



United States
Department of
Agriculture

Forest
Service

Fishlake National Forest
Supervisor's Office
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Richfield, UT 84701
Phone: (435) 896-9233

File Code: 1950/2820

Date: January 24, 2014

Kevin Mueller
Utah-Southern Rockies Conservation Manager
WildEarth Guardians
1817 South Main Street, Suite 10
Salt Lake City, UT 84115

Dear Mr. Mueller:

Fishlake National Forest Oil and Gas Leasing Appeal Resolution
1/24/2014

The appellants filed an administrative appeal in accordance with 36 CFR 219.17 (b)(3) of the Forest Supervisor's August 20, 2013, decision. This decision amends the Fishlake National Forest LRMP to identify what lands are administratively available for oil and gas leasing, and the conditions and constraints under which available National Forest System (NFS) land may be leased. The decision also amends the Dixie National Forest LRMP for the Teasdale unit of the Dixie National Forest, now managed by the Fremont River Ranger District of the Fishlake National Forest, to identify what lands are administratively available for oil and gas leasing and the conditions and constraints under which available National Forest System (NFS) land may be leased.

We met with appellants in person on January 7th. We followed this up by sharing suggested changes through e-mail exchanges and conference calls on January 9th, 10th, 17th, and 22nd.

This documents our agreement on actions to resolve the appeal. This agreement applies to all the lands addressed by the Fishlake National Forest Oil and Gas Leasing Record of Decision and managed by the Fishlake National Forest, including those on the former Teasdale Ranger District of the Dixie National Forest.

Elements of Agreement for the Oil and Gas Leasing Record of Decision Appeal Resolution:

Air Quality

We have made minor corrections to clarify the Controlled Surface Use Stipulation – 03 Other Resources: Air Quality, and to the Lease Notice – Air Resources. The Controlled Surface Use Stipulation will apply to all lands administered by the Fishlake National Forest. The Lease Notice is corrected to require air quality impact analysis for proposals on all lands administered by the Fishlake National Forest.

Research Natural Areas

The Forest Service – Fishlake National Forest will begin the process to seek withdrawal of the four Research Natural Areas located on lands administered by the Forest Service from mineral entry. The final determination on withdrawal will be made by the Bureau of Land Management. Within one year, the Forest Service will initiate scoping associated with the withdrawal proposal



and will then prepare the appropriate NEPA and supporting decision documents. During this process the Forest Service will meet with appellants about once every six months to provide a progress update. Such meetings will be informal, open, and public. They may be via conference call or in-person. Until the areas are withdrawn, the Forest Service will not authorize leasing of these lands under 36 CFR 228(e).

Sage Grouse

We have made minor corrections to No Surface Occupancy Stipulation – 09 to remove any exceptions, modification, or waivers to the No Surface Occupancy within 4 miles of a sage grouse lek.

Clarification on No Surface Occupancy Stipulations

We have made minor corrections to No Surface Occupancy Stipulations – 03 Watershed Resources: Riparian Areas, 04 Watershed Resources: Delineated Wetlands, 15 Inventoried Roadless Areas, 16 Recreation: Developed Recreation sites and National Recreation Trails and, 18 Other Resources: Forest Service Administrative Sites and Facilities. The changes remove confusing language about the construction of roads, pipelines, and similar facilities.

Cultural Resources

We have made minor corrections to the Lease Notice for Cultural Resources. In summary, site specific field surveys will be required for all activities. The minimum level of survey will be to walk the center line/preliminary line of all proposed roads and pipelines and visit each proposed well pad site. Additional level of survey detail above this will be identified in the project specific MOA with the State of Utah SHPO.

As an example to clarify what this correction may mean on the ground, a proposal for oil and gas development in an area with some previous cultural resource surveys and known to have very few sites, the required survey may only be to walk the proposed road alignment. In a case where we know there is a high density of cultural sites the required surveys would include the road alignment and other locations close by that might be impacted, such as searching nearby cliffs for pictographs or petroglyphs.

Clarification on the Oil and Gas Leasing Reform Act

I confirm that this decision only identifies the NFS land administratively available for leasing in accordance with 36 CFR 228.102(d). This decision does not authorize the BLM to lease specific lands, or offer specific lands for leasing under 36 CFR 228.102(e).

Sensitive and MIS species

We have made minor corrections to the Lease Notice for Sensitive and MIS species (Plants and Vertebrate Wildlife): The corrections identify that ground disturbing activities will not occur within one mile of known Sensitive and MIS plant locations, unless there is scientific evidence that ground disturbing activities would be exclusively on lands that are not habitat for the species.

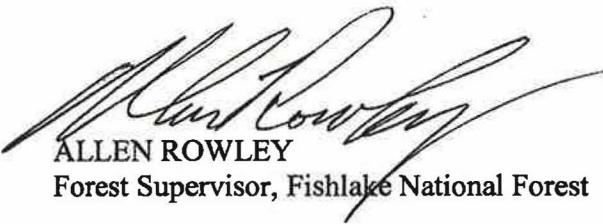
For sensitive wildlife species that do not have their own conservation agreement(s), no ground disturbing activities will occur within one-half mile of known locations unless there is scientific

evidence that surface occupancy within that half mile would be exclusively on lands that are not habitat for the species and the actions are consistent with Forest Service sensitive species policy.


For MIS wildlife species, any ground disturbing activities will be consistent with direction in the applicable National Forest Land and Resource Management Plan.

Agreement

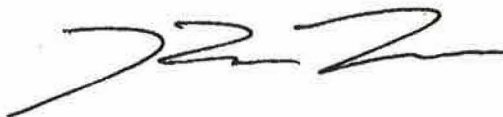
In consideration of the foregoing, appellants WildEarth Guardians, Grand Canyon Trust, and Western Resource Advocates have agreed to withdraw their administrative appeal in its entirety. The commitments above are contingent upon withdrawal of the appeal by WildEarth Guardians, Grand Canyon Trust, and Western Resource Advocates in its entirety by written instrument, transmitted to the Appeal Deciding Officer in accordance with the appeal regulations not later than January 29, 2014.



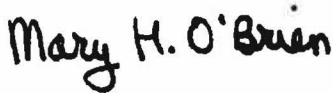
ALLEN ROWLEY
Forest Supervisor, Fishlake National Forest




ANGELITA S. BULLETS
Forest Supervisor, Dixie National Forest



KEVIN MUELLER
WildEarth Guardians



MARY O'BRIEN
Grand Canyon Trust



JORO WALKER
Western Resource Advocates

cc: Angelita S Bullets, Allen Rowley

CONTROLLED SURFACE USE STIPULATION – 03

Other Resources: Air Quality

Controlled Surface Use Relating to Air Quality

Where: For exploratory and production projects within the boundaries of land administered by the Fishlake N.F.

For the purpose of: Protection of air resources within the Forest to meet or exceed FLAG guidelines.

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

Operations must be located and/or designed to not cause or contribute to adverse impacts to air quality related values. 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. Development of the lease parcels may be subject to appropriate mitigation and conditions of approval (COAs) to reduce or mitigate air resource impacts and GHG emissions.

To ensure meeting this purpose, an air impact analysis would be required prior to any field activity to demonstrate that proposed operations will not result in exceedances of the air standards as outlined in the most recent FLAG guidance, including Clean Air Act increment and NAAQ standards.

Typical design and mitigation measures include but are not limited to: 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.

Exception: None

Modification: None

Waiver: None

NO SURFACE OCCUPANCY STIPULATION – 03

Watershed Resources: Riparian Areas

No Surface Occupancy for Riparian Areas

Where: Within 300 feet of Forest Service delineated boundary of riparian areas.

For the Purpose Of: Protecting riparian ecosystems. Riparian ecosystems are managed by the Forest Service to protect from conflicting uses in order to provide healthy, self-perpetuating plant and water communities that will have optimum diversity and density of understory and overstory vegetation.

Exceptions: An exception could be authorized if: (a) an on-site review determines the area proposed to be impacted is not riparian; and (b) any additional mitigation that is determined to be necessary is fully implemented. Locate roads outside of riparian area unless alternative routes have been reviewed and rejected as being more environmentally damaging.

Modification: None

Waiver: None

NO SURFACE OCCUPANCY STIPULATION – 04

Watershed Resources: Delineated Wetlands

No Surface Occupancy for Delineated Wetlands

Where: Within 300 feet of delineated and mapped boundary of jurisdictional wetlands.

For the Purpose Of: Protecting jurisdictional wetlands relative to Executive Order 11990, and the associated habitats, water quality, and ecosystems associated with these areas.

Exceptions: An exception could be authorized if: (a) an on-site review determines the area proposed to be impacted is not a jurisdictional wetland; and (b) any additional mitigation that is determined to be necessary is fully implemented.

Modification: None

Waiver: None

NO SURFACE OCCUPANCY STIPULATION – 09

Wildlife and Plant Species: Greater Sage Grouse Leks

No Surface Occupancy in Sage Grouse Leks

Where: Within 4 miles of sage grouse leks delineated and mapped by the Forest Service.

For the purpose of: Protecting breeding and brood-rearing sage grouse from predation, habitat fragmentation, and disturbance.

Exceptions: None

Modifications: None

Waivers: None

NO SURFACE OCCUPANCY STIPULATION – 15

Inventoried Roadless Areas: Inventoried Roadless Areas

No Surface Occupancy in Inventoried Roadless Areas

Where: Within the boundary of all Inventoried Roadless Areas.

For the Purpose Of: Protecting the roadless and wilderness characteristics of these lands.

Exception: None

Modification: None

Waiver: None

NO SURFACE OCCUPANCY STIPULATION – 16

Recreation: Developed Recreation Sites and National Recreation Trails

No Surface Occupancy for Developed Recreation Areas and National Recreation Trails

Where: Within ¼ mile of developed recreation sites and national recreation trails.

For the Purpose Of: Protecting the capital investment and recreation uses associated with these sites.

Exception: None

Modification: A modification may be granted if a portion of the developed recreation sites in the leasehold are moved or eliminated.

Waiver: A waiver may be granted if all the developed recreation site(s) in the leasehold are moved or eliminated.

NO SURFACE OCCUPANCY STIPULATION – 18

Other Resources: Forest Service Administrative Sites and Facilities

No Surface Occupancy for Administrative Sites

Where: Within ¼ mile of Forest Service administrative sites.

For the Purpose Of: Protecting the capital investment and uses associated with administrative sites.

Exception: None

Modification: A modification may be granted if a portion of the administrative site(s) in the leasehold are moved or eliminated.

Waiver: A waiver may be granted if all the administrative site(s) in the leasehold are moved or eliminated.

LEASE NOTICE – 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 and/or Bureau of Land Management will work with cooperating agencies as project specific proposals are received ensuring that appropriate air impact analyses are performed and limits or mitigation measures needed to ensure compliance with authorities listed in first paragraph of this Lease Notice are incorporated. Additional project specific air impact analyses would need to be conducted if one or more of the following project criteria are fulfilled:

i. For exploration drilling projects, depending upon various factors including the size of the proposed development and estimated emissions, proposed air quality related value (AQRV) impacts would need to be estimated. Additional air impact analyses, consistent with the Clean Air Act, may be necessary following the guidance found in the FLAG modeling guidelines and the Clean Air Act.

ii. For production drilling projects, depending upon various factors including the size of the proposed development and estimated emissions, for production projects a quantitative air quality impact analysis following the guidance found in the FLAG modeling guidelines may be required.

iii. If an exploratory or development project which has estimated emissions exceeding those modeled with the Fishlake N.F. Oil and Gas Leasing Analysis, consultation between the Forest Service and cooperating Federal Agencies would occur 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. If model and/or analysis results associated with subparts i through iii above estimate exceedances of limits required by laws, rules or regulations including those listed in paragraph 1 of this Lease Notice, mitigation measures and/or limits will be required.

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 ensure compliance with State of Utah Ambient Air Quality Standards and to ensure that those activities protect Class I air associated with adjacent National Parks including Capitol Reef National Parks, and all Class II air.

e. 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 the Conditions of Approval for Applications for Permit to Drill, which include but are not necessarily limited to:

(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 Non-road 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 NO_x per horsepower-hour. (This requirement does not apply to gas field engines of less than or equal to 40 designated 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 NO_x 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).

- a. 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.
- b. Lease holders will need to examine the use of additional mitigations for ozone precursors.

LEASE NOTICE – 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 the level of on-site cultural resource inventory required prior to undertaking any surface-disturbing activities on Forest Service lands covered by this lease. Site specific cultural resource inventories will be required for exploratory and production facilities. The minimum level of survey will be to walk the center line/preliminary line for all roads and pipelines and visit each well pad. Additional level of survey detail above this will be identified in the project specific MOA with the State of Utah SHPO with consideration of site richness in the area and potential for off-site impacts.

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.

LEASE NOTICE - Sensitive and MIS Species (Plants and Vertebrate Wildlife)

The Lessee/Operator is given notice that the lands in this parcel contain suitable habitat for sensitive, and/or management indicator species (MIS). The following avoidance and minimization measures have been developed to facilitate locating and designing operations to avoid adverse effects to the viability of these species.

Prior to conducting any surface disturbing activities within suitable habitat for sensitive and Management Indicator Species (MIS), surveys will be completed.

No ground disturbing activities will occur within one mile of known Sensitive and MIS plant locations unless there is scientific evidence that surface occupancy within that mile would be exclusively on lands that are not habitat for the sensitive species and additional non-direct impacts are not likely to impair the adjacent Sensitive and MIS plant communities.

For sensitive wildlife species that do not have their own conservation agreement(s) no ground disturbing activities will occur within one-half mile of known locations unless there is scientific evidence that surface occupancy within that half mile would be exclusively on lands that are not habitat for the species and the actions are consistent with Forest Service sensitive species policy.

For MIS wildlife species any ground disturbing activities will be consistent with direction in the applicable National Forest Land and Resource Management Plan.

NO SURFACE OCCUPANCY STIPULATION – 03
Watershed Resources: Riparian Areas

No Surface Occupancy for Riparian Areas

Where: Within 300 feet of Forest Service delineated boundary of riparian areas.

For the Purpose Of: Protecting riparian ecosystems. Riparian ecosystems are managed by the Forest Service to protect from conflicting uses in order to provide healthy, self-perpetuating plant and water communities that will have optimum diversity and density of understory and overstory vegetation.

Exceptions: An exception could be authorized if: (a) an on-site review determines the area proposed to be impacted is not riparian; and (b) any additional mitigation that is determined to be necessary is fully implemented. Locate roads outside of riparian area unless alternative routes have been reviewed and rejected as being more environmentally damaging.

Modification: None

Waiver: None

NO SURFACE OCCUPANCY STIPULATION – 04
Watershed Resources: Delineated Wetlands

No Surface Occupancy for Delineated Wetlands

Where: Within 300 feet of delineated and mapped boundary of jurisdictional wetlands.

For the Purpose Of: Protecting jurisdictional wetlands relative to Executive Order 11990, and the associated habitats, water quality, and ecosystems associated with these areas.

Exceptions: An exception could be authorized if: (a) an on-site review determines the area proposed to be impacted is not a jurisdictional wetland; and (b) any additional mitigation that is determined to be necessary is fully implemented.

Modification: None

Waiver: None

NSO – 04

C-79

NO SURFACE OCCUPANCY STIPULATION – 09
Wildlife and Plant Species: Greater Sage Grouse Leks

No Surface Occupancy in Sage Grouse Leks

Where: Within 4 miles of sage grouse leks delineated and mapped by the Forest Service.

For the purpose of: Protecting breeding and brood-rearing sage grouse from predation, habitat fragmentation, and disturbance.

Exceptions: None

Modifications: None

Waivers: None

NSO – 09

C-84

NO SURFACE OCCUPANCY STIPULATION – 15
Inventoried Roadless Areas: Inventoried Roadless Areas

No Surface Occupancy in Inventoried Roadless Areas

Where: Within the boundary of all Inventoried Roadless Areas.

For the Purpose Of: Protecting the roadless and wilderness characteristics of these lands.

Exception: None

Modification: None

Waiver: None

NSO – 15

C-90

NO SURFACE OCCUPANCY STIPULATION – 16
Recreation: Developed Recreation Sites and National Recreation Trails

No Surface Occupancy for Developed Recreation Sites and National Recreation Trails

Where: Within $\frac{1}{4}$ mile of developed recreation sites and national recreation trails.

For the Purpose Of: Protecting the capital investment and recreation uses associated with these sites.

Exception: None

Modification: A modification may be granted if a portion of the developed recreation sites in the leasehold are moved or eliminated.

Waiver: A waiver may be granted if all the developed recreation site(s) in the leasehold are moved or eliminated.

NO SURFACE OCCUPANCY STIPULATION – 18
Other Resources: Forest Service Administrative Sites and Facilities

No Surface Occupancy for Administrative Sites

Where: Within $\frac{1}{4}$ mile of Forest Service administrative sites.

For the Purpose Of: Protecting the capital investment and uses associated with administrative sites.

Exception: None

Modification: A modification may be granted if a portion of the administrative site(s) in the leasehold are moved or eliminated.

Waiver: A waiver may be granted if all the administrative site(s) in the leasehold are moved or eliminated.

CONTROLLED SURFACE USE STIPULATION – 03
Other Resources: Air Quality

Controlled Surface Use Relating to Air Quality

Where: For exploratory and production projects within the boundaries of land administered by the Fishlake N.F.

For the purpose of: Protection of air resources within the Forest to meet or exceed FLAG guidelines.

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

Operations must be located and/or designed to not cause or contribute to adverse impacts to air quality related values. 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. Development of the lease parcels may be subject to appropriate mitigation and conditions of approval (COAs) to reduce or mitigate air resource impacts and GHG emissions.

To ensure meeting this purpose, an air impact analysis would be required prior to any field activity to demonstrate that proposed operations will not result in exceedances of the air standards as outlined in the most recent FLAG guidance, including Clean Air Act increment and NAAQ standards.

Typical design and mitigation measures include but are not limited to: 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.

Exception: None

Modification: None

Waiver: None

CSU – 03

C-97

LEASE NOTICE – 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 the level of on-site cultural resource inventory required prior to undertaking any surface-disturbing activities on Forest Service lands covered by this lease. Site specific cultural resource inventories will be required for exploratory and production facilities. The minimum level of survey will be to walk the center line/preliminary line for all roads and pipelines and visit each well pad. Additional level of survey detail above this will be identified in the project specific MOA with the State of Utah SHPO with consideration of site richness in the area and potential for off-site impacts.

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.

LEASE NOTICE - Sensitive and MIS Species (Plants and Vertebrate Wildlife):

The Lessee/Operator is given notice that the lands in this parcel contain suitable habitat for sensitive, and/or management indicator species (MIS). The following avoidance and minimization measures have been developed to facilitate locating and designing operations to avoid adverse effects to the viability of these species.

Prior to conducting any surface disturbing activities within suitable habitat for sensitive and Management Indicator Species (MIS), surveys will be completed.

No ground disturbing activities will occur within one mile of known Sensitive and MIS plant locations unless there is scientific evidence that surface occupancy within that mile would be exclusively on lands that are not habitat for the sensitive species and additional non-direct impacts are not likely to impair the adjacent Sensitive and MIS plant communities.

For sensitive wildlife species that do not have their own conservation agreement(s) no ground disturbing activities will occur within one-half mile of known locations unless there is scientific evidence that surface occupancy within that half mile would be exclusively on lands that are not habitat for the species and the actions are consistent with Forest Service sensitive species policy.

For MIS wildlife species any ground disturbing activities will be consistent with direction in the applicable National Forest Land and Resource Management Plan.

LEASE NOTICE - 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 and/or Bureau of Land Management will work with cooperating agencies as project specific proposals are received ensuring that appropriate air impact analyses are performed and limits or mitigation measures needed to ensure compliance with authorities listed in first paragraph of this Lease Notice are incorporated. Additional project specific air impact analyses would need to be conducted if one or more of the following project criteria are fulfilled:

i. For exploration drilling projects, depending upon various factors including the size of the proposed development and estimated emissions, proposed air quality related value (AQRV) impacts would need to be estimated. Additional air impact analyses, consistent with the Clean Air Act, may be necessary following the guidance found in the FLAG modeling guidelines and the Clean Air Act.

ii. For production drilling projects, depending upon various factors including the size of the proposed development and estimated emissions, for production projects a quantitative air quality impact analysis following the guidance found in the FLAG modeling guidelines may be required.

iii. If an exploratory or development project which has estimated emissions exceeding those modeled with the Fishlake N.F. Oil and Gas Leasing Analysis, consultation between the Forest Service and cooperating Federal Agencies would occur 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. If model and/or analysis results associated with subparts i through iii above estimate exceedances of limits required by laws, rules or regulations including those listed in paragraph 1 of this Lease Notice, mitigation measures and/or limits will be required.

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 ensure compliance with State of Utah Ambient Air Quality Standards and to ensure that those activities protect Class I air associated with adjacent National Parks including Capitol Reef National Parks, and all Class II air.

e. 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 the Conditions of Approval for Applications for Permit to Drill, which include but are not necessarily limited to:

(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 Non-road 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 NO_x per horsepower-hour. (This requirement does not apply to gas field engines of less than or equal to 40 designated 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 NO_x 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).
 - a. 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.
 - b. Lease holders will need to examine the use of additional mitigations for ozone precursors.