE STIPULATION**  
**CSU-29**  
**Protection of Class I Airsheds**

**Surface occupancy or use is subject to the following special operating constraints (Relative to protection of air resources).**

Proposed operations must be located and/or designed to not cause or contribute to adverse impacts to air quality related values in Class I airsheds as determined by the potentially impacted agency. Operators will be expected to use appropriate Best Available Control Technology (BACT) to reduce impacts to air quality and air quality related values by reducing emissions from field production and operations. The future development of the lease parcels may be subject to appropriate mitigation and conditions of approval (COAs) to reduce or mitigate air resource impacts.

To ensure this, within 60km of any Class I airshed an air impact analysis would be required prior to any field development. Analysis must demonstrate that proposed operations and associated mitigating measures will not cause or contribute to adverse impacts to air quality related values as determined by the potentially impacted agency and as outlined in the most recent FLAG guidance.

Typical design and mitigation measures may include: use of Tier IV or better engines, use of low sulfur fuels, electrification of well fields, flaring hydrocarbon and gases at high temperatures in order to reduce emissions of incomplete combustion; water dirt roads during periods of high use in order to reduce fugitive dust emissions; require that vapor recovery systems be maintained and functional in areas where petroleum liquids are stored; minimize roads and re-vegetate areas of the pad not required for production facilities to reduce the amount of dust from the pads.

**On the lands described below:**

All lands in leasehold within 60 km of the Class I areas.

**For the purpose of:**

Protection of air resources in and around Class I areas to meet or exceed FLAG guidelines.

A request for a waiver, exception, or modification (WEM) to the above lease stipulation may be requested along with the submission of a Surface Use Plan of Operations (36 CFR 228.104).

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, See BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

# Lease Notices for Oil and Gas Development on Lands of the Dixie National Forest

Under Jurisdiction of  
Department of Agriculture

In conducting operations associated with this lease, the lessee/operator 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, occupancy, and management of National Forest System (NFS) lands when not inconsistent with existing lease rights granted by the Secretary of Interior.

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

***Forest Supervisor  
Dixie National Forest  
1789 Wedgewood Lane  
Cedar City, Utah 84721***

Telephone: **435 865-3700**

who is the authorized representative of the Secretary of Agriculture.

**MIGRATORY BIRDS** (Migratory Bird Treaty Act of 1918, as amended by P.L. 86-732; P.L. 90-578; P.L. 91-135; P.L. 93-300; P.L. 95-616; P.L. 99-645; and P.L. 105-312)

The Forest Service is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any migratory birds, or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Migratory Bird Treaty Act of 1918 by detrimentally affecting these species or their habitats.

The lessee/operator may, unless notified by the Forest Service that the examination is not necessary, conduct the examination on the leased lands at his discretion and cost. This examination must be done by or under the supervision of a qualified resource specialist approved by the Forest Service. An acceptable report must be provided to the Forest Service identifying the anticipated effects of a proposed action on migratory birds or their habitats.

**BALD AND GOLDEN EAGLE NESTS** (Bald and Golden Eagle Protection Act of 1940, as amended by P.L. 86-70; P.L. 87-884; P.L. 92-535; and P.L. 95-616)

The Forest Service is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any bald eagles or golden eagles, or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Bald and Golden Eagle Protection Act of 1940 by detrimentally affecting these species or their habitats.

The lessee/operator may, unless notified by the Forest Service that the examination is not necessary, conduct the examination on the leased lands at his discretion and cost. This examination must be done by or under the supervision of a qualified resource specialist approved by the Forest Service. An acceptable report must be provided to the Forest Service identifying the anticipated effects of a proposed action on bald or golden eagles or their habitats.

**THREATENED OR ENDANGERED SPECIES** (The Endangered Species Act. (ESA), P.L. 93-205 (1973), P.L. 94-359 (1974), P.L. 95-212 (1977), P.L. 95-632 (1978), P.L. 96-159 (1979), P.L. 97-304 (1982), P.L. 100-653 (1988)).

The lessee/operator is given notice that lands in the lease area have been identified as containing potential habitat for plant and animal species listed on the USFS Intermountain Region Sensitive Species List and/or Utah Sensitive Species List (i.e., sensitive species), and that no surface use or otherwise disruptive activity would be allowed that would result in impacts to individuals or populations of these sensitive species that would result in a trend toward listing of these species under the Endangered Species Act.

Lessee will be required to survey potentially affected habitat using scientific methods approved by the USFS. If such habitat is occupied and the species may be adversely affected by exploration and/or production operations, modifications to the Surface Use Plan of Operations may be required in order to protect these resources from surface disturbing activities in accordance with Section 6 of the lease terms, National Forest Management Act, Endangered Species Act, Migratory Bird Treaty Act, and 43 CFR 3101.1-2.

If the USFS determines sensitive species may be affected by fluid mineral operations, the lessee will be required to develop and implement a monitoring plan prior to and during operations. This monitoring plan will apply widely-accepted scientific methods approved by the USFS, and results of monitoring will be reported to the USFS at least annually. If unanticipated types or levels of adverse effects are observed during monitoring, the USFS will be promptly notified and conservation measures identified by the USFS will be implemented by the lessee.

*(Forest Service Manual 2672.4 and BLM Manual 6840 require surveys for and management activities to be managed to prevent a trend toward federal listing of species. FS policy addresses species identified by the Regional Forester as sensitive species; Utah BLM adopts the UDWR Sensitive species).*

The Forest Service is responsible for ensuring that the leased land is examined through the biological assessment process prior to undertaking any surface disturbing activities, to determine effects upon any plant or animal species listed or proposed for listing as endangered or threatened or their habitats. The finding of this biological assessment may result in some restrictions to the operators plans or even disallow use and occupancy that would be in violation of the 1973 Endangered Species Act (as amended), by detrimentally affecting endangered species or their habitats.

In order to further protect threatened and endangered species on the Dixie National Forest, the following lease notices will be attached to each lease where applicable:

#### **LEASE NOTICE - Utah Prairie Dog**

The lessee/operator is given notice that lands in this lease may contain historic and/or occupied Utah prairie dog habitat, a threatened species under the Endangered Species Act. Avoidance or use restrictions may be placed on portions of the lease. Application of appropriate measures will depend whether the action is temporary or permanent, and whether it occurs when prairie dogs are active or hibernating. A temporary action is completed prior to the following active season leaving no permanent structures and resulting in no permanent habitat loss. A

permanent action continues for more than one activity/hibernation season and/or causes a loss of Utah prairie dog habitat or displaces prairie dogs through disturbances, i.e. creation of a permanent structure. The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act. Integration of and adherence to these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of Endangered Species Act, Section 7 consultation at the permit stage.

Current avoidance and minimization measures include the following:

1. Surveys will be required prior to operations unless species occupancy and distribution information is complete and available. All Surveys must be conducted by qualified individual(s).
2. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
3. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in prairie dog habitat.
4. Surface occupancy or other surface disturbing activity will be avoided within 0.5 mile of active prairie dog colonies.
5. Permanent surface disturbance or facilities will be avoided within 0.5 mile of potentially suitable, unoccupied prairie dog habitat, identified and mapped by Utah Division of Wildlife Resources.
6. The lessee/operator should consider if fencing infrastructure on well pad, e.g., drill pads, tank batteries, and compressors, would be needed to protect equipment from burrowing activities. In addition, the operator should consider if future surface disturbing activities would be required at the site.
7. Within occupied habitat, set a 5 mph speed limit on operator-created access roads and adhere to speed limits on maintained roads.
8. Limit disturbances to and within suitable habitat by staying on designated routes.
9. Limit new access routes created by the project.
10. Unavoidable impacts to the species will be mitigated through site specific consultation with the USFWS.

Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service between the lease sale stage and lease development stage to ensure continued compliance with the ESA.

#### **LEASE NOTICE - Mexican Spotted Owl**

The Lessee/Operator is given notice that the lands in this lease contain suitable habitat for Mexican spotted owl, a federally listed species. Insert the following sentence if lease contains Designated Critical Habitat: *[The Lessee/Operator is given notice that the lands in this lease contain Designated Critical Habitat for the Mexican spotted owl, a federally listed species. Critical habitat was designated for the Mexican spotted owl on August 31, 2004 (69 FR 53181-53298).]* Avoidance or use restrictions may be placed on portions of the lease. Application of appropriate measures will depend whether the action is temporary or permanent, and whether it occurs within or outside the owl nesting season. A temporary action is completed prior to the following breeding season leaving no permanent structures and resulting in no permanent habitat loss. A permanent action continues for more than one breeding season and/or causes a

loss of owl habitat or displaces owls through disturbances, i.e. creation of a permanent structure. The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act. Integration of, and adherence to these measures, will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of Endangered Species Act, Section 7 consultation at the permit stage.

Current avoidance and minimization measures include the following:

1. Surveys following Forest Service approved protocol will be required prior to operations unless species occupancy and distribution information is complete and available. All Surveys must be conducted by qualified individual(s).
2. Assess habitat suitability for both nesting and foraging using accepted habitat models in conjunction with field reviews. Apply the conservation measures below if project activities occur within 0.5 mile of suitable owl habitat. Determine potential effects of actions to owls and their habitat.
  - a. Document type of activity, acreage and location of direct habitat impacts, type and extent of indirect impacts relative to location of suitable owl habitat.
  - b. Document if action is temporary or permanent.
3. Lease activities will require monitoring throughout the duration of the project. To ensure desired results are being achieved, minimization measures will be evaluated and, if necessary, Section 7 consultation reinitiated.
4. Produced water will be managed to ensure maintenance or enhancement of riparian habitat.
5. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in canyon habitat suitable for Mexican spotted owl nesting.
6. For all temporary actions that may impact owls or suitable habitat:
  - a. If the action occurs entirely outside of the owl breeding season (March 1 – August 31), and leaves no permanent structure or permanent habitat disturbance, action can proceed without an occupancy survey.
  - b. If action will occur during a breeding season, survey for owls prior to commencing activity. If owls are found, activity must be delayed until outside of the breeding season.
  - c. Rehabilitate access routes created by the project through such means as raking out scars, revegetation, gating access points, etc.
7. For all permanent actions that may impact owls or suitable habitat:
  - a. Survey two consecutive years for owls according to accepted protocol prior to commencing activities.
  - b. If owls are found, no actions will occur within 0.5 mile of identified nest site. If nest site is unknown, no activity will occur within the designated Protected Activity Center (PAC).
  - c. Avoid drilling and placing permanent structures within 0.5 mi of suitable habitat as identified by the Forest Service.
  - d. Reduce noise emissions (e.g., use hospital-grade mufflers) to 45 dBA at 0.5 mile from suitable habitat, including canyon rims. Placement of permanent noise-generating facilities should be determined by a noise analysis to ensure noise does not encroach upon a 0.5 mile buffer for suitable habitat, including canyon rims.
  - e. Limit disturbances to and within suitable habitat by staying on approved routes.
  - f. Limit new access routes created by the project.

Additional measures to avoid or minimize effects to the species may be developed and implemented in consultation with the U.S. Fish and Wildlife Service between the lease sale stage and lease development stage to ensure continued compliance with the ESA.

### **LEASE NOTICE - California Condor**

The Lessee/Operator is given notice that the lands located in this parcel contain potential habitat for the California condor, a federally listed species. Avoidance or use restrictions may be placed on portions of the lease if the area is known or suspected to be used by condors. Application of appropriate measures will depend on whether the action is temporary or permanent, and whether it occurs within or outside potential habitat. A temporary action is completed prior to the following important season of use, leaving no permanent structures and resulting in no permanent habitat loss. This would include consideration for habitat functionality. A permanent action continues for more than one season of habitat use, and/or causes a loss of condor habitat function or displaces condors through continued disturbance (i.e. creation of a permanent structure requiring repetitious maintenance, or emits disruptive levels of noise).

The following avoidance and minimization measures have been designed to ensure activities carried out on the lease are in compliance with the Endangered Species Act. Integration of and adherence to these measures will facilitate review and analysis of any submitted permits under the authority of this lease. Following these measures could reduce the scope of Endangered Species Act, Section 7 consultation at the permit stage.

Current avoidance and minimization measures include the following:

1. Surveys will be required prior to operations unless species occupancy and distribution information is complete and available. All Surveys must be conducted by qualified individual(s) approved by the USFS, and must be conducted according to approved protocol.
2. If surveys result in positive identification of condor use, all lease activities will require monitoring throughout the duration of the project to ensure desired results of applied mitigation and protection. Minimization measures will be evaluated during development and, if necessary, Section 7 consultation may be reinitiated.
3. Temporary activities within 1.0 mile of nest sites will not occur during the breeding season.
4. Temporary activities within 0.5 miles of established roosting sites or areas will not occur during the season of use, August 1 to November 31, unless the area has been surveyed according to protocol and determined to be unoccupied.
5. No permanent infrastructure will be placed within 1.0 mile of nest sites.
6. No permanent infrastructure will be placed within 0.5 miles of established roosting sites or areas.
7. Lessee is responsible to remove big game carrion to 100 feet from on lease roadways occurring within foraging range as feasible in coordination with the UDWR and the Forest Service. Carrion will become an unnecessary attractant.
8. Where technically and economically feasible, use directional drilling or multiple wells from the same pad to reduce surface disturbance and eliminate drilling in suitable habitat. Utilize directional drilling to avoid direct impacts to large cottonwood gallery riparian habitats. Ensure that such directional drilling does not intercept or degrade alluvial aquifers.

Additional measures may also be employed to avoid or minimize effects to the species between the lease sale and lease development stages. These additional measures will be developed and implemented in consultation with the U.S. Fish and Wildlife Service to ensure continued compliance with the Endangered Species Act.

**CULTURAL RESOURCES** (National Historic Preservation Act of 1966 (NHPA), P.L. 89-665 as amended by P.L. 94-422, P.L. 94-458, and P.L. 96-515):

The Forest Service authorized officer is responsible for ensuring that the leased lands are examined prior to the undertaking of any ground-disturbing activities to determine whether or not cultural resources are present, and to specify mitigation measures for effects on cultural resources that are found to be present.

The lessee or operator shall contact the Forest Service to determine if a site-specific cultural resource inventory is required prior to undertaking any surface-disturbing activities on Forest Service lands covered by this lease.

The lessee or operator may engage the services of a cultural resource specialist acceptable to the Forest Service to conduct any necessary cultural resource inventory of the area of proposed surface disturbance. In consultation with the Forest Service authorized officer, the lessee or operator may elect to conduct an inventory of a larger area to allow for alternative or additional areas of disturbance that may be needed to accommodate other resource needs or operations.

The lessee or operator shall implement mitigation measures required by the Forest Service to preserve or avoid destruction of cultural resource values. Mitigation may include relocation of proposed facilities, testing, salvage, and recordation or other protective measures.

During the course of actual surface operations on Forest Service lands associated with this lease, the lessee or operator shall immediately bring to the attention of the Forest Service the discovery of any cultural or paleontological resources. The lessee or operator shall leave such discoveries intact until directed to proceed by Forest Service.

**AIR RESOURCES** (Clean Air Act of 1963, as amended by P.L. 90-148, P.L. 91-604, and P.L. 101-549; National and State of Utah Ambient Air Quality Standards, National Standards of Performance for New Stationary Sources, National Prevention of Significant Deterioration Standards, National Emissions Standards for Hazardous Air Pollutants, Utah Air Conservation Regulations (R446), and Utah State Implementation Plan)

1. The operator shall comply with the following practices to control impacts to ambient air quality from oil and gas exploration and production activities:
  - a. As appropriate, quantitative analysis of potential air quality impacts will be conducted for project-specific developments by the operator, in concert with direction from the Utah Department of Environmental Quality, Division of Air Quality (UDAQ), the Forest Service and cooperating federal land management agencies including but not limited to the National Park Service. The Forest Service will notify cooperating agencies as project specific proposals are received and additional air impact analyses are performed to ensure input from those agencies. Additional project specific air impact analyses would need to be conducted if the following project criteria are fulfilled:
    - i. If an exploration drilling project is proposed within 5km of an adjacent Class I area, air quality related value (AQRV) impacts would need to be addressed utilizing at a minimum the VISCREEN screening tool. Additional air impact analyses may be necessary based on the review of the initial VISCREEN analysis.

- ii. If an oil and gas production project is proposed at a distance of over 60km from an adjacent Class I area and has emissions that exceed those utilized in the existing "Dixie 20-well development scenario", A quantitative air quality impact analysis would need to be conducted for the project that follows the guidance found in the FLAG modeling guidelines.
  - iii. If an oil and gas production project is proposed within 60km of an adjacent Class I area and has emissions that equal or exceed those utilized in the existing "Dixie 20-well development scenario", a quantitative air quality impact analysis would need to be conducted for the project that follows the guidance found in the FLAG modeling guidelines.
  - iv. If an exploratory drilling or oil and gas development project is proposed to occur within 60km of an adjacent Class I area and has emissions that are greater than those utilized in the existing "exploratory drilling scenario" but less than those utilized in the "Dixie 20-well development scenario", consultation with the Forest Service and cooperating Federal Agencies would be required to determine an appropriate assessment of air quality impacts. The level of additional analysis would be predicated on the size of the proposed project.
- b. Compliance with Utah Air Conservation (UAC) Regulation R446-1 would be necessary. The best air quality control technology, as per guidance from the UDAQ, will be applied to actions as needed to meet air quality standards.
  - c. The operator will comply with UAC Regulation R446-1-4.5.3, which prohibits the use, maintenance, or construction of roadways without taking appropriate dust abatement measures. Compliance will be obtained through special stipulations as a requirement on new projects and through the use of dust abatement control techniques in problem areas.
  - d. The operator will manage authorized activities to maintain air quality within the thresholds established by the State of Utah Ambient Air Quality Standards and to ensure that those activities continue to keep the area in attainment, meet prevention of significant deterioration (PSD) Class II standards, and protect the Class I air shed of the National Parks (e.g. Zion, Bryce Canyon, and Capitol Reef National Parks).
  - e. National Ambient Air Quality Standards will be enforced by the UDEQ, with EPA oversight. Special requirements to reduce potential air quality impacts will be considered on a case-by-case basis in processing land-use authorizations.
  - f. The operator will utilize BMPs and site specific mitigation measures, when appropriate, based on-site specific conditions, to reduce emissions and enhance air quality. Examples of these types of measures can be found in the Four Corners Air Quality Task Force Report of Mitigation Options, November 1, 2007; EPA Natural Gas STAR Program (<http://www.epa.gov/gasstar/>); and US Forest Service Emission Reduction Techniques for Oil and Gas activities 2011 (<http://www.fs.fed.us/air/documents/EmissionReduction-010711x.pdf>).
  - g. The operator will comply with a Condition of Approval for Applications for Permit to Drill, which includes: (1) All new and replacement internal combustion diesel fired drilling engines must meet or exceed Tier II emissions limits as codified in 40 CFR Part 89 - "Control of Emissions From New and In-Use Nonroad Compression-Ignition Engines". (2) All new and replacement internal combustion diesel fired well pump engines must meet or exceed Tier II emissions limits for Particulate Matter and Tier III emissions limits for Oxides of Nitrogen and Carbon Monoxide as codified in 40 CFR Part 89 - "Control of Emissions From New and In-Use Nonroad Compression-Ignition Engines". (3) All new and replacement spark ignited natural gas fired internal combustion well-pump engines must meet or exceed emissions limits for Oxides of Nitrogen, Carbon Monoxide and Volatile Organic Compounds from New Source Performance Standard Subpart JJJJ for

Stationary Spark Ignition Internal Combustion Engines manufactured since 2008. (4) All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 grams of NOx per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower. (5) All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 grams of NOx per horsepower-hour. (6) All diesel fuel fired internal combustion engines must utilize certified Ultra Low Sulfur Diesel fuel with a maximum sulfur content of 15 parts per million (PPM).

h. Lease holders will need to conduct detailed volatile organic compound (VOC) emissions inventories for any proposed facilities to provide necessary data to the BLM Utah State Office for their regional photochemical modeling.

i. Lease holders will need to examine the use of additional mitigations for ozone precursors.

## **CAVE RESOURCES**

The Lessee/Operator is given notice that the lands located in this parcel contain potential areas with known or suspected caves, lava tubes, and karst features.

Cave resources are defined as any naturally formed void, cavity, recess, natural pit, sinkhole, or other feature that is large enough to permit a person to enter, whether or not the entrance is naturally formed or human-made. The term includes any extension or component of a cave or system of interconnected cave passages that occur beneath the surface of the earth or within a cliff or ledge, and/or natural subsurface water and drainage systems. Cave resources include any material or substance occurring naturally in caves, such as animal life, plant life, paleontological deposits, sediments, minerals, speleogens (relief features on the walls, ceiling, and floor of any cave that are part of the surrounding bedrock), and speleothems (any natural mineral formation or deposit occurring in a cave).

Surveys will be required to determine if cave resources occur within or adjacent to the proposed project area and all casing and cementing programs must be designed to allow for a karst protection string and all strings of casing must be cemented to the surface. Upon abandonment of the well the wellbore will be cemented from the base of the cave/karst zone to the surface.

Most cave resource potential is in the Cedar City Ranger District; very few areas have been mapped.

## **FLOODPLAINS AND WETLANDS (EO 11988; EO 11990)**

The lessee is hereby notified that this lease may contain land within a riparian or wetland ecosystem.

All activities within this area may be precluded or highly restricted in order to comply with Executive Order 11988 - Floodplain Management and Executive Order 11990 - Protection of Wetlands, in order to preserve and restore or enhance the natural and beneficial values served by floodplains and wetlands.

Occupancy and use of lands within riparian or wetland areas, as proposed in a Surface Use Plan of Operations, will be considered in an environmental analysis and mitigation measures deemed necessary to protect these areas identified. These areas are to be avoided to the extent possible, or special measures such as road design, well pad size and location or directional drilling, may be made part of the permit authorizing the activity.

## **SENSITIVE PLANT SPECIES** (Forest Service Manual 2670)

The Forest Service is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any Forest-Sensitive plant species or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would lead to a loss of viability for any sensitive plant species.

The lessee/operator may, unless notified by the Forest Service that the examination is not necessary, conduct the examination on the leased lands at his discretion and cost. This examination must be done by or under the supervision of a qualified resource specialist approved by the Forest Service. An acceptable report must be provided to the Forest Service identifying the anticipated effects of a proposed action on Forest-Sensitive plants or their habitats.

**DRINKING WATER PROTECTION ZONES** (R309-600-7(1) Utah Administrative Code Source Protection: Drinking Water Source Protection for Groundwater Sources)

### **LEASE NOTICE - Groundwater Protection Zones 2-4:**

This lease (or a portion thereof) is within one or more Drinking Water Source Protection Zones (DWSPZs) designated by the Utah Division of Drinking Water (DDW). Prior to a lease being offered up for sale that overlies a DWSPZ the BLM would attach IM No. UT 2010-055, Attachment F (Utah Drinking Water Source Protection Zone Lease Notice).

BLM's rules and regulations outlined in 43 CFR §3162.4-2, §3162.5-1(a) and §3162.5-2 (d) Control of wells, Onshore Oil and Gas Orders Nos. 2 and 7, and the Gold Book have been developed to address potential impacts to ground water from the drilling and completion of oil and gas wells, including the construction and use of reserve and production pits. Specifically, §3162.5-2 (d) *Protection of fresh water and other minerals* requires that the operator shall isolate freshwater-bearing and other usable water containing 5,000 ppm or less dissolved solids and Onshore Order No. 2 increases the requirement by establishing a 10,000 ppm total dissolved solids (TDS) threshold for protection of usable water.

Concurrent with submittal of an application for a permit to drill (APD), or any proposed surface-disturbing activity, the lessee/operator must provide the BLM Authorized Officer (AO) protective measures, which adequately address protection of the DWSPZ or other usable ground water zones. If operator proposed measures are considered insufficient to adequately protect the water zones, the AO will incorporate additional protective measures as condition(s) of approval (COAs). During further analysis at time of APD approval, the BLM would attach IM No. UT 2010-055, Attachment G (Utah Drinking Water Source Protection Zone COA).

Geophysical logs will be required in order to determine cement integrity and subsequent protection/isolation of usable ground water resources. Upon well completion, additional testing may be required to verify well bore integrity for protection of usable ground water resources. Testing results will be evaluated to determine if effective implementation of mitigation measures has been achieved.

## **LEASE NOTICE - Existing Transient Non-Community Water Systems – Zones T2 and T4:**

This lease (or a portion thereof) is within Drinking Water Source Protection Zones designated as a transient non-community water system which does not serve 25 of the same nonresident persons per day for more than 6 months per year by the Utah Division of Drinking Water. The Transient System T2 protection zone for existing wells or springs is the area within a 250-day ground-water time of travel to the wellhead, spring or margin of the collection area, the boundary of the aquifer(s) which supplies water to the ground-water source, or the ground-water divide, whichever is closer. The Transient System T4 protection zone for existing wells or springs is the area within a 10-year ground-water time of travel to the wellhead, spring or margin of the collection area, the boundary of the aquifer(s) which supplies water to the ground-water source, or the ground-water divide, whichever is closer. Compliance with R309-600 is voluntary for existing transient non-community water systems. However, all new ground water sources (including transient non-community systems) must submit to the DDW a Preliminary Evaluation Report (R309-600-13(2)) and a Drinking Water Source Protection Plan (R309-600-7(1)) which designates ground water source protection zones 1 through 4. Protection of the zones T2 and T4 must also comply with **LEASE NOTICE – Groundwater Protection Zones 2-4.**

## **LEASE NOTICE – Surface Water Protection Zones 2-4**

This lease (or a portion thereof) is within public Drinking Water Source Protection Zones 2, 3, and/or 4. Before application for a permit to drill (APD) submittal or any proposed surface-disturbing activity, the lessee/operator must contact the BLM field office and the public water system manager to determine any zoning ordinances, best management or pollution prevention measures or physical controls that may be required within the protection zone. Drinking Water Source Protection plans are developed by the public water systems under the requirements of R309-605-7, Drinking Water Source Protection for Surface Sources (Utah Administrative Code). There may also be county ordinances in place to protect the source protection zones, as required by Section 19-4-113 of the Utah Code.

Incorporated cities and towns may also protect their drinking water sources using Section 10-8-15 of the Utah Code. Cities and town have the extraterritorial authority to enact ordinances to protect a source of drinking water ... "For 15 miles above the point from which it is taken and for a distance of 300 feet on each side of such stream..." Class I cities (greater than 100,000 population) are granted authority to protect their entire watersheds.

Some public water sources qualify for monitoring waivers which reduce their monitoring requirements for pesticides and volatile organic chemicals (VOCs). Exploration, drilling and production activities within a Source Protection Zone could jeopardize these waivers, thus requiring increased monitoring. Contact the public water system to determine what effect your activities may have on their monitoring waivers. Please be aware of other state rules to protect surface and ground water, including Utah Division of Water Quality Rules R317 Water Quality Rules; and Rules of the Utah Division of Oil, Gas and Mining, Utah Oil and Gas Conservation Rules R649.

During further analysis at time of APD the BLM would attach IM No. UT 2010-055, Attachment G - Utah Drinking Water Source Protection Zone COA.

At the time of development, drilling operators will additionally conform to the BLM operational regulations and Onshore Oil and Gas Order No. 7 (which prescribes measures required for the handling of produced water to ensure the protection of surface and ground water sources) and the Surface Operating Standards and Guidelines for Oil and Gas Development, The Gold Book,

Fourth Edition-Revised 2007 (which provides information and requirements for conducting environmentally responsible oil and gas operations).

#### **LEASE NOTICE – Sole Source Aquifers**

This lease (or a portion thereof) is within Sole Source Aquifer Protection zone designated by the Environmental Protection Agency (EPA). BLM's rules and regulations outlined in 43 CFR §3162.4-2, §3162.5-1(a) and §3162.5-2 (d) Control of wells, Onshore Oil and Gas Orders Nos. 2 and 7, and the Gold Book have been developed to address potential impacts to ground water from the drilling and completion of oil and gas wells, including the construction and use of reserve and production pits. Specifically, §3162.5-2 (d) *Protection of fresh water and other minerals* requires that the operator shall isolate freshwater-bearing and other usable water containing 5,000 ppm or less dissolved solids and Onshore Order No. 2 increases the requirement by establishing a 10,000 ppm total dissolved solids (TDS) threshold for protection of usable water.

During further analysis at time of APD the BLM would attach IM No. UT 2010-055, Attachment G - Utah Drinking Water Source Protection Zone COA.

Concurrent with submittal of an application for a permit to drill (APD), or any proposed surface-disturbing activity, the lessee/operator must provide the BLM Authorized Officer (AO) protective measures, which adequately address protection of the Sole Source Aquifer and other usable ground water zones. If operator proposed measures are considered insufficient to adequately protect the water zones, the AO will incorporate additional protective measures as condition(s) of approval (COAs).

Geophysical logs will be required in order to determine cement integrity and subsequent protection/isolation of usable ground water resources. Upon well completion, additional testing may be required to verify well bore integrity for protection of usable ground water resources. Testing results will be evaluated to determine if effective implementation of mitigation measures has been achieved.