

# Appendix C — Standard “Conditions of Approval” APDs, BLM – Buffalo Field Office

Conditions of Approval, are applied to both APD and Sundry Notice Drilling Plans and Surface Use Plans when: 1) they are not specifically addressed in those plans and 2) they are needed to mitigate impacts to resource values identified at the onsite inspection or during review of the plans. The first section identifies standard conditions of approval applicable to development involving only coal bed methane. The second section identifies standard conditions of approval that are pertinent to all federal oil & gas lease development. Not all of the conditions in this second section are applicable to development of CBM.

It is important to note that site-specific mitigation are also developed by the BLM authorized officer, as needed, on a case-by-case basis at the onsite inspection to address special, unanticipated issues not addressed by a programmatic mitigation or standard conditions of approval (e.g., erosive soils, steep slopes, proximity to existing improvements, etc.) These special mitigating measures obviously cannot be listed here. The following are the standard conditions of approval that are always applied (if not already specifically addressed in the plans).

Any new mitigation resulting from analysis in this EIS will be disclosed in the Record of Decision and may be added or will replace or revise the standard conditions already identified in this plan.

## Section 1 — Applicable to Coal Bed Methane Well Development Only

1. The operator is committed to all of the mitigation measures and monitoring contained in the Programmatic Mitigation Plan PRB O&G EIS Appendix M. The operator is also committed to the following **Standard “Conditions of Approval” for APD’s.**
2. A pre-construction field meeting shall be conducted prior to beginning any dirt work approved under this POD. The operator shall contact the BLM Authorized Officer (responsible NRS @ 307-684-1100) at least 4-days prior to beginning operations so that the meeting can be scheduled. The operator is responsible for having all contractors present (dirt contractors, drilling contractor, pipeline contractor, project oversight personnel, etc.) including the overall field operations superintendent, and for providing all contractors copies of the approved POD, project map and BLM *Conditions of Approval* pertinent to the work that each will be doing.
3. Pits will be adequately fenced during and after drilling operations until pit is reclaimed so as to effectively keep out wildlife and livestock. Adequate fence-

ing, in lieu of more stringent requirements by the surface owner, is defined as follows:

Construction materials will consist of steel or wood posts. Three or four strand wire (smooth or barbed) fence or hog panel (16-foot length by 50-inch height) or plastic snow fence must be used with connectors such as fence staples, quick-connect clips, hog rings, hose clamps, twisted wire, etc. Electric fences will not be allowed.

Construction standards: Posts shall be firmly set in ground. If wire used must be taut and evenly spaced, from ground level to top wire, to effectively keep out animals. Hog panels must be tied securely into posts and one another using fence staples, clamps, etc. Plastic snow fencing must be taut and sturdy. Fence must be at least 2-feet from edge of pit. 3 sides fenced before beginning drilling, the fourth side fenced immediately upon completion of drilling and prior to rig release. Fence must be left up and maintained in adequate condition until pit is closed.

4. Drilling pits will be closed as soon as possible, but no later than 90 days from time of drilling/well completion, unless the BLM Authorized Officer gives an extension. Squeezing of pit fluids and cuttings is prohibited. Pits must be dry of fluids or they must be removed via vac truck or other environmentally acceptable method prior to backfilling, recontouring and replacement of topsoil. Mud and cuttings left in pit must be buried at least 3-feet below recontoured grade. The operator will be responsible for recontouring any subsidence areas that develop from closing a pit before it is sufficiently dry.
5. The operator shall complete wells as soon as possible, but no later than 30 days after drilling operations, unless an extension is given by the BLM Authorized Officer.
6. Operators must submit a *Surface Use Data Summary Form* (Attachment A) as part of every Master Surface Use Plan.
7. If in the process of air drilling the wells there is a need to utilize mud, all circulating fluids will be contained either in an approved pit or in an above-ground containment tank. The pit or containment tank will be large enough to safely contain the capacity of all expected fluids without danger of overflow. Fluid and cuttings will not be squeezed out of the pit, and the pit will be reclaimed in an expedient manner.

## **Section 2 — Pertinent to All Oil and Gas Well Development**

### **A. Construction**

1. The operator will limit vegetation removal and the degree of surface disturbance wherever possible. Where surface disturbance cannot be avoided, all

practicable measures will be utilized to minimize erosion and stabilize disturbed soils.

2. Construction and drilling activity will not be conducted using frozen or saturated soil material during periods when watershed damage or excessive rutting is likely to occur.
3. Remove all available topsoil (depths vary from 4 inches on ridges to 12+ inches in bottoms) from constructed well locations including areas of cut and fill, and stockpile at the site. Topsoil will also be salvaged for use in reclamation on all other areas of surface disturbance (roads, pipelines, etc.). Clearly segregate topsoil from excess spoil material. Any topsoil stockpiled for one year or longer will be signed and stabilized with vegetation. Seed with annual ryegrass or other suitable cover crop.
4. The operator will not push soil material and overburden over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved without creating additional undue surface disturbance and where it does not impede watershed and drainage flows.
5. Construct the backslope no steeper than ½:1, and construct the foreslope no steeper than 2:1, unless otherwise directed by the BLM authorized officer.
6. Maintain a minimum 20-foot undisturbed vegetative border between toe-of-fill of pad and/or pit areas and the edge of adjacent drainages, unless otherwise directed by the BLM Authorized Officer.
7. With the overall objective of minimizing surface disturbance and retaining land stability and productivity, the operator shall utilize equipment that is appropriate to the scope and scale of work being done for roads and well pads (utilize equipment no larger than needed for the job.)
8. To minimize electrocution potential to birds of prey, all overhead electrical power lines will be constructed to standards identified by the Avian Power Line Interaction Committee (1996).
9. The operator shall utilize wheel trenchers or ditch witches to construct all pipeline trenches, except where extreme topography or other environmental factors preclude their use.
10. A flare pit will be constructed on the well pad for use during drilling operations. It will be located at least 125 feet from the well head and will be located down-wind from the prevailing winds.
11. Pit will be **adequately** fenced during and after drilling operations until pit is reclaimed so as to effectively keep out wildlife and livestock. This requires that it be fenced on the three nonworking sides prior to drilling and on the remaining side **immediately** following rig release. Fencing will be constructed in accordance with BLM specifications. (Plastic snow fence is not acceptable fencing material for conventional wells.)

12. The reserve pit will be oriented to prevent collection of surface runoff. After the drilling rig is removed, the operator may need to construct a trench on the uphill side of the reserve pit to divert surface drainage around it. If constructed, the trench will be left intact until the pit is closed.
13. The reserve pit will be lined with an impermeable liner if permeable subsurface material is encountered. An impermeable liner is any liner having a permeability less than  $10^{-7}$  cm/sec. The liner will be installed so that it will not leak and will be chemically compatible with all substances that may be put in the pit. Liners made of any man-made synthetic material will be of sufficient strength and thickness to withstand normal installation and pit use. In gravelly or rocky soils, a suitable bedding material such as sand will be used prior to installing the liner.
14. The reserve pit will be constructed so that at least half of its total volume is in solid cut material (below natural ground level).
15. If any cultural values (sites, artifacts, remains) are observed during operation of this lease/permit/right-of-way, they will be left intact and the Buffalo Area Manager notified. The authorized officer will conduct an evaluation of the cultural values to establish appropriate mitigation, salvage or treatment.
16. If paleontological resources, either large or conspicuous, and/or a significant scientific value are discovered during construction, the find will be reported to the Authorized Officer immediately. Construction will be suspended within 250 feet of said find. An evaluation of the paleontological discovery will be made by a BLM approved professional paleontologist within five (5) working days, weather permitting, to determine the appropriate action(s) to prevent the potential loss of any significant paleontological values. Operations within 250 feet of such a discovery will not be resumed until written authorization to proceed is issued by the Authorized Officer. The applicant will bear the cost of any required paleontological appraisals, surface collection of fossils, or salvage of any large conspicuous fossils of significant scientific interest discovered during the operation.
17. Culverts will be placed on channel bottoms on firm, uniform beds, which have been shaped to accept them, and aligned parallel to the channel to minimize erosion. Backfill will be thoroughly compacted.
18. The minimum diameter for culverts will be 18 inches. However, all culverts will be appropriately sized in accordance with standards in BLM Manual 9113.
19. Low water crossings will be constructed at original streambed elevation in a manner that will prevent any blockage or restriction of the existing channel. Material removed will be stockpiled for use in reclamation of the crossings.
20. Construction-related traffic will be restricted to approved routes. Cross-country vehicle travel will not be allowed.

21. Any facilities, pipelines, powerlines, pits, etc., that involve new surface disturbance and are not specifically addressed in the APD/POD, must be authorized by the BLM via a Sundry Notice prior to construction.
22. Pipeline construction shall not block nor change the natural course of any drainage. Pipelines shall cross perpendicular to drainages. Pipelines shall not be run parallel in drainage bottoms. Suspended pipelines shall provide adequate clearance for maximum runoff.
23. Pipeline trenches shall be compacted during backfilling. Pipeline trenches shall be routinely inspected and maintained to ensure proper settling, stabilization and reclamation.
24. The operator shall restrict travel on unimproved two-track roads during periods of inclement weather or spring thaw when the possibility exists for of surface damage from excessive rutting.
25. The operator shall institute measures such as surfacing, watering, use of non-saline dust suppressants, etc. on all roads authorized under this project in order to minimize impacts from fugitive dust emissions. The use of chemical dust suppressants on public surface will require prior approval from the BLM Authorized Officer.
26. Operators are required to obtain a National Pollution Discharge Elimination System (NPDES) Storm Water Permit from the Wyoming DEQ for any projects that disturb five or more acres (changing to one acre in early 2003). This general construction storm water permit must be obtained from WDEQ **prior** to any surface disturbing activities and can be obtained by following directions on the WDEQ website at <http://deq.state.wy.us>. Further information can be obtained by contacting Barb Sahl at (307) 777-7570.
27. In accordance with the U.S. Army Corps of Engineers (COE) General Permit 98-08 (Appendix D), a summary of the improvements and/or disturbance made to channels, wetlands and in-channel structures associated with this project will be submitted to the COE as a Statement of Compliance.

## **B. Operations/Maintenance**

1. Confine all equipment and vehicles to the access road, pad, and area specified in the APD or POD.
2. All waste, other than human waste and drilling fluids, will be contained in a portable trash cage. This waste will be transported to a State approved waste disposal site immediately upon completion of drilling operations. No trash or empty barrels will be placed in the reserve pit or buried on location. All state and local laws and regulations pertaining to disposal of human and solid waste will be complied with.
3. Rat and mouse holes shall be filled and compacted from the bottom to the top immediately upon release of the drilling rig from the location.

4. The operator will be responsible for control of noxious weeds on all areas of surface disturbance associated with this project (well locations, roads, water management facilities, etc.) Use of pesticides shall comply with the applicable Federal and State laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of Interior. Prior to the use of pesticides on public land, the holder shall obtain from the BLM authorized officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the authorized officer to such use.
5. In areas of high concern relative to noxious weed infestations, the operator will be required to submit an integrated pest management plan. This plan will need to incorporate appropriate mitigation measures such as spraying herbicides, washing vehicles, etc. to ensure that noxious weed spread/impacts are minimized. Mitigation will be developed on a site-specific basis. Companies should contact the local County Weed and Pest office to ascertain information about weeds in their proposed project area.
6. All permanent above-ground structures (specify type of structures, e.g. , production equipment, tanks, transformers, insulators, 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 this (site, project), is (name and Munsell Soil Color Number).
7. Sewage shall be placed in a self-contained, chemically treated porta-potty on location.
8. The operator and their contractors shall ensure that all use, production, storage, transport and disposal of hazardous and extremely hazardous materials associated with the drilling, completion and production of this well will be in accordance with all applicable existing or hereafter promulgated federal, state and local government rules, regulations and guidelines. All project-related activities involving hazardous materials will be conducted in a manner to minimize potential environmental impacts. A file will be maintained onsite containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds and/or substances which are used in the course of construction, drilling, completion and production operations.
9. Produced fluids shall be put in test tanks on location during completion work. Produced water will be put in the reserve pit during completion work per On-shore Order #7.
10. The only fluids/waste materials which are authorized to go into the reserve pit are RCRA exempt exploration and production wastes. These include:
  - drilling muds & cuttings
  - rigwash
  - excess cement and certain completion & stimulation fluids defined by EPA as exempt

It does not include drilling rig waste, such as:

- spent hydraulic fluids
- used engine oil
- used oil filter
- empty cement, drilling mud, or other product sacks
- empty paint, pipe dope, chemical or other product containers
- excess chemicals or chemical rinsate

Any evidence of non-exempt wastes being put into the reserve pit may result in the BLM Authorized Officer requiring specific testing and closure requirements.

11. Operators are advised that prior to installation of any oil and gas well production equipment which has the potential to emit air contaminants, the owner or operator of the equipment must notify the Wyoming Department of Environmental Quality, Air Quality Division (phone 307-777-7391) to determine permit requirements. Examples of pertinent well production equipment include fuel-fired equipment (e.g., diesel generators), separators, storage tanks, engines and dehydrators.
12. Any potential impacts to archaeological sites, regardless of eligibility for the National Register of Historic Places (NHRP), must be disclosed to the appropriate surface owner by the operator prior to surface disturbance.
13. If this well is drilled during the fire season (June-October), the operator shall institute all necessary precautions to ensure that fire hazard is minimized, including but not limited to mowing vegetation on the access route(s) and well location(s), keeping fire fighting equipment readily available when drilling, etc.

## **C. Dry Hole/Reclamation**

1. All disturbed lands associated with this project, including the pipelines, access roads, water management facilities, etc will be expediently reclaimed and reseeded in accordance with the surface use plan and any pertinent site-specific COAs.
2. Disturbed lands will be recontoured back to conform with existing undisturbed topography. No depressions will be left that trap water or form ponds.
3. The fluids and mud must be dry in the reserve pit before recontouring pit area. The operator will be responsible for recontouring of any subsidence areas that develop from closing a pit before it is completely dry. The plastic pit liner will be cut off below grade and properly disposed of at a state authorized landfill before beginning to recontour the site.
4. Before the location has been reshaped and prior to redistributing the topsoil, the operator will rip or scarify the drilling platform and access road on the contour, to a depth of at least 12 inches. The rippers are to be no farther than 24 inches apart.

5. Distribute the topsoil evenly over the entire location and other disturbed areas. Prepare the seedbed by disking to a depth of 4-to-6 inches following the contour.
6. Waterbars are to be constructed at least one (1) foot deep, on the contour with approximately two (2) feet of drop per 100 feet of waterbar to ensure drainage, and extended into established vegetation. All waterbars are to be constructed with the berm on the downhill side to prevent the soft material from silting in the trench. The initial waterbar should be constructed at the top of the backslope. Subsequent waterbars should follow the following general spacing guidelines:

Slope (percent)	Spacing Interval (feet)
$\leq 2$	200
2 – 4	100
4 – 5	75
$\geq 5$	50

7. The operator will drill seed on the contour to a depth of 0.5 inch, followed by cultipaction to compact the seedbed, preventing soil and seed losses. To maintain quality and purity, the current years tested, 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:

**SPECIES-CULTIVAR      LBS PLS/ACRE**

**To be determined at the site-specific onsite inspection)**

8. Slopes too steep for machinery may be hand broadcast and raked with twice the specified amount of seed.
9. Complete fall seeding after September 15 and prior to prolonged ground frost. To be effective, complete spring seeding after the frost has left the ground and prior to May 15.
10. The operator will reshape abandoned access roads by pushing the fill material back into the cuts. On roads to be permanently closed, waterbars are to be constructed near the contour across the shaped road, utilizing the spacing guidelines contained in No. 6 above.
11. Disk and seed the access road per number 6 above.
12. All rehabilitation work, including seeding, will be completed as soon as feasible following plugging.

13. Following reseeding, the location will be temporarily fenced off (**if not already fenced**) for at least two complete growing seasons to ensure long-term reclamation success, unless otherwise requested by the surface owner.
14. BLM will not release the performance bond until the area has been successfully revegetated (evaluation will be made after the second complete growing season) and has met all other reclamation goals of the surface owner and surface management agency.
15. A Notice of Intent to Abandon and a Subsequent Report of Abandonment must be submitted for abandonment approval.
16. For performance bond release approval, a Final Abandonment Notice (with a surface owner release on split-estate must be submitted prior to a final abandonment evaluation by BLM.
17. Soil fertility testing and the addition of soil amendments may be required to stabilize some disturbed lands.
18. Any mulch or seed utilized for reclamation needs to be certified weed free and be current year’s tested.

## **D. Producing Well**

1. The entire location will be fenced off with a 4-strand barbed wire fence (or sheep fence based on site-specific conditions), with H-braces on the corners and a cattle guard, far enough outside of disturbed areas and soil stockpiles to allow for perimeter rehab within the fenced location.
2. Landscape those areas not required for production to the surrounding topography as soon as possible. The fluids and mud must be dry in the reserve pit before recontouring pit area. The operator will be responsible for recontouring and reseeding of any subsidence areas that develop from closing a pit before it is completely dry.
3. Reduce the backslope to 2:1 and the foreslope to 3:1, unless otherwise directed by the BLM Authorized Officer. Reduce slopes by pulling fill material up from foreslope into the toe of cut slopes.
4. Production facilities (including dikes) must be placed on the cut portion of the location and a minimum of 15 feet from the toe of the back cut unless otherwise approved by the BLM Authorized Officer.
5. A dike will be constructed completely around the production facilities (i.e. production tanks, water tanks, and heater-treater). The dikes for the production facilities must be constructed of impermeable soil, hold 110% of the capacity of the largest tank plus 1-foot of freeboard, and be independent of the back cut.

6. Any chemicals used in treating the wells (e.g., corrosion inhibitor, emulsion breaker, etc.) will be in a secure, fenced-in area that has an appropriate secondary containment structure (dikes, catchment pan, etc.).
7. The load out line coming from the oil/condensate tank(s) will have a suitable containment structure to capture and recycle any oil spillage that might occur.
8. Individual production facilities (tanks, treaters, etc.) will be adequately fenced off (if entire facility not already fenced off).
9. Any spilled or leaked oil, produced water or treatment chemicals must be reported in accordance with NTL-2A and immediately cleaned up in accordance with BLM requirements. This includes clean-up and proper disposition of soils contaminated as a result of such spills/leaks.
10. Distribute stockpiled topsoil evenly over those areas not required for production and reseed as recommended. \*\*Due to fragile soils, the entire well location may need to be fenced off to ensure revegetation and stability of the reclaimed location perimeter throughout the producing life of the well, subject to the discretion of the BLM Authorized Officer.
11. Upgrade and maintain access roads and drainage control (e.g., culverts, drainage dips, ditching, crowning, surfacing, etc.) as necessary and as directed by the BLM Authorized Officer to prevent soil erosion and accommodate safe, environmentally-sound access.
12. Prior to construction of production facilities not specifically addressed in the APD, the operator shall submit a Sundry Notice to the BLM Authorized Officer for approval.
13. If not already required prior to constructing and drilling the well location, the operator shall immediately upgrade the entire access road to BLM standards (including topsoiling, crowning, ditching, drainage culverts, surfacing, etc.) to ensure safe, environmentally-sound, year-round access.
14. Waterbars shall be installed on all reclaimed pipeline corridors per the guidelines in C.5.

## **E. General Information**

1. Please contact (pertinent NRS), Natural Resource Specialist, @ (307) 684-1100, Bureau of Land Management, Buffalo, if there are any questions concerning the above surface use stipulations.