

**DECISION RECORD  
FOR  
Williams Production RMT Company  
Carr Draw III East SDR Remand (site visit Condition of Approval)  
ENVIRONMENTAL ASSESSMENT - WY-070-10-37**

On July 29 - 30, 2009, the Bureau of Land Management (BLM), Wyoming State Office (WSO), received three requests for State Director Review (SDR) from (1) the Powder River Basin Resource Council, Wyoming Outdoor Council, and Biodiversity Conservation Alliance (PRBRC *et al.*); (2) Yonkee & Toner, LLP, representing Mr. William P. Maycock (Maycock); and (3) Holland & Hart, LLP representing Williams Production RMT Company (Williams). In their letters, PRBRC *et al.* and Maycock requested a stay of operations and Williams requested permission to intervene in the PRBRC *et al.* and Maycock SDRs.

The SDRs requested review of a July 1, 2009 decision by the Buffalo Field Office (BFO); this decision is documented in the Finding of No Significant Impact (FONSI) and Decision Record (DR) for the Carr Draw III - East Plan of Development (CDIII E POD) Remand Environmental Assessment (Remand EA). The Remand EA was developed by the BFO in response to a decision from the Interior Board of Land Appeals (IBLA), *William P. Maycock*, 177 IBLA 1 (2009).

On October 13, 2009, the State Director issued a decision to remand the Buffalo Field Office's application of the following Condition of Approval (COA) to the Carr Draw III E Remand EA:

*Well metering, maintenance and other site visits will be allowed monthly, 3 per week for the first six months after the wells are completed. The company will be required to monitor frequency of site visits along with repairs made and problems identified resulting from the visits. Reports containing results of this monitoring will be submitted to the BLM at the end of every month. The BLM will use this data to determine the necessity of multiple monthly visits during the sage-grouse breeding and nesting periods (March 1 to June 15).*

The State Director's remand of this COA is based on several factors: First, the COA left unanswered several important questions about its implementation. Second, application of this COA was made without analyzing or disclosing in the NEPA analysis any potential beneficial or adverse impacts of limiting site visits. Finally, there is no documented correlation between number of site visits that the operator would be required to track and potential changes observed during lek monitoring that would justify limiting site visits to a specific number.

**DECISION**

After consideration of the issues raised by the SDR remand, the BLM's decision is to approve Alternative C as described in the attached Environmental Assessment and authorize the following Condition of Approval (COA):

*A site visit is defined as presence by personnel representing the leaseholder or operator at infrastructure associated with federal leases and located within the POD area to conduct activities associated with the federal permit. For the first six months after 20 days after the issuance of this decision the company will be required to submit site-visit monitoring reports. Reports containing results of this monitoring will be submitted to the BLM every 3 months.*

*The report shall summarize the work activities from the previous 3 months, including frequency and location of site visits, equipment used, repairs made, and problems identified outside routinely*

*anticipated maintenance. Site visit duration should also be recorded.(Please see attached report format example in Appendix A).*

This approval is subject to adherence with all of the operating plans and mitigating measures contained in the master surface use plan of operations, drilling plan, water management plan, and information in individual APDs. This approval is also subject to operator compliance with all mitigation and monitoring requirements contained within the Powder River Oil and Gas Project Final Environmental Impact Statement and Resource Management Plan Amendment (PRB FEIS), the Carr Draw III East DR, and the Carr Draw III E DR (remand; sage-grouse emphasis).

- All other operator committed measures and conditions of approval addressed in the original Carr Draw III E EA , (WY-070-08-029) and Carr Draw III E Remand EA (WY-070-09-078) approvals are still in effect, unless superseded by this decision.

### **RATIONALE**

The decision to authorize the selected alternative, as summarized above, is based on the following:

1. This decision addresses the SDR's remand to disclose potential beneficial and adverse impacts from limiting site visits.
2. This decision addresses the SDR's remand to account for the fact that there is no documented correlation between number of site visits and measurable impacts to grouse that justifies limiting site visits to a specific number. This new COA is to establish baseline human activity, and is not mitigation for impacts that may occur as a result of human activity in sage-grouse habitat.
3. This COA will help the BLM meet the objective of reducing human activity in sage-grouse habitat by providing baseline information that may be used to develop appropriate mitigation measures for future authorizations or modifications of existing permitted activities.
4. This decision establishes a site visit reporting format to obtain a quantitative record of human activity in the Carr Draw III E POD. This information will provide a baseline of human activity in the project area.
5. The selected alternative will not result in any undue or unnecessary environmental degradation.

**ADMINISTRATIVE REVIEW AND APPEAL:** Under BLM regulations, this decision is subject to administrative review in accordance with 43 CFR 3165. Any request for administrative review of this decision must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in writing with the State Director, Bureau of Land Management, P.O. Box 1828, Cheyenne, Wyoming 82003, no later than 20 business days after this Decision Record is received or considered to have been received.

Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals, as provided in 43 CFR 3165.4.

  
\_\_\_\_\_  
Field Manager, Buffalo Field Office

11/2/09  
\_\_\_\_\_  
Date

**FINDING OF NO SIGNIFICANT IMPACT  
FOR  
Williams  
Carr Draw III East Remand (site visit Condition of Approval)  
WY-070-EA10-37**

**FINDING OF NO SIGNIFICANT IMPACT**

Based on the analysis of the potential environmental impacts, I have determined that NO significant impacts are expected from the implementation of the selected alternative and, therefore, an environmental impact statement is not required.

In conformance with Appendix E, *Record of Decision, Powder River Oil and Gas Project Environmental Impact Statement and Resource Management Plan Amendment* BLM Buffalo Field Office has initiated actions within the PRB FEIS analysis area in response to additional information regarding impacts to sage-grouse. The measures outlined in the approved COA in this document would contribute to this effort by providing quantitative data about site visitation frequency.

The implementation of the selected alternative best meets the stated purpose and need for disclosure of impacts of limiting site visits, and for taking steps to identify the correlation between number of site visits and changes observed during lek monitoring.

  
\_\_\_\_\_  
Field Manager, Buffalo Field Office

11/2/09  
\_\_\_\_\_  
Date

**BUREAU OF LAND MANAGEMENT  
BUFFALO FIELD OFFICE  
ENVIRONMENTAL ASSESSMENT  
FOR  
Williams  
Carr Draw III East Remand (site visit Condition of Approval)  
WY-070-EA10-37**

**INTRODUCTION**

On July 29 - 30, 2009, the Bureau of Land Management (BLM), Wyoming State Office (WSO), received three requests for State Director Review (SDR) from (1) the Powder River Basin Resource Council, Wyoming Outdoor Council, and Biodiversity Conservation Alliance (PRBRC *et al.*); (2) Yonkee & Toner, LLP, representing Mr. William P. Maycock (Maycock); and (3) Holland & Hart, LLP representing Williams Production RMT Company (Williams). In their letters, PRBRC *et al.* and Maycock requested a stay of operations and Williams requested permission to intervene in the PRBRC *et al.* and Maycock SDRs.

The SDRs requested review of a July 1, 2009 decision by the Buffalo Field Office (BFO); this decision is documented in the Finding of No Significant Impact (FONSI) and Decision Record (DR) for the Carr Draw III East Plan of Development (CDIII E POD) Remand Environmental Assessment (Remand EA). The Remand EA was developed by the BFO in response to a decision from the Interior Board of Land Appeals (IBLA), *William P. Maycock*, 177 IBLA 1 (2009).

On October 13, 2009, the State Director returned a decision to remand the Buffalo Field Office's application of the following Condition of Approval (COA) to the Carr Draw III E Remand EA:

*Well metering, maintenance and other site visits will be allowed monthly, 3 per week for the first six months after the wells are completed. The company will be required to monitor frequency of site visits along with repairs made and problems identified resulting from the visits. Reports containing results of this monitoring will be submitted to the BLM at the end of every month. The BLM will use this data to determine the necessity of multiple monthly visits during the sage-grouse breeding and nesting periods (March 1 to June 15).*

To address the issues identified in the SDR remand, this site-specific analysis addresses only the proposed action as it relates to defining a "site visit", impacts resulting from site visit limitations, and site visitation and human activity in connection with impacts to sage-grouse. This document tiers into and incorporates by reference the original Carr Draw III East EA(WY-070-08-029), the Carr Draw III E Remand (sage-grouse) EA(WY-070-09-078), and the Powder River Basin Final Environmental Impact Statement (PRB FEIS) (WY-070-02-065) approved April 30, 2003.

The State Director's remand of this COA is based on three factors:

- 1) The COA left unanswered several important questions about implementation and lacked a clear definition of "site visit". The COA left unanswered several important questions about implementation and lacked a clear definition of "site visit".
- 2) Application of this COA was made without analyzing or disclosing in the NEPA analysis any potential beneficial or adverse impacts of limiting site visits.

- 3) There is no documented correlation between number of site visits that the operator would be required to track and potential changes observed during lek monitoring that would justify limiting site visits to a specific number.

## **1. PURPOSE AND NEED**

The purpose and need of this EA is to determine, in response to the October 13, 2009 SDR decision, how and under what conditions to allow Williams to exercise lease rights granted by the United States to develop the oil and gas resources on federal leaseholds as described in their proposed action.

This action responds to the goals and objectives outlined in the 1985 Buffalo RMP and the PRB FEIS. This action helps move the project area toward desired conditions for mineral development with appropriate mitigation consistent with the goals, objectives and decisions outlined in these two documents.

Sage-grouse research and BLM policy support reducing human activity in sage-grouse habitat where practical. The primary purpose of this EA is to address this objective, and the issues identified by the State Director (SDR No. WY-2009-16 (Part 2)) in regard to the definition of a site visit, and to the application of a COA limiting the number of site visits.

In order to meet the objective of reducing human activity in sage-grouse habitat, baseline information about site visit frequency is necessary. Currently, the BLM has no information on site visit frequency associated with CBNG development.

Recent recommendations cited in the CDIII E Remand EA, strongly support a reduction of human activity in sage-grouse habitat. Additionally, several documents used by the BFO as guidance for sage-grouse protection direct BFO to take actions to reduce human activity in sage-grouse habitat. These include:

- The BLM National Sage-Grouse Habitat Conservation Strategy
- The Wyoming greater sage-grouse conservation plan developed by the Wyoming Sage-Grouse Working Group (Wyoming Game and Fish Department)
- Wyoming Game and Fish Recommendations for Oil and Gas Development in Important Wildlife Habitat

### **1.1. Conformance with Applicable Resource Management Plan and Other Environmental Assessments:**

The proposed action conforms to the terms and the conditions of the 1985 Buffalo RMP as amended and as required by 43 CFR 1610.5.

## **2. ALTERNATIVES INCLUDING THE PROPOSED ACTION**

### **2.1. Alternative A - No Action**

This alternative would consist of three well visits per week, for the first six months following well completion. Additionally, the operator would monitor frequency of site visits and provide a report containing the results at the end of each month. Under this alternative, the Condition of Approval stands as written.

### **2.2. Alternative B Proposed Action**

Under this alternative, there would be no limitation on the number of well visits throughout the life of the project.

The Master Use Surface Plan for the Carr Draw III E POD states that well metering shall be accomplished by telemetry at the well head. Use of telemetry will, to some unknown degree, reduce the number of wellsite visits by the operator. No discrete number of wells visits per week is specified.

### **2.3. Alternative C – Modified Proposed Action**

This alternative was developed in the context of the following:

- Accommodating the technical requirements of the company with regard to well monitoring.
- Acknowledgement that most components of the project have already been constructed.
- The BLM’s lack of quantitative data about site visitation.

Under this alternative, the Condition of Approval has been modified to read as follows:

*A site visit is defined as presence by personnel representing the leaseholder or operator at infrastructure associated with federal leases and located within the POD area to conduct activities associated with the federal permit. For the first six months after 20 days after the issuance of this decision the company will be required to submit site-visit monitoring reports. Reports containing results of this monitoring will be submitted to the BLM every 3 months.*

*The report shall summarize the work activities from the previous 3 months, including frequency and location of site visits, equipment used, repairs made, and problems identified outside routinely anticipated maintenance. Site visit duration should also be recorded.(Please see attached report format in Appendix A).*

## **3. DESCRIPTION OF AFFECTED ENVIRONMENT**

The Carr Draw III E POD, with 82 wells on 41 locations, was approved March 4, 2008. As of the writing of this document, the majority of the wells have been drilled, and the associated infrastructure has been constructed. Only components of the affected environment specifically related to the implementation of a site-visitation COA applied for the protection of sage grouse are discussed.

### **3.1. Threatened and Endangered and Sensitive Species**

#### **3.1.1. Sensitive Species**

##### **3.1.1.1. Greater sage-grouse**

The greater sage-grouse is listed as a sensitive species by BLM (Wyoming). In recent years, several petitions have been submitted to the United States Fish and Wildlife Services (USFWS) to list greater sage-grouse as threatened or endangered. On January 12, 2005, the USFWS issued a decision that stated that listing the greater sage-grouse was “not warranted” following a status review. The decision document supporting this outcome noted the need to continue or expand all conservation efforts to conserve sage-grouse. In 2007, the U.S. District Court remanded that decision, stating that the USFWS’ decision-making process was flawed and ordered the USFWS to conduct a new status review as a result of a lawsuit and questions surrounding the 2005 review). *Western Watersheds Project V. United States Forest Service*, 535 F. Supp. 2d 1173 (D. Id. 2007)

Greater sage-grouse are found in prairie, sagebrush shrublands, other shrublands, wet meadows, and agricultural areas; they depend on substantial sagebrush stands for nesting and winter survival (BLM 2003). High-quality sage-grouse habitat is present throughout the project area. According to habitat maps and site-specific assessment, moderately dense to dense sagebrush can be found throughout the southern half of the project area. Sections 25 and 26, T50N, R76W and sections 20, 29, 30 and 31, T50N, R75W contain large stands of sagebrush and moderate topography. Sagebrush communities within the northern half of the project area contain areas of shorter, more dispersed sagebrush. Approximately 88% of the

project area meets seasonal habitat requirements and is large enough to meet the landscape scale requirements of the bird (BLM 2008). Sage-grouse habitat models indicate that 61% of the project area contains high quality sage-grouse nesting habitat and 57% contains high quality sage-grouse wintering habitat (Walker et al. 2007). Old and fresh sign was observed in the project area primarily in the southern and southeastern portion in sections 19, 20 and 30, T50N, R75W as well as in sections 25, 26, and 36, T50N, R76W. Western Land Services personnel observed individual sage-grouse in NESE Section 19 (Aksamit 2007). The BLM biologist observed a hen and brood among the sagebrush and greasewood in the floodplain of North Prong of Barber Creek in NENE Section 26, T50N, R76W. BLM records identified 10 sage-grouse leks within 4 miles of the project area. The WGFD's ad hoc committee recommended the 4-mile distance for consideration of oil and gas development effects to nesting habitat (WGFD 2008). These lek sites are identified in the following table.

**Table 3.1. Sage-grouse Leks Surrounding the Carr Draw III East Project Area**

<b>Lek Name</b>	<b>Legal Location</b>	<b>Status In (year - peak males)</b>	<b>Distance from Project Area (miles)</b>
Hayden I	SWSE Sec. 17 T50N, R75W	'79 - 39, '80 - 73, '82 - 24, '85 - 14, '88 - 44, '89 - 10, '92 - 4, '95 - 7, '98 - 0, '01 - 32, '02 - 17, '03 - 21, '04 - 17, '05 - 17, '06 - 27, '07 - 22, '08 - 19	0.33
Hayden II	SESW Sec. 31 T51N, R75W	'79 - 39, '80 - 23, '83 - 8, '85 - 0, '88 - 8, '91 - 13, '92 - 7, '95 - 0, '98 - 0, '00 - 0, '01 - 7, '02 - 3 '03 & '04 - 2, '05 - 0, '06 - '08 - 2	2.76
Hayden Satellite A	SWNE Sec. 22 T50N, R75W	'80 - 9, '85 - 18, '88 - 23, '89 - 12, '92 - 5, '95 - 23, '98 - 0, '00 - 40, '01 - 1, '02 - '04 - 0, '05 - 2, '06 - 4, '07 - 2, '08 - 0	1.03
Hayden Satellite B	NENW Sec. 27 T50N, R75W	'80 - 7, '85 - 0, '88 - 0, '91 - 4, '92 - 0, '95 - 0, '98 - 30, '00 - 20, '01 & '02 - 0, '03 - 22, '04 - 12, '05 - 63, '06 - 33, '07 - 30, '08 - 29	1.84
Barber Creek South Prong	NWSE Sec. 1 T49N, R76W	'06 - 8, '07 - 0, '08 - 4	1.32
Watsabaugh IV	NENE Sec. 17 T49N, R75W	'04 - 7, '05 - 34, '06 - 51, '07 - 45, '08 - 44	2.72
Laskie Draw	SESW Sec. 4 T49N, R76W	'04 - 3, '05 - 6, '06 - 4, '07 - 19, '08 - 0	2.82
Laskie Draw East	NENW Sec. 3 T49N, R76W	'05 - 20, '06 - 23, '07 - 24, '08 - 11	1.61
			Chapter 2
Fortification	SWNW Sec. 25, T51N, R76W	'98 - 0, '00 - '04 - 0, '05 - 1, '06 - '08 - 0,	3.05
Watsabaugh I	NESW Sec. 36 T50N, R75W	'97 - 0, '00 - 45, '01 - 20, '02 - 0, '03 - 15, '04 - 0, '05 - 20, '06 - 34, '07 - 38, '08 - 31	3.57

During the comment period for the Carr Draw III Remand EA and FONSI, photographs and video were submitted that indicated a potential lek location in section 20 of T50N, R75W. Strutting male sage-grouse were recorded as well as heavy use by sage-grouse in habitat adjacent to the potential lek location. This location has not been previously documented by WYGF or industry consultants.

### **3.2. Economics and Recovery of CBNG Resources**

In order to maintain infrastructure throughout the development cycle of a coal bed natural gas (CBNG) POD, multiple site visits per week can often occur. These visits are necessary for the conduct of production operations, and for timely discovery of leaks, spills, accidents, or equipment failure. Additionally, large storm events can result in severe erosion problems that become more difficult to remedy with the passage of time. Furthermore, operators are also obligated by regulatory requirements to monitor their operations regularly by various agencies, including the Wyoming Department of Environmental Quality's storm water pollution prevention requirements, and the BLM's undesirable event reporting and response requirements under NTL-3A. Finally, the development and maintenance of the supporting infrastructure of a POD, including pipelines and powerlines, can require the presence of multiple contractors for construction, maintenance, and repair. The initial level of activity associated with infrastructure in the project area would drop dramatically after the construction, drilling, and completion phase, but would not disappear altogether. In general, human activity in the project area is highest for the first six months after initiation of construction.

## **4. ENVIRONMENTAL CONSEQUENCES**

The impacts to sage-grouse for each alternative herein are similar to those described in the CDIII E remand EA.

### **4.1. Alternative A- No Action**

#### **4.1.1. Greater sage-grouse Direct and Indirect Effects**

To reduce disruptive activity over the life of the project, multiple visits would be allowed monthly, 3 per week for the first six months after completion of the wells. BLM would require the company to monitor frequency of site visits along with repairs made and problems identified resulting from the visits. These reports would be submitted to BLM at the end of every month. After six months of reporting, BLM would use this data to determine the necessity of multiple monthly site visits.

Research suggests that minimizing road and well pad construction, vehicle traffic, and industrial noise (Lyon and Anderson 2003, Holloran 2005) may decrease impacts to suitable habitat around the lek.

There are 10 occupied leks within 4 miles of the CDIII E POD boundary. As indicated in the CDIII E Remand EA, development of the CDIII E POD, even with site visits reduced to three a week, would impact sage-grouse through reduced habitat effectiveness and disturbance to brood-rearing, nesting, and winter habitat. These effects are anticipated due to increased vehicle traffic on established roads and increased noise associated with human activity for the construction and maintenance of CBNG wells on 41 locations, 18.3 miles of new roads, 28 miles of new pipelines, and 4.2 miles of new 3-phase overhead power. In addition to the direct impacts to sage-grouse habitat that would be created by the federal wells and associated infrastructure, the project area contains existing fee, state, and federal fluid mineral development.

Noise can affect sage-grouse by preventing vocalizations that influence reproduction and other behaviors (WGFD 2003). In a study of greater sage-grouse population response to natural gas field development in western Wyoming, Holloran (2005) concluded that increased noise intensity, associated with active drilling rigs within 5 km (3.1 miles) of leks, negatively influenced male lek attendance. In 2002, Braun et al. documented approximately 200 CBNG facilities within 1 mile of sage-grouse leks. Sage-grouse

numbers for these leks were found to be consistently lower than for leks without this disturbance. It was concluded that direct habitat losses from the facilities, roads, traffic, and the associated noise were the likely reason for this finding.

#### **4.2. Economics and Recovery of CBNG Resources Direct and Indirect Effects**

Information provided by Williams indicates that any limitation to site visits would compromise their ability to monitor and maintain the wells and associated infrastructure of the Carr Draw III East POD. Limiting the number of site visits could result in delayed discovery of accidents, leaks, and spills; equipment malfunctions; and erosion damage. Furthermore, a site visit limit could compromise Williams' ability to meet the regulatory requirements of the BLM with regard to Undesirable Event reporting, as well as those of the Wyoming Department of Environmental Quality for stormwater inspections. Slow discovery of and response to spills, erosion, and equipment problems increases the time and expense required to remedy these situations, as well as the potential environmental damage.

The requirement to have the company monitor frequency and reason of site visits, and to submit reports containing the results of this monitoring to the BLM at the end of every month would increase the costs of field coordination and paperwork associated with this POD. Initially, increased communication between the operator's field personnel (including contractors) would be necessary to establish monitoring and reporting procedures, but this should be a short-term impact. The increased coordination between the operator and the BLM to establish report submission dates and procedures would also be short-term.

#### **4.3. Greater sage-grouse Cumulative Impacts**

Cumulative impacts to sage-grouse from the implementation of the CDIII E project are explained in the CDIII E Remand EA, and are likely similar between the alternatives presented.

As indicated previously in this document, recommendations to limit human activity are made in the context of other mitigation measures designed to reduce impacts to sage-grouse. Effects to sage-grouse from human activity associated with the CDIII E POD are not quantifiable at this time. These effects on a landscape scale throughout areas of CBNG development in the Powder River Basin are assumed to be cumulative. Due to lack of information concerning current site visit frequency, a difference cannot be discerned. However, the previous EA disclosed that there are approximately 1,194 existing wells present within the cumulative impacts analysis area (CIAA) for sage-grouse (that area within four miles of the affected sage-grouse leks, see EA at Page 25). The 82 APDs (at 41 locations) previously authorized in the CDIII E POD represent a 6.9% increase in the number of wells within the CIAA. Visitation activities at the 1,194 existing wells are not, to our knowledge, restricted.

The collection of information through monitoring reports would allow quantification of human activity related to POD development, and may inform future analyses.

#### **4.4. Economics and Recovery of CBNG Resources Cumulative Impacts**

The cumulative effects of limited site visitation include potential for economic loss to the operator associated with failing to apprehend and repair potential equipment and environmental problems in a timely manner.

The cumulative impacts to the operator may be the increased costs associated with tracking, reporting, and coordination requirements discussed in direct and indirect effects. These requirements would increase in complexity and scope if this requirement is applied to subsequent authorizations.

This type of coordination, communication, and reporting may also result in increased efficiency of field personnel, potentially saving the operator money.

**4.5. Alternative B – Proposed Action**

**4.5.1. Greater sage-grouse Direct and Indirect Effects**

Due to the lack of information concerning the number of site-visits associated with CBNG development, it is premature to distinguish the difference in effects between Alternatives A and B. The CDIII E project area is already extensively developed. Due to the small relative increase in activity within the Cumulative Impacts Assessment Area, it is assumed that the potential beneficial effects would be similar between all alternatives.

**4.6. Economics and Recovery of CBNG Resources Direct and Indirect Effects**

No limit to site visitation would allow the operator unrestricted access to the project area for all monitoring and maintenance. No site-visit reporting requirement would free the operator of any additional communication or coordination obligations associated with establishing a reporting protocol.

**4.7. Greater sage-grouse Cumulative Impacts**

Cumulative impacts to sage grouse are the same as for Alternative A.

**4.8. Economics and Recovery of CBNG Resources Cumulative Impacts**

No additional cumulative impacts to the operator are anticipated with the implementation of this alternative.

**4.9. Alternative C – Modified Proposed Action**

**4.9.1. Greater sage-grouse Direct and Indirect Effects**

The Direct and Indirect Effects of Alternative C are the same as those for Alternative B.

**4.10. Economics and Recovery of CBNG Resources Direct and Indirect Effects**

The impacts to the operator for Alternative C are the same as those for Alternative A.

**4.11. Greater sage-grouse Cumulative Impacts**

Cumulative impacts to sage grouse are the same as for Alternative A.

**4.12. Economics and Recovery of CBNG Resources Cumulative Impacts**

The cumulative impacts to the operator associated with this alternative may be the increased communication and coordination requirements discussed in direct and indirect effects, which would increase in complexity and scope if this requirement is applied to subsequent authorizations.

**5 CONSULTATION/COORDINATION**

Contact	Title	Organization
Chris Durham	Sup. Nat. Res. Spec.	BLM BFO
Melanie Hunter	NEPA Coord.	BLM BFO
Paul Beels	Assoc. Field Mgr.	BLM BFO
Duane Spencer	Field Mgr.	BLM BFO

**6 REFERENCES AND AUTHORITIES**

All documents cited are the same as those cited in the original EA with the exception of the following:

Bureau of Land Management. 2008. Buffalo Field Office, Environmental Assessment for Carr Draw III East (CDIII E) Environmental Assessment (EA), #WY-070-080-029

Doherty, K.E., D.E. Naugle, B.L. Walker, J.M. Graham. 2008. Greater sage-grouse winter habitat selection and energy development. *Journal of Wildlife Management* 72:187-195.

Petroleum Association of Wyoming. 2009. Petroleum Association of Wyoming – Sage Grouse Management Recommended Management Practices.

State of Wyoming Executive Department. 2008. Executive Order 2008-2. 3pp.

State Wildlife Agencies' Ad Hoc Committee for Sage-Grouse and Oil and Gas Development. 2008. Using the Best Available Science to Coordinate Conservation Actions that Benefit Greater Sage-Grouse Across States Affected by Oil and Gas Development in Management Zones I-II (Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming). Unpublished report. Colorado Division of Wildlife, Denver; Montana Fish, Wildlife and Parks, Helena; North Dakota Game and Fish Department, Bismarck; Utah Division of Wildlife Resources, Salt Lake City; Wyoming Game and Fish Department, Cheyenne.

Wyoming Game and Fish Department (WGFD). 2009. Recommendations for Development of Oil and Gas Resources within Crucial and Important Wildlife Habitats.

**Carr Draw III East Site Visitation Report Format (example)**

<u>Date</u>	<u>Time</u>	<u>Location</u>	<u>Activity</u>	<u>E/R</u>	<u>Duration</u>	<u>Equipment/Personnel</u>	<u>Who</u>	<u>Notes</u>
11/2/2009	1530	SWSE Sec 18 5075	Spill response	E	1.5 hours	Backhoe/4 personnel	John Smith	Further cleanup planned for following morning.
11/3/2009	0700	SWSE Sec 18 5075	Spill response	E	2 hours	Backhoe	J.Smith	Re-check location in one week.

**E**=Emergency visit, **R**=Routine visit

**Notes:** Please indicate issues discovered during visit that will result in additional visits.