



## WYOMING GAME AND FISH DEPARTMENT

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June 24, 2010

WER 12037  
Aqua Terra Consultants, Inc  
Wildlife Survey (LQD Permit Appendix D9) the  
Mine Plan and the Reclamation Plan  
East Fork Ranch Pit  
McMurry Ready Mix  
DEQ TFN 5 3/143  
Sublette County

Steven J. Stresky  
Aqua Terra Consultants, Inc.  
2624 Heartland Drive  
Sheridan, WY 82801

Dear Mr Stresky:

The staff of the Wyoming Game and Fish Department has reviewed Wildlife Survey (LQD Permit Appendix D9) the Mine Plan and the Reclamation Plan East Fork Ranch Pit McMurry Ready Mix in Sublette County. We offer the following comments for your consideration.

### Terrestrial Considerations:

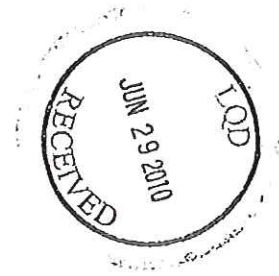
The wildlife inventory (Section D9) is correct in identifying both Sections 6 and 7 to be in a sage-grouse core area. The closest sage-grouse lek lies to the southeast within Section 17. In addition, our data indicate that legal Section 7 lies within a moose crucial winter range.

The Sage-Grouse Implement Team is currently updating the mining stipulations for new and expanding projects in sage-grouse core areas. Although these stipulation have not been finalized, we believe the elements for mining should not substantially change. The draft stipulations are attached and should provide adequate background for your permit submission.

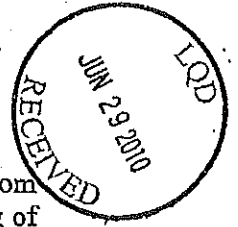
Your mining plan contains elements contained within the draft stipulations, such as no new surface disturbance from July 1 to March 14 and mine location will occur at a distance greater than 0.6 miles to the nearest lek. However, there is additional information which is needed to complete the permit application for the Department of Environmental Quality. It appears that the mining operation will remain under the 5% disturbance cap at 25 acres at any given point in time, however this needs to be verified through a Project Impact Analysis. Please review the attachment and if you have any questions feel free to contact us at any time.

*"Conserving Wildlife - Serving People"*

EQC  
Docket No. 10-4803  
**McMurry  
Exhibit Y**



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If roads occur within designated moose crucial winter range, we recommend limiting traffic from November 15 through April 30 to reduce stress on wintering moose. We support the posting of reduced speed limits and other operational practices to reduce traffic/vehicle impacts to wildlife.

**Aquatic Considerations:**

The applicant has addressed our aquatic concerns provided in the previous letter.

Thank you for the opportunity to comment. If you have any questions or concerns, please contact Scott Gamo, Staff Terrestrial Biologist, at 307-777-4509.

Sincerely,

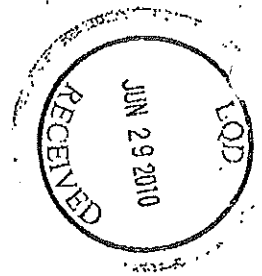
A handwritten signature in black ink, appearing to read 'John Emmerich', written over the printed name and title.

John Emmerich  
Deputy Director

JE:MF:sg

cc: USFWS  
Scott Smith – WGFD Pinedale

Permitting Process and Stipulations for Development  
in Sage-Grouse Core Areas.  
**DRAFT**  
Version 7  
SGIT Recommendations 6/23/2010



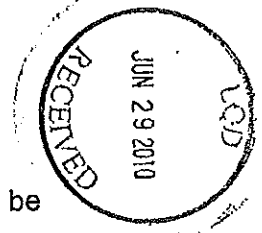
**PERMITTING PROCESS**

**Point of Contact:** The first point of contact for addressing sage-grouse issues in any permit application should be the Wyoming Game and Fish Department (WGFD). Project proponents (proponents) need to have a thorough description of their project and identify the potential effects on sage-grouse prior to submitting an application to the permitting agency (details such as a draft project implementation area analysis, habitat maps and any other information will help to expedite the project). Project proponents should contact WGFD at least 45-60 days prior to submitting their application. More complex projects will require more time. It is understood that WGFD has a role of consultation, recommendation, and facilitation, and has no authority to either approve or deny the project. The purpose of the initial consultation with the WGFD is to become familiar with the project proposal and ensure the project proponent understands recommended stipulations and stipulation implementation process.

**Maximum Disturbance Process:** All activities will be evaluated within the context of maximum allowable disturbance (disturbance percentages, location and number of disturbances) of suitable sage-grouse habitat (See Appendix A for definition of suitable sage-grouse habitat and disturbance of suitable sage-grouse habitat) within the area affected by the project. The maximum disturbance allowed will be analyzed via a Project Impact Analysis Area (PIAA) process conducted by the Federal Land Management Agency on federal Land and the project proponent on non-federal (private, state) land. Unsuitable habitat occurring within the project area will not be included in the disturbance cap calculations.

1. **Project impact analysis area (PIAA) delineation:**  
Determine all leks that may be affected by the project by placing a four-mile boundary around the project boundary (as defined by the proposed area of disturbance related to the project). All occupied leks located within the four-mile boundary will be considered affected by the project.

A four-mile boundary will then be placed around the perimeter of each affected lek. The area within the boundary of affected leks and the project boundary creates the PIAA for each individual project. Disturbance will be analyzed for the PIAA as a whole and for each individual affected lek within

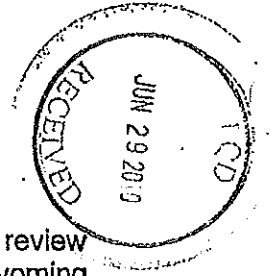


the PIAA. Any portion of the PIAA occurring outside of core area will be removed from the analysis.

2. Disturbance analysis: Total disturbance acres within the PIAA will be determined through an evaluation (See Appendix A for definition of disturbance) of:
  - a. Existing disturbance (sage-grouse habitat that is disturbed due to existing anthropogenic activity and wildfire).
  - b. Approved permits (that have approval for on the ground activity) not yet implemented.
3. Habitat Assessment: A habitat assessment will be conducted to create a baseline survey identifying:
  - a. Suitable and unsuitable habitat within the PIAA
  - b. Sage-grouse use of suitable habitat (seasonal, densities, etc)
  - c. Priority restoration areas (which could reduce 5% cap)
    - i. Areas where plug and abandon activities will eliminate disturbance
    - ii. Areas where old reclamation has not produced suitable habitat
  - d. Areas of invasive species
  - e. Other assurances in place (CCAA, easements, habitat contracts, etc.)
4. Determination of existing and allowable suitable habitat disturbance:

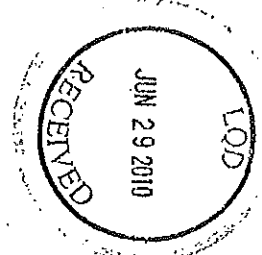
Acres of disturbance within suitable habitat divided by the total suitable habitat within the PIAA times 100 equals the percent of disturbed suitable habitat within the PIAA. Subtracting the percentage of existing disturbed suitable habitat from 5% equals new allowable suitable habitat disturbance until plant regeneration or reclamation reduces acres of disturbed habitat within the PIAA.

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**Permitting:** The complete analysis package developed by consultation and review outlined herein will be forwarded to the appropriate permitting agency. Wyoming Game and Fish Department recommendations will be included, as will other recommendations from project proponents and other appropriate agencies.

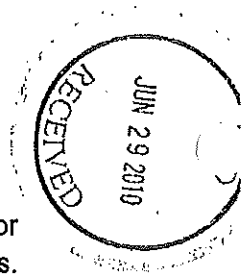
**Excepted activities:** A list of de minimus practices to be completed by July 1. WGFD is coordinating with ag and Aaron to get a draft finalized.



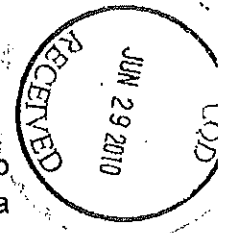
### **GENERAL STIPULATIONS**

These stipulations are designed to maintain existing suitable sage-grouse habitat by permitting development activities in core areas in a way that will not cause declines in sage-grouse populations. General stipulations are recommended to apply to all activities in core areas, with the exception of de minimus actions defined herein or specifically identified activities. The specific industry stipulations are considered in addition to the general stipulations.

1. **Surface disturbance:** Surface disturbance will be limited to 5% of suitable sage-grouse habitat per an average of 640 acres. The PIAA process will be used to determine the level of disturbance. Distribution of disturbance may be considered and approved on a case-by-case basis. Unsuitable habitat should be identified in a seasonal and landscape context, on a case-by-case basis, outside the 0.6 mile buffer around leks. This will incentivize proponents to locate projects in unsuitable habitat to avoid creating additional disturbance acres. Acres of development in unsuitable habitat are not considered disturbance acres. The primary focus should be on protection of suitable habitats and protecting from habitat fragmentation. See Appendix A for a description of suitable, unsuitable habitat and disturbance.
2. **Surface occupancy:** Within 0.6 miles of the perimeter of occupied sage-grouse leks there will be no surface occupancy (NSO). NSO, as used in these recommendations, means no surface facilities including roads shall be placed within the NSO area. Other activities may be authorized with the application of appropriate seasonal stipulations, provided the resources protected by the NSO are not adversely affected. For example, underground utilities may be permissible if installation is completed outside applicable seasonal stipulation periods and significant resource damage does not occur. Similarly, geophysical exploration may be permissible in accordance with seasonal stipulations.
3. **Seasonal use:** Activity (production and maintenance activity exempted) will be allowed from July 1 to March 14 outside of the 0.6 mile perimeter of a lek in core areas where breeding, nesting and early brood-rearing habitat is present. In areas used solely as winter concentration areas, exploration and development activity will be allowed March 14 to December 1. Activities in unsuitable habitat may also be approved year-round (including March 15-June 30) on a case by case basis. Activities may be allowed during seasonal closure periods as determined on a case by case basis.



4. **Transportation:** Locate main roads used to transport production and/or waste products > 1.9 miles from the perimeter of occupied sage-grouse leks. Locate other roads used to provide facility site access and maintenance > 0.6 miles from the perimeter of occupied sage-grouse leks. Construct roads to minimum design standards needed for production activities.
5. **Overhead lines:** Bury lines when possible, if not, locate overhead lines at least 0.6 miles from the perimeter of occupied sage-grouse leks. New lines should be raptor proofed if not buried.
6. **Noise:** Limit noise levels to 10 dBA above ambient noise measured at the perimeter of a lek from March 1 to May 15 (Inglefinger 2001, Nicholoff 2003). Actual thresholds may be adjusted upon completion of current research being conducted in core habitat.
7. **Vegetation Removal:** Vegetation removal should be limited to the minimum disturbance required by the project. All topsoil stripping and vegetation removal in suitable habitat will occur between July 1 and March 14 in areas that are within 4.0 miles of an occupied lek. Initial disturbance in unsuitable habitat between March 15 and June 30 may be approved on a case by case basis.
8. **Sagebrush Treatment:** Sagebrush eradication is considered disturbance and will contribute to the 5% disturbance factor. Sagebrush treatments that maintain sagebrush canopy cover at or above 15% total canopy cover within the treated acres will not be considered disturbance. Treatments that reduce sagebrush canopy cover below 15% will be allowed if all such treated areas make up less than 20% of the suitable sagebrush habitat within the PIAA, and any point within the treated area is within 60 yards (Slater) of sagebrush habitat with 10% or greater canopy cover. Treatments to enhance sagebrush/grassland will be evaluated based upon the existing habitat quality and the functional level post-treatment.
9. **Monitoring/adaptive response:** For all activities allowed in Core Areas, sage-grouse monitoring will be conducted to evaluate the response of the affected populations (PIAA identified leks) to the permitted activity. Monitoring plans will be coordinated and modified by the permitting agency with input from WGFD. Monitoring will include the evaluation of affected leks and at least three reference leks (one control area) outside the PIAA. If declines in affected leks (using a three-year running average during any five-year period relative to trends on reference leks) are determined to be caused



by the project, the operator will propose adaptive management responses to increase the number of birds. If the operator cannot demonstrate a restoration of bird numbers to baseline levels (established by pre-disturbance surveys, reference surveys and taking into account regional and statewide trends) within three years, operations will cease until such numbers are achieved.

10. **Reclamation:** Reclamation should re-establish native grasses, forbs and shrubs during interim and final reclamation to achieve cover, species composition, and life form diversity commensurate with the surrounding plant community or desired ecological condition to benefit sage-grouse and replace or enhance sage-grouse habitat to the degree that environmental conditions allow. Seed mixes should include 2 native forbs and 2 native grasses with at least one bunchgrass species. Where sagebrush establishment is prescribed, establishment is defined as meeting the standard prescribed in the individual reclamation plan. Landowners should be consulted on desired plant mix on private lands. The operator is required to control noxious and invasive weed species, including cheatgrass. Rollover credit, if needed, will be outlined in the individual project reclamation plan.

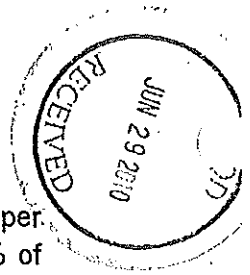
Credit may be given for completion of habitat enhancements on bond released or other minimally functional habitat when detailed in a plan. These habitat enhancements may be used as credit for reclamation that is slow to establish in order to maintain the disturbance cap or to improve nearby sage-grouse habitat.

11. Areas already disturbed or approved for development within Core Areas prior to Executive Order 2008-02 are not subject to new sage-grouse stipulations with the exception existing operations may not initiate activities resulting in new surface occupancy within 0.6 mile of the perimeter of a sage-grouse lek. Any existing disturbance will be counted toward the calculated disturbance cap for a new proposed activity. The level of disturbance for existing activity and rollover credit may exceed 5%.

12. **Exceptions:** Any exceptions to these general or specific stipulations will be considered on a case by case basis and must show that the exception will not cause declines in sage-grouse populations.

**SPECIFIC STIPULATIONS (To be applied in addition to general stipulations)**





1. Oil and Gas: Well pad densities not to exceed an average of 1 pad per square mile (640 acres) and suitable habitat disturbed not to exceed 5% of suitable habitat within the PIAA. As an example the number of well pads within a 2 mile radius of the perimeter of an occupied sage-grouse lek should not exceed 11, distributed preferably in a clumped pattern in one general direction from the lek. \*
2. Mining
  - a. For development drilling or ore body delineation drilled on tight centers, (approximately 100'X100') the disturbance area will be delineated by the external limits of the development area. Assuming a widely-spaced disturbance pattern, the actual footprint will be considered the disturbance area.
  - b. Monitoring results will be reported annually in the mine permit annual report and to WGFD. Pre-disturbance surveys will be conducted as required by the appropriate regulatory agency.
  - c. Active mining (e.g. operating equipment and significant human activity) not to exceed an average of 1 site per square mile (640 acres) within the PIAA. Entire active mine site will be analyzed as disturbance area. \*
  - d. Surface disturbance and surface occupancy stipulations will be waived within the Core Area for underground mining practices necessary to protect the health, welfare, and safety of miners, mine employees, contractors and the general public. The mining practices include but are not limited to bore holes or shafts necessary to 1) provide adequate oxygen to an underground mine, 2) supply inert gases or other substances to prevent, treat, or suppress combustion or mine fires 3) inject mine roof stabilizing substances and 4) remove methane from mining areas. Any surface disturbance or surface occupancy necessary to access the sites to implement these mining practices will also be exempt from any stipulation.

\* Average of either one pad or one active mine per 640 acres. It cannot be both (One pad or one mine).



**3. Transmission Line Rights of Way:** The following criteria will be used to determine new transmission line location:

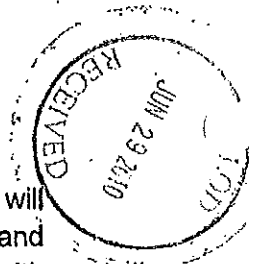
- a. New transmission lines in core area will be consistent with the core area strategy if the new transmission is sited adjacent to existing transmission lines. Line separation distances necessary to meet the Western Electric Coordinating Council's reliability criteria will be considered adjacent.
- b. New transmission lines in core area will be consistent with the core area strategy if new transmission is sited in designated corridors established in BLM RMPs or the WVEC 368 Corridor Record of Decision.

**4. Process Deviation or Undefined Activities:** Development proposals incorporating less restrictive stipulations or development that is not covered by these stipulations may be considered depending on site-specific circumstances and the proponent must have data demonstrating that the alternative development proposal will not cause declines in sage-grouse populations in the core area. Proposals to deviate from standard stipulations will be considered by a team including WGFD and the appropriate land management and permitting agencies, with input from the U.S. Fish and Wildlife Service. Project proponents need to demonstrate that the project development would meet at least one of the following conditions:

- a. No suitable habitat is present in one contiguous block of land that includes at least a 0.6-mile buffer between the project area and suitable habitat;
- b. No sage-grouse use occurs in one contiguous block of land that includes at least a 0.6 mile buffer between the project area and adjacent occupied habitat, as documented by total absence of sage-grouse droppings and an absence of sage-grouse activity for the previous ten years;
- c. Provision of a development/mitigation plan that has been implemented and demonstrated by previous research not to cause declines in sage-grouse populations. The demonstration must be based on monitoring data collected and analyzed with accepted scientific based techniques.

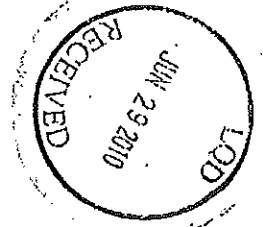
**5. Wind Development:** Wind development is not recommended in sage-grouse core areas.

**6. Water Wells:** The following stipulations apply only to small facilities that require limited operation and maintenance activities and are intended to support



existing land uses (stock reservoir, stock well, etc.). The proponent will provide a brief narrative describing the type of facility to be constructed and the anticipated operation and maintenance activity that will be associated with the facility. The narrative should include any anticipated impacts or benefits to sage-grouse. The permit will then be conditioned as follows:

- 1) Construction activities or facilities not allowed on an active or occupied lek.
- 2) Construction activities for facilities located from 0.0 to 0.6 miles from the perimeter of an active or occupied sage-grouse lek shall be conducted from July 1 to March 14.
- 3) For facilities located greater than 0.6 miles from the perimeter of an active or occupied sage-grouse lek, construction is allowed throughout the year.



## Appendix A

### Suitable Sage-Grouse Habitat Definition

Sage-grouse require somewhat different seasonal habitats distributed over large areas to complete their life cycle. All of these habitats consist of, are associated with, or are immediately adjacent to, sagebrush. If sage-grouse seasonal habitat use maps do not exist for the project site the following description of suitable habitat should be used to determine areas of unsuitable sage grouse habitat for development siting purposes. An abbreviated description of a complex system cannot incorporate all aspects of, or exceptions to, what habitats a local sage-grouse population may or may not utilize. The references provided below will assist where more detailed site evaluations are required.

**Suitable sage-grouse habitat** (nesting, breeding, brood-rearing, or winter) is within the mapped occupied range of sage-grouse, and:

- 1) has 5% or greater sagebrush canopy cover as measured by the technique developed by interagency efforts. "Sagebrush" includes all species and sub-species of the genus *Artemisia* except the mat-forming sub-shrub species: *frigida* (fringed) and *pedatifida* (birdfoot)."; or
- 2) is riparian, wet meadow (native or introduced) or areas of alfalfa or other suitable forbs (early brood rearing habitat) within 60 yards (Slater XXX) of sagebrush habitat with 10% or greater canopy cover and the early brood rearing habitat does not exceed 20% (Connelly 2000) of the suitable habitat present within the PIAA. Larger riparian/wet meadow, and grass/forb producing areas may be considered suitable habitat as determined on a case by case basis, or
- 3) is a burned or treated sagebrush site being managed to return to its ecological site potential via succession that will allow it to meet a minimum 5% sagebrush canopy cover within 10 to 15 years.

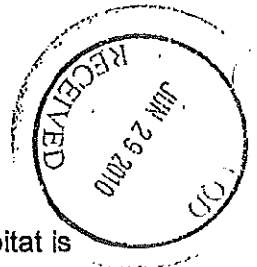
#### References:

##### Connelly 2000 reference

Connelly, J. W., K. P. Reese and M. A. Schroeder. 2003. Monitoring of greater sage-grouse habitats and populations. Station Bulletin 80. University of Idaho College of Natural Resources Experiment Station, Moscow, ID. 50 pp.

##### Slater reference

Soehn, G. and 11 others. 2001. A framework to assist in making greater sage-grouse (*Centrocercus urophasianus*) habitat assessments for BLM-administered public lands in Wyoming. U.S.D.I. Bureau of Land Management. Cheyenne, WY. 53 pp.



### **Suitable Habitat Disturbance Definition**

To evaluate the 5% disturbance cap per average 640 acres or PIAA, suitable habitat is considered disturbed when it is removed and unavailable for immediate sage-grouse use.

- a. Long-term removal occurs when habitat is physically removed through activities that replace suitable habitat with long term occupancy of unsuitable habitat such as a road, well pad or active mine.
- b. Short-term removal occurs when vegetation is removed in small areas, but restored to suitable habitat within a few years of disturbance, such as a successfully reclaimed pipeline, or successfully reclaimed drill hole or pit.
- c. Suitable habitat rendered unusable due to numerous anthropogenic disturbances less than 1.2 miles apart that preclude use by sage-grouse.