

**Decision on Action and Application for Categorical Exclusion
For Activities Associated with Oil and Gas Development
Section 390, Energy Policy Act of 2005**

CLABAUGH ADDITION 1 POD
CEDAR RESOURCES
WY070-CX10-03-312 through WY070-CX10-03-319
Bureau of Land Management
Buffalo Field Office

Description of the Proposed Action

Cedar Resources Corporation proposes to drill 8 additional CNBG wells and construct the associated infrastructure within the approved Clabaugh POD. The Clabaugh POD EA# WY-070-07-158 was approved on 05/05/2008. APDs for the 8 proposed wells and related fees were submitted on 05/26/2009 and are located as follows:

List of wells:

	Well Name	Well #	QTR	Sec	TWP	RNG	Lease
1	CLABAUGH FEDERAL	13-3WA*	NWSW	3	53N	76W	WYW146293
2	CLABAUGH FEDERAL	24-3WA	SESW	3	53N	76W	WYW146293
3	CLABAUGH FEDERAL	33-3WA	NWSE	3	53N	76W	WYW146293
4	CLABAUGH FEDERAL	44-3WA	SESE	3	53N	76W	WYW146293
5	CLABAUGH FEDERAL	32-10WA	NESW	10	53N	76W	WYW142082
6	CLABAUGH FEDERAL	11-13WA	NWNW	13	53N	76W	WYW146293
7	CLABAUGH FEDERAL	13-13WA	NWSW	13	53N	76W	WYW146293
8	CLABAUGH FEDERAL	42-15WA	SENE	15	53N	76W	WYW142082

The following impoundments, previously approved for use in association with the water management plan for Clabaugh POD, were inspected and approved for use in association with the water management strategy for the Clabaugh Addition 1 POD:

List of Impoundments:

	IMPOUNDMENT Name / Number	Qtr/Qtr	Section	TWP	RNG	Capacity (Acre Feet)	Surface Disturbance (Acres)
1	Clabaugh 11-3-53-76	NENE	4	53	76	25.1	4.5
2	Deadman Stock	SESE	15	53	76	19	2.9
3	Landry Stock	SENW	33	54	76	13.9	4.8

The operator proposes to drill 8 CBNG wells in T53N, R76W, Sections 3, 10, 13, and 15 in Campbell County, Wyoming. These wells are infill wells in the approved Clabaugh POD. The proposed wells will be drilled into the Swartz-Anderson, Canyon, Cook, and Wall coal seams at an average depth of 1,728 feet.

New disturbance for the proposed action will total 6.31 acres. The new disturbance includes 0.1 acre per non-constructed well location; 0.2 acre per slot location; 1.01 miles of proposed 2-track road with gas, water, and buried electric corridor 35 feet in width; and 0.15 miles of engineered

road with gas, water, and buried electric corridor 50 feet in width. The summary of disturbance is illustrated in the table below.

SUMMARY OF DISTURBANCE FOR CLABAUGH ADDITION 1 POD:

Facility	Number or Miles	Factor	Acres of Disturbance	Duration of Disturbance
Nonconstructed Pad	5	0.10 acres	0.50 acres	Long term
Slot locations	3	0.20 acres	0.60 acres	Long term
Proposed 2 Track Road				
No Corridor	0	0	0	0
With Corridor	1.01 miles	35 feet	4.28 acres	Long term
(GWE)				
Engineered Road				
No Corridor	0	0	0	0
With Corridor	0.15 miles	50 feet	0.93 acres	Long term
(GWE)				
Total Disturbance			6.31 acres	

Production facilities for each well would consist of 8 by 8 by 6 feet tall fiberglass enclosure painted Covert Green (18-0617 TPX). Seven well sites will have non-constructed locations on undisturbed ground; three well sites will have slot locations. Vegetation will be mowed only. Electronic natural gas flow measurement equipment is proposed utilizing telecommunications data gathering or chart recorders. Gas measurement will occur at the individual wellhead.

Power lines from proposed power drops to the individual wells will be buried.

Estimated time to drill and complete the wells is 4-6 days.

All proposed wells are located on private surface with federal minerals. The surface owner for all the proposed wells is Kenneth Clabaugh, Clabaugh Ranch.

Water Management:

The operator has submitted a comprehensive WMP for this project which incorporates sound water management practices, monitoring of downstream impacts within the Upper Powder River watershed and commitment to comply with Wyoming State water laws and regulations. It also addresses potential impacts to the environment and landowner concerns. Qualified hydrologists, in consultation with the BLM, developed the water management plan. Adherence with the plan, in addition to BLM applied mitigation (in the form of COAs), would reduce project area and downstream impacts from proposed water management strategies.

Water produced in association with CBNG from this project will be added to existing infrastructure which was included and analyzed in the original Clabaugh POD.

Groundwater

The average anticipated water production per well is 11 gpm or 88 gpm (0.20 cfs or 142 acre-feet per year) for the 8 wells in this project. The water quality of the produced water is expected to be similar to a reference water sample analysis which was submitted from a well producing from the Swartz, Anderson and Canyon coal zones (see table below).

The PRB FEIS predicts an infiltration rate of 40 % to groundwater aquifers and coal zones in the Upper Powder River drainage area (PRB FEIS pg 4-5). For this action, it may be assumed that a maximum of 35.2 gpm will infiltrate at or near the discharge points and impoundments (56.8 acre feet per year). The PRB FEIS predicts that one of the environmental consequences of coal bed natural gas production is possible impacts to the groundwater. The 10 permitted water wells within 1 mile of the project area produce from depths which range from 0 to 1050 feet compared to 1728 feet to the coal zones. Some of the permitted water wells are producing from depths similar to some of the targeted coal zones. The operator has offered water well agreements to holders of properly permitted domestic and stock wells within the circle of influence (½ mile of a federal CBNG producing well) of the proposed wells.

Surface Water

The following table shows the average values of EC and SAR as measured at selected USGS gauging stations at high and low monthly flows as well as the Wyoming groundwater quality standards for TDS and SAR for Class I to Class III water (there is no current standard for EC). It also shows constituent limits for TDS, SAR and EC detailed in the project area WYPDES permit, and the concentrations found in the POD’s representative water sample.

Comparison of Existing and Predicted Water Quality

Sample location or Standard	TDS mg/l	SAR	EC µmhos/cm
Upper Powder River Watershed at Arvada, WY Gauging station 06317000 Historic Data Average at Maximum Flow Historic Data Average at Minimum Flow		4.76 7.83	1,797 3,400
WDEQ Quality Standards for Wyoming Groundwater (Chapter 8) Drinking Water (Class I) Agricultural Use (Class II) Livestock Use (Class III)	500 2,000 5,000	8	
WDEQ Water Quality Requirement for WYPDES Permit: #WY0055859 At discharge point	NA	NA	7,500
Predicted Produced Water Quality Comingled Swartz, Anderson and Canyon Coal Zone	960	21.3	1,562
Existing Surface Water Quality Seep SENW Sec 14 T53N R76W	11,800	7.6	10,210
Existing Groundwater Quality Coy # 1 well NESE Sec 15 T53N R76W Depth 190’ bgs	3,310	16.9	4,090

There is a seep or in channel spring located with the Clabaugh POD boundary. The operator submitted a copy of a recent water analysis for the water found in the channel as listed above.

The primary water management strategy is proposed to be use of the water for subsurface drip irrigation (SDI) of 120 acres of cultivated field. The operator has obtained a Class 5F2 permit (UIC 07-805) for the disposal of water by SDI. These fields were included in the original Clabaugh POD water management strategy. If the operator does choose to discharge to the surface at any of the three water discharge points as analyzed in the original Clabaugh POD, the water will be fully contained in the impoundments. No discharge is permitted below any of the impoundments except in the case of a storm event.

The operator has obtained a Wyoming Pollutant Discharge Elimination System (WYPDES) permit #WY055859 for the discharge of water produced from this project from the WDEQ.

WYPDES Permit Parameters #WY0055859

Parameters	Clabaugh POD Water Quality 7-7-10	WYPDES Permit Maximum Concentrations	UIC Permit Limit
pH	7.82	6.5 to 9.0	6.5 to 8.5
Specific Conductance	1,562 mg/l	7,500 mg/l max	NA
Dissolved Iron	ND	1,000 µg/l max	NA
Dissolved Copper	2 µg/l	6 µg/l max	NA
Total Barium	300 µg/l	1800 µg/l max	NA
Total Arsenic	ND	8.4 µg/l max	NA
Chlorides	7 mg/l	150 mg/l	2,000 mg/l
Total Dissolved Solids	960 mg/l	NA	2,430 to 3,820 mg/l
Sulfate	ND	NA	2,020 to 2,460 mg/l

Alternative (2A), the approved alternative in the Record of Decision for the PRB FEIS, states that the peak production of water discharged to the surface will occur in 2005 at a total contribution to the mainstem of the Upper Powder River of 68 cfs (PRB FEIS pg 4-102). The predicted maximum discharge rate from these 8 wells is anticipated to be a total of 88.0 gpm or 0.20 cfs to SDI or impoundments. Using full containment, the produced water re-surfacing in Wild Horse Creek from this action may add a maximum 0.03 cfs to the Upper Powder River flows, or 0.04% of the predicted total CBNG produced water contribution.

Plan Conformance

The proposed action is in conformance with the terms and the conditions of the Approved Resource Management Plan for the Public Lands Administered by the Bureau of Land Management, Buffalo Field Office (BFO), April 2001 and the PRB FEIS, as required by 43 CFR 1610.5.

Plan of Operations

The proposal is designed in conformance with all bureau standards and incorporates appropriate best management practices, required and designed mitigation measures determined to reduce the effects on the environment.

A surface use plan of operations describing all proposed surface-disturbing activities has been reviewed and is approved pursuant to Section 17 of the Mineral Leasing Act, as amended.

Compliance with the Energy Policy Act of 2005

The proposed activity has been determined to be statutorily categorically excluded from NEPA documentation in accordance with Section 390 of the National Energy Policy Act of 2005.

The applicable Categorical Exclusion reference in Section 390 of the Energy Policy Act of 2005 is exclusion number (b)(3) which is *drilling an oil or gas well within a developed field for which an approved land use plan or any environmental document prepared pursuant to NEPA analyzed such drilling as a reasonably foreseeable activity, so long as such plan or document was approved within 5 years prior to the date of spudding the well.*

The Clabaugh POD EA# WY-070-07-158 has been reviewed and has been determined to consider potential environmental effects associated with the proposed activity at a site specific level.

The environmental assessment for Clabaugh POD was approved on 05/05/2008 and identifies the development of CBNG as reasonably foreseeable.

Persons and Agencies Consulted

Sharon Soule, Legal Instruments Examiner
Casey Freise, Supervisory Natural Resource Specialist
Kathy Brus, Hydrology
Ardeth Hahn, Archaeologist
Courtney Frost, Wildlife Biologist
Scott Jawors, Wildlife Biologist
Stacy Gunderson, Civil Engineer
Kenneth Clabaugh, Surface Owner
Rich Lynde, Cedar Resources Corporation
Debby Green, Natural Resource Specialist
Mary Hopkins, State Historic Preservation Officer
Pauline Schuette, US Fish & Wildlife Service

CULTURAL:

Class III cultural resource inventory was performed for the Clabaugh Addition I POD prior to on-the-ground project work (BFO project no. 70100063). ACR Consultants, Inc. conducted a combination block and linear, pedestrian and shovel test, class III cultural resource inventory following the Archeology and Historic Preservation, Secretary of the Interior's Standards and Guidelines (48CFR190) and the *Wyoming State Historic Preservation Office Format, Guidelines, and Standards for Class II and III Reports*. Ardeth Hahn, BLM Archaeologist, reviewed the report for technical adequacy and compliance with Bureau of Land Management (BLM) standards, and determined it to be adequate. No cultural resources are located in or near the project area.

Some of the project area analyzed in this EA occurs on deep alluvial deposits. Alluvial deposits typically have a high potential for buried cultural resources, which are nearly impossible to locate during a Class III inventory. When a project is constructed in an area with a high potential for buried cultural material, archaeological monitoring is often included as a condition of approval. Construction monitoring is performed by a qualified archeologist working in unison with construction crews. If buried cultural resources are located by the archeologist, construction is halted and the BLM consults with the State Historic Preservation Office (SHPO) on mitigation or avoidance. Due to the presence of alluvial deposits specified by the NRCS soil survey and confirmed by ACR Consultants, Inc., the operator will be required to have an archeologist monitor all earth moving activities associated with certain construction, as described in the site specific COA's.

No historic properties will be impacted by the proposed project. Following the Wyoming State Protocol Section VI(A)(1) the Bureau of Land Management electronically notified the Wyoming State Historic Preservation Officer (SHPO) on 9/3/2010 that no historic properties exist within the APE. If any cultural values [sites, artifacts, human remains (Appendix L PRB FEIS)] are observed during operation of this lease/permit/right-of-way, they will be left intact and the Buffalo Field Manager notified. Further discovery procedures are explained in the Standard COA (General)(A)(1).

WILDLIFE:

The wildlife biologist has reviewed the proposal and determined that the project is consistent with the Final Environmental Impact Statement (WY-070-02-065), programmatic biological opinion (ES-6-WY-07-F012) from the Powder River Basin Oil and Gas Project, and EA-WY-070-EA07-158.

Threatened, Endangered, Proposed, and Candidate species that were not analyzed in EA-WY-070-EA07-158 or for which listing status has changed are analyzed in Table W1 below.

Table W1.

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
<i>Endangered</i>				
Black-footed ferret (<i>Mustela nigripes</i>)	Black-tailed prairie dog colonies or complexes > 1,000 acres.	NS	NLAA	Species is not suspected to occur in area
Blowout penstemon (<i>Penstemon haydenii</i>)	Sparse vegetated, shifting sand dunes	NP	NE	No suitable habitat present
<i>Threatened</i>				
Ute ladies' -tresses orchid (<i>Spiranthes diluvialis</i>)	Riparian areas with permanent water	NP	NE	No suitable habitat present
<i>Proposed</i>				
Mountain plover (<i>Charadrius montanus</i>)	Short-grass prairie with slopes < 5%	NP	NLJ	No suitable habitat present.
<i>Candidate</i>				
Greater sage-grouse (<i>Centrocercus urophasianus</i>)	Basin-prairie shrub, mountain-foothill shrub	K	NLAA	Sagebrush cover will be affected. Human presence and traffic will increase.
<p>Presence K - Known, documented observation within project area. S - Habitat suitable and species suspected, to occur within the project area. NS - Habitat suitable but species is not suspected to occur within the project area. NP - Habitat not present and species unlikely to occur within the project area.</p> <p>Project Effects LAA - Likely to adversely affect NE - No Effect NLAA - May Affect, not likely to adversely affect individuals or habitat. NLJ - Not likely to jeopardize species existence.</p>				

Blowout Penstemon

Blowout penstemon is listed as Endangered under the ESA. It is a regional endemic species with documented populations in the Sand Hills of west-central Nebraska and the northeastern Great Divide Basin of Carbon County, Wyoming. Suitable blowout penstemon habitat consists of sparsely vegetated, early successional, shifting sand dunes and blowout depressions created by wind. In Wyoming, the habitat is typically found on sandy aprons or the lower half of steep sandy slopes deposited at the base of granitic or sedimentary mountains or ridges. The Clabaugh

Addition 1 POD project area does not contain areas with these characteristics, and blowout penstemon is not expected to occur.

Decision and Rationale on Action

I have decided to approve the Clabaugh Addition 1 POD with the following Conditions of Approval (COAs) and Operator Committed Mitigation Measures:

List of wells:

	Well Name	Well #	QTR	Sec	TWP	RNG	CX# WY070
1	CLABAUGH FEDERAL	13-3WA*	NWSW	3	53N	76W	CX10-03-312
2	CLABAUGH FEDERAL	24-3WA	SESW	3	53N	76W	CX10-03-313
3	CLABAUGH FEDERAL	33-3WA	NWSE	3	53N	76W	CX10-03-314
4	CLABAUGH FEDERAL	44-3WA	SESE	13	53N	76W	CX10-03-315
5	CLABAUGH FEDERAL	32-10WA	NESW	10	53N	76W	CX10-03-316
6	CLABAUGH FEDERAL	11-13WA	NWNW	13	53N	76W	CX10-03-317
7	CLABAUGH FEDERAL	13-13WA	NWSW	13	53N	76W	CX10-03-318
8	CLABAUGH FEDERAL	42-15WA	SENE	15	53N	76W	CX10-03-319

The following impoundments, previously approved for use in association with the water management plan for Clabaugh POD, were inspected and approved for use in association with the water management strategy for the Clabaugh Addition 1 POD:

List of Impoundments:

	IMPOUNDMENT Name / Number	Qtr/Qtr	Section	TWP	RNG	Capacity (Acre Feet)	Surface Disturbance (Acres)
1	Clabaugh 11-3-53-76	NENE	4	53	76	25.1	4.5
2	Deadman Stock	SESE	15	53	76	19	2.9
3	Landry Stock	SENE	33	54	76	13.9	4.8

OPERATOR COMMITTED MITIGATION MEASURES:

1. Utilities will be installed inside 2-track roads to minimize disturbance.
2. Wildlife mitigation to address concerns for well #24-3 located within 0.25 miles and also in line of sight of a raptor nest (BLM_ID # 6572), the following mitigation measures are included in the MSUP as operator committed measures:
 - Operator will adhere to BLM guidelines with regard to timing stipulations for Raptor Nesting (February 1- June 30). A survey to document nest occupancy shall be conducted by a biologist following BLM protocol, between April 15 and June 30. Survey results shall be submitted in writing to a BFO BLM biologist and approved prior to any needed surface disturbing activities. If the survey identifies active raptor nest, a 0.5 mile timing buffer will be implemented restricting surface disturbing activities.
 - Nest activity surveys will be conducted to determine activity status prior to visitation between February 1st and June 1st.
 - Telemetry options will be utilized to limit visitation to the well site.

- Visitation to well 24-3-5376 for routine monitoring will be limited to minimal number of visits per week (one or less) during raptor breeding and nesting seasons and will be limited to 20 minutes or less.
- Nest productivity checks by a biologist will be conducted no earlier than June 1 or later than June 30 and will be for the first five years after project completion. Any evidence of nesting success or production will be recorded and results submitted no later than July 31
- Shut-off will be incorporated into the piping plan to provide the ability to isolate well 24-3 in the event that work needs to be done which would violate timing stipulations. In the event that a raptor nest(s) within 0.5 miles of the well is determined active, the well will be shut-in and maintenance work will be done after young have been verified by a biologist to have fledged from the nest.

Wildlife mitigation to address concerns for Well 11-13-5376WA that limits the amount of sagebrush disturbed and reclamation needs are included in the MSUP as operator committed measures;

- Minimize disturbance area by developing access to the well site using 2-track roads versus built up crown and ditch where possible with regard to safety concerns.
- Utilize equipment to lay needed pipelines which will minimize disturbance zones. Use of the Wolfe Plow was mentioned at the on-site meeting and this would be a good situation for utilization of that equipment.

CONDITIONS OF APPROVAL (COAs)

1. The operator will adhere to all Conditions of Approval contained in the Clabaugh POD EA # WY-070-07-158 approved 05/05/08.
2. All surface disturbing activity in the following areas will be monitored by a BLM cultural resource use permit (CRUP) holder or permitted crew chief. The Bureau has identified these areas as having a high potential for buried cultural deposits (areas containing alluvial deposits based on NRCS soil survey data and supported by the ACR cultural report). Some portions of the monitoring areas as described may lie outside alluvial deposits and exact monitoring areas are left to the discretion of the archeological monitor. All monitored areas must be plotted on the map provided with the monitoring report. The submission of two copies of a monitoring report to BFO is required within 30 days of the completion of all monitoring work.
 - All surface disturbing activity associated with the construction of the 32-10-5376WA well and the associated utility corridor.
3. To reduce the potential for erosion and the creation of muddy conditions, tire tanks will not be allowed to overflow.
4. A fifteen (15) mile per hour speed limit sign must be installed at the entrance of the POD on the main access roads off Echeta Road.
5. The operator is responsible for having the licensed professional engineer(s) certify that the actual construction of the roads meets the design criteria and is constructed to Bureau standards.
6. All engineered road segments must be completed, including any culverts and low water crossings before the drilling rig or other drilling equipment moves onto the pad.

7. Surfacing material on the portions of road with an anticipated ADT of 10 or greater will meet the grading requirements for “Grading W” as outlined in the Wyoming Highway Department’s Standard Specification for Road and Bridge Construction.
8. Install an approach culvert on access to #32-10 at the junction with Echeta Road.
9. All permanent above-ground structures (e.g., production equipment, tanks, etc.) not subject to safety requirements will be painted to blend with the natural color of the landscape. The paint used will be a color which simulates “Standard Environmental Colors.” The color selected for the Clabaugh Addition 1 POD is Covert Green (18-0617 TPX).
10. The following well locations and access road/corridor in the project area have been identified to have limited reclamation potential that will require disturbed areas to be stabilized (stabilization efforts may include mulching, matting, soil amendments, etc.) in a manner which eliminates accelerated erosion until a self-perpetuating native plant community has stabilized the site in accordance with the Wyoming Reclamation Policy. Stabilization efforts shall be finished within 30 days of the initiation of construction activities: #42-15 slot location; #11-13 knife ridge slot location - maintain a 20 foot vegetative border to the edge of knife ridge.
11. The operator will seed on the contour to a depth of no more than 0.5 inch. To maintain quality and purity, certified seed with a minimum germination rate of 80% and a minimum purity of 90% will be used. On BLM surface or in lieu of a different specific mix desired by the surface owner, use the following:

**10-14” Precipitation Zone
Loamy Ecological Site Seed Mix**

Species	% in Mix	Lbs PLS*
<i>Western Wheatgrass</i> (Pascopyrum smithii)/ <i>Thickspike Wheatgrass</i> (Elymus lanceolatus ssp. lanceolatus)	30	4.8
<i>Bluebunch Wheatgrass</i> (Pseudoroegneria spicata ssp. Spicata)	10	1.2
<i>Green needlegrass</i> (Nassella viridula)	25	3.0
<i>Slender Wheatgrass</i> (Elymus trachycaulus ssp. trachycaulus)	20	1.2
<i>Prairie coneflower</i> (Ratibida columnifera)	5	0.6
<i>White or purple prairie clover</i> (Dalea candidum, purpureum)	5	0.6
<i>Rocky Mountain beeplant</i> (Cleome serrulata) /or <i>American vetch</i> (Vicia americana)	5	0.6
Totals	100%	12 lbs/acre

*PLS = pure live seed. Northern Plains adapted species
Double this rate if broadcast seeding

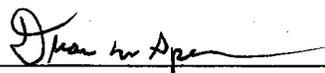
12. For any questions regarding this project and the Conditions of Approval, contact Debby Green, NRS, at (307)684-1058.

The above COAs and/or terms and conditions provide justification for this decision and may not be segregated from project implementation without further NEPA review. In addition, I have reviewed the plan conformance statement and have determined that the proposed activity is in conformance with the applicable land use plan(s). Further, I have reviewed the proposal to ensure the appropriate exclusion category as described in Section 390 of the Energy Policy Act of 2005 has been correctly applied. It is my determination that no further environmental analysis is required.

The above described action must be completed by 05/05/2013.

Implementation Date

This project will be implemented on or after the below date.



Duane W. Spencer
Field Manager

9/14/10

Date

Administrative Review or Appeal Opportunities

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.

Contact Person

For additional information concerning this decision, contact
Debby Green NRS
Buffalo Field Office, BLM
1425 Fort St.
Buffalo, WY 82834
(307)684-1058