

Appendix A. Applicant Committed Measures

This appendix is Anadarko Petroleum Company's (APC) measures to avoid and mitigate potential impacts from the Crazy Cat East project. As described below, some of these ACMs are Programmatic Mitigation Measures and Standard Conditions of Approval Identified in the PRB FEIS ROD.

1.1. Applicant Committed Measures

The applicant incorporated various measures to alleviate resource impacts. For a detailed description of the design features and construction practices associated with the Proposed Action, refer to the proposal in Section 2 of Environmental Assessment, EA, WY-070-EA13-028, the final Master Surface Use Plan of the likely applications for permit to drill (APDs) and this Appendix. Additional applicant committed measures are the Integrated Weed and Pest Management Plan (Appendix B) of this EA.

1.2. Site Specific

Additional site-specific conditions of approval will be evaluated by the applicant and the BLM during individual APD approval to minimize environmental impacts.

Surface:

1. Improved roads used in conjunction with accessing project wells will be fully built (including all water control structures such as wing ditches, culverts, relief ditches, low water crossings, surfacing, etc.) and functional to BLM standards as outlined in the BLM Manual 9113 prior to drilling of the well. This applies to the entire project area.
2. Erosion control fabric used for reclamation of steep slopes will be photodegradable or biodegradable to limit the amount of debris/trash on and around location. All erosion control products will be applied according to manufacturer's specifications to reduce product failures.
3. To ensure proper water movement over the top of the erosion control fabric, the fabric will be 'keyed' into the slope by digging a small trench at the top of the slope. Lay the top end of the material into the trench to line it. To line it the edge is folded underneath itself and then it is secured using staples. The trench is then filled in to the previous soil level. Fabric should be overlapped on edges and stapled according to manufacturers' specifications.
4. A 20-foot undisturbed vegetative buffer will be maintained between all surface disturbances from well drilling activities or well operation due to slope and the proximity to adjacent drainages for wells to be determined by the BLM's AO.
5. All permanent aboveground structures installed on the producing well location (e.g., production equipment, tanks, etc.) not subject to safety requirements will be painted one of the standard environmental colors recommended by the BLM.
6. A 30-day stabilization standard will apply to all wells or infrastructure to help protect soil from erosion.
7. The applicant will follow the guidance provided in the Wyoming Policy on Reclamation (Instruction Memorandum WY-2012-032). The Wyoming Reclamation Policy applies to all surface-disturbing activities. Authorizations for surface-disturbing actions are based upon the assumptions that an area can and ultimately would be successfully reclaimed. BLM reclamation goals also include the short-term goal of quickly stabilizing disturbed areas to protect both disturbed and adjacent undisturbed areas from unnecessary degradation. Interim reclamation measures are used to achieve this short-term goal.

8. Before replacing topsoil on disturbed surfaces, and on all other compacted surfaces, compaction will be remediated by ripping to the depth of compaction. Scarification will only be used on shallow soils.
9. BLM approved cuttings will be buried within the cuttings collection area. Subsoil will then be replaced in the cuttings collection area before topsoiling. Under no circumstances would any by-products from drilling or subsoil to be spread on top of topsoil.
10. The applicant 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 percent and a minimum purity of 90 percent will be used. Site specific evaluation will determine the overall seed mixture in conjunction with the BLM or private surface owner.
11. All construction personnel will carry a copy of the COAs.

Water:

1. The operator will collect a water sample representative of the water produced from this project area for analysis within 30 to 60 days of initial production. Results of the analysis will be submitted to the BLM Authorized Officer as soon as they become available. The constituents analyzed in the water quality analyses will be the same as those required by the WDEQ for WYPDES permit using approved EPA test procedures (40CFR136 or 40CRF136.5).
2. After well completion, the operator shall submit a Sundry Notice for approval of disposal of all produced water per Onshore Oil and Gas Order No. 7, Disposal of Produced Water.

Wildlife:

Raptors

The following conditions will alleviate impacts to raptors:

1. No surface-disturbing activity shall occur within 0.5 mile of all identified raptor nests from February 1 through July 31, annually, prior to a raptor nest occupancy survey for the current breeding season.
2. Surveys to document nest occupancy shall be conducted by a biologist following BLM protocol, between April 15 and June 15. All survey results shall be submitted in writing to a Buffalo BLM biologist and approved prior to surface-disturbing activities. Surveys outside this window may not depict nesting activity. If a survey identifies active raptor nests, a 0.5 mile timing buffer will be implemented. The timing buffer restricts surface-disturbing activities within 0.5 mile of occupied raptor nests from February 1 to July 31.
3. If an undocumented raptor nest is located during project construction or operation, the Buffalo Field Office (307-684-1100) shall be notified within 24 hours.

Migratory Birds

1. Migratory birds shall be effectively excluded, through the use of bird cones, from all facilities that pose a mortality risk, including, but not limited to, heater treaters, flare stacks, and secondary containment where escape may be difficult or wildlife toxicants are present.

Greater Sage-Grouse

The following conditions will reduce impacts to Greater Sage-Grouse:

1. Timing limitations on surface-disturbing activities will be determined on a well-by-well basis by the BLM to protect nesting and brood-rearing Greater Sage-Grouse. For well locations with Greater Sage-Grouse timing limitations, surface disturbing activities will be prohibited between March 15 and June 30 and will be implemented on an annual basis for the life of the project.

2. Disruptive activity is restricted on or within a 0.25-mile radius of the perimeter of occupied or undetermined Greater Sage-Grouse leks from 6:00 pm to 8:00 am from March 15 to May 15. Disruptive activities are those that "...require people and/or activity to be in nesting habitats for a duration of 1 hour or more during a 24-hour period..." (BLM 2009).

Western Burrowing Owls

The following conditions will alleviate impacts to burrowing owls:

1. No surface-disturbing activities shall occur within 0.25 mile of all identified prairie dog colonies, from April 15 through August 31, annually, prior to a burrowing owl survey. This timing limitation will be in effect unless surveys determine that no burrowing owls are present. A 0.25 mile buffer will be applied if a burrowing owl nest is identified.
 - a. Surveys shall be conducted by a biologist following BLM protocol. All survey results shall be submitted in writing to a Buffalo BLM biologist and approved prior to surface disturbing activities.
 - b. If a burrowing owl nest is located during project construction or operation, the Buffalo Field Office (307-684-1100) shall be notified within 24 hours.

1.3. General

Additionally, the Applicant, in their POD, will commit to:

1. Comply with all applicable federal, state, and local laws and regulations.
2. Obtain the necessary permits for the drilling, completion and production of these wells including water rights appropriations, the installation of water management facilities, water discharge permits, and relevant air quality permits.
3. Offer water well agreements to the owners of record for permitted water wells within 0.5 mile of a federal producing well.
4. The Applicant will certify it reached a Surface Access Agreement with the landowners.

1.4. Standard General

1. If any cultural values [sites, artifacts, human remains (Appendix L FEIS and ROD)] are observed during operation of this lease/permit/right-of-way, they will be left intact and the Buffalo Field Manager notified. The authorized officer will conduct an evaluation of the cultural values to establish appropriate mitigation, salvage, or treatment. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized BLM officer (AO). Within five working days the AO will inform the operator as to:
 - whether the materials appear eligible for the National Register of Historic Places;
 - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
 - a time-frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction measures.

2. 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.
3. Please contact Casey Friese, Supervisory Natural Resource Specialist, at (307) 684-1100, Bureau of Land Management, Buffalo, if there are any questions concerning the following programmatic mitigation measures or conditions of approval.

Topsoil Suitability and Management and Short-term Stabilization

1. Salvage of topsoil and suitable subsoil is an important component of the reclamation process. Unless specifically identified, most discussion in this document of “topsoil” includes actual topsoil at the surface and underlying suitable subsoil. Topsoil is the most fertile portion of the soil profile as it contains the most organic matter. Suitable subsoil can provide additional plant growth medium that is adequate from chemical and/or physical characteristics. Its salvage and use is essential since actual topsoil depth is limited in arid/semi-arid environments. Depths of topsoil/suitable subsoil to be removed from each site will be included in each reclamation design detail site report and map. Where possible, APC will use brush-hogging to facilitate topsoil/suitable subsoil removal by reducing vegetation growth that would limit or hinder salvage by equipment. Disturbance will be limited, wherever possible, to minimize impacts to the soil resource. In areas where topsoil/suitable subsoil is very limited (less than 2 inches) or suitable subsoil is not present, vegetation scraping of the surface will allow collection of organic material, as well as provide a seed source of native material that can potentially germinate and provide diversity to the reclaimed surface.
2. Topsoil/suitable subsoil will be removed and clearly segregated from unsuitable subsoil during construction of well pads, pits, roads, pipelines, and other disturbances. Topsoil/suitable subsoil stockpiles will have signs designating the material as “topsoil” for easy identification. In most cases, topsoil/suitable subsoil will not be stockpiled for longer than 180 days. Soil stockpiles will be protected from water and wind erosion by stabilization seeding, installing erosion control barriers and application of erosion control products to the surface of the stockpiles (hydromulch/soil polymers etc.), or other means within 30 days of construction completion. While removal of topsoil will cause some initial loss of microbial viability, stabilization and seeding the piles will maintain microbial viability in the event that the topsoil cannot be spread within the 180 day time frame. Re-spreading of topsoil/suitable subsoil within 180 days of removal is the desired practice; however long-term storage greater than 180 days will not greatly reduce microbial populations. Re-disturbance of topsoil/suitable subsoil is the greatest threat to microbial populations, so care must be taken to leave stockpiles as they are until re-spreading can be done without the threat of re-disturbance within a short time-frame (re-spread when all planned wells are in the production phase).
3. Once the development phase of the location is completed (all proposed wells are drilled), areas not needed for the operation/production phase will be re-contoured and topsoil/suitable subsoil will be spread over these areas and seeded (interim reclamation). A level area (production pad) that is sufficient for the setup and operation of a work-over rig and associated equipment and vehicles will be left at each well site.

4. Prior to interim re-construction work, short term stabilization measures will be performed at each site as soon as practical during the development phase of the pad location. This will maintain the soil stability of the site during the development phase and minimize soil movement within the site and off-site. Short term stabilization will include installation of erosion control barriers around topsoil/suitable subsoil and excess cut spoil stockpiles and fill slopes, stabilization seeding of the topsoil/suitable subsoil stockpiles and fill slopes, addition of hydro-mulch or similar product to all soil piles and slope stabilization. In general, fill slopes steeper than 2:1 will be stabilized with a hydro-mulch or similar product and other areas will be straw mulched. Cut slopes will be cat tracked and erosion control ditches and/or berms will be installed to minimize soil movement on and off-site.
5. Stabilization seeding will consist of 10 PLS/acre of streambank wheatgrass, 10 PLS/acre of slender wheatgrass, and 10 PLS/acre of an annual species such as sterile triticale, barley, oats or winter wheat (depending on the season of when the stabilization seeding occurs in). The stabilization seeding will be replaced by the approved seed mix once the location is pulled back and re-contoured for interim reclamation. Interim reclamation will take place as soon as practical on areas that are re-contoured and topsoiled during the drilling and completions stages of development (such as roads and tank battery locations).
6. Short term stabilization design details will be included on the engineered pad/road design summary.

Drilling and Production Operations

1. Verbal notification shall be given to the Authorized Officer at least 24 hours before formation tests, BOP tests, running, and cementing casing, and drilling over lease expiration dates.
2. New hard-band drill pipe shall not be rotated inside any casing. Hard-band drill pipe shall be considered new until it has been run at least once.
3. All Blow Out Prevention Equipment tests shall include a 5 minute low pressure test between 250 psi and 500 psi with no drop in pressure with the only exception being the chokes. The chokes are only required to have the high pressure test held for a minimum length of time necessary to verify their functional integrity.
4. All operations will be conducted in accordance with all applicable laws and regulations: with the lease terms, Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the Authorized Officer, unless a variance has been granted in writing by the Authorized Officer.
5. The Operator shall install an identification sign consistent with the requirements of 43 CFR 3162.6 immediately upon or before the completion of the well pad construction operations.
6. All Blow Out Prevention Equipment rated 5M or greater shall be isolated from the casing and tested to stack working pressure. All Blow Out Prevention Equipment tests shall be performed by a suitable test pump, not the rig-mud pumps and recorded on a chart. The chart shall be submitted to the Buffalo Field Office.
7. Low test on Blow Out Prevention Equipment shall be performed and passed before moving onto the high test for each component.
8. If there are indications of inadequate primary cementing of the surface, intermediate, or production casing strings; such as but not limited to no returns to surface, cement channeling, fallback or mechanical failure of equipment, the operator will evaluate the adequacy of the cementing operations. This evaluation will consist of running a cement bond log (CBL) or an alternate method approved by

the Authorized Officer (AO) no sooner than 12 hours and no later than 24 hours from the time the cement was first pumped.

9. If the evaluation indicates inadequate cementing, the operator shall contact a BLM Buffalo Field Office Petroleum Engineer for approval of remedial cementing work.
10. The adequacy of the remedial cementing operations shall be verified by a cement bond log (CBL) or an alternate method approved by the Authorized Officer (AO). All remedial work shall be completed and verified prior to drilling out the casing shoe or perforating the casing for purposes other than remedial cementing.
11. The cement mix water used will be of adequate quality so as not to degrade the setting properties of the cement. Any water that does not meet municipal quality water standards shall be tested by mixing the water and cement in a lab and comparing the results to the municipal quality water mix results. If the results show that the cement qualities are not the same or greater, than the non-municipal water shall not be used for mixing cement in the well.
12. All oil and gas operations shall be conducted in a manner to prevent the pollution of all freshwater resources. All fresh waters and waters of present or probable future value for domestic, municipal, commercial, stock or agricultural purposes will be confined to their respective strata and shall be adequately protected. Special precautions will be taken to guard against any loss of artesian water from the strata in which it occurs and the contamination of fresh water by objectionable water, oil, condensate, gas or other deleterious substance to such fresh water.
13. Any changes to the approved drilling plan and/or these conditions of approval shall be approved by the BLM-Buffalo Field Office Petroleum Engineer prior to being implemented.
14. After hour's numbers: Petroleum Engineer: Matthew Warren Cell Telephone: 307-620-0103.
15. Reclamation planning and review of sites will begin prior to site construction activities. The company will hold a meeting with construction, drilling, and other APC personnel involved in project development to review conditions of approval and other pertinent information regarding the project, including reclamation plans. Contractors will be briefed and trained to carry out the reclamation design details for each site. To minimize the surface disturbance, only equipment that is appropriate to the scope and scale of the work will be used. Access to construction work will be suspended when excessive rutting or resource damage will occur. Soil and spoil will not be pushed over side slopes or into drainages. Diligent care during salvaging of topsoil/suitable subsoil and/or vegetation scraping will be taken. All soil material disturbed will be placed in an area where it can be retrieved and where the material does not impede watershed and drainage flows. Erosion control barriers will be placed around all excess cut spoil stockpiles and topsoil/suitable subsoil stockpiles to prevent soil loss, and/or sediment contamination. Additional stabilization measures will be taken on the site to prevent soil loss or degradation of adjacent soil. Please refer to the Topsoil/Suitable Subsoil Management and Short Term Stabilization portions of the plan for more detail.

Construction

1. 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.
2. 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 annual ryegrass or other suitable cover crop.

3. 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.
4. 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.
5. 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.
6. All overhead electrical power lines on federal surface will be constructed to the Avian Power Line Interaction Committee (2005, 2006) standards to minimize electrocution potential to birds of prey.
7. 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.
8. The minimum diameter for culverts will be 18 inches. However, all culverts will be appropriately sized in accordance with standards in BLM Manual 9113.
9. Construction and other project-related traffic will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
10. Maximum design speed on all operator constructed and maintained roads will not exceed 25 miles per hour.
11. 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.
12. Pipeline trenches shall be compacted during backfilling. Pipeline trenches shall be routinely inspected and maintained to ensure proper settling, stabilization, and reclamation.
13. During construction, emissions of particulate matter from well pad and road construction would be minimized by application of water or other non-saline dust suppressants with at least 50 percent control efficiency. Dust inhibitors (surfacing materials, non-saline dust suppressants, and water) will be used as necessary on unpaved roads that present a fugitive dust problem. The use of chemical dust suppressants on public surface will require prior approval from the BLM Authorized Officer.
14. 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 March 2005). This general construction storm water permit will 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.
15. The operator shall submit a Sundry Notice (Form 3160-5) to BLM for approval prior to construction of any new surface disturbing activities that are not specifically addressed in the approved APD or POD Surface Use Plan.

Operations/Maintenance

1. Confine all equipment and vehicles to the access road(s), pad(s), and area(s) specified in the approved 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 cuttings collection area 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 prevention and control of noxious weeds and weeds of concern 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. Sewage shall be placed in a self-contained, chemically treated porta-potty on location.
6. 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. In accordance with OSHA requirements, 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.
7. As close loop drilling is proposed, produced fluids shall be put in test tanks on location during completion work. Produced water will also be put in tanks during completion work.
8. Because closed loop drilling is proposed a reserve pit is not necessary for planned operations. However, if a reserve pit is used, 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.

9. 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 will 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.

DryHole/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 will be dry in the cuttings collection area 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 (if any) 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 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)
less than 2	200
2 – 4	100
4 – 5	75
greater than 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. Site specific evaluation will determine the overall seed mixture in conjunction with the BLM or private surface owner.
8. The operator will submit a Notice of Intent to Abandon and a Subsequent Report of Abandonment for abandonment approval.

9. For performance bond release approval, a Final Abandonment Notice (with a surface owner release letter on split-estate) will be submitted prior to a final abandonment evaluation by BLM.
10. Soil fertility testing and the addition of soil amendments may be required to stabilize some disturbed lands.
11. Any mulch utilized for reclamation needs to be certified weed free.

Producing Well

1. Landscape those areas not required for production to the surrounding topography as soon as possible. The fluids and mud will be dry in the cuttings collection area 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.
2. 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.
3. Any chemicals used in treating the wells (e.g., corrosion inhibitor, emulsion breaker, etc.) will be in a secure, fenced-in area with appropriate secondary containment structure (dikes, catchment pan, etc.).
4. 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.
5. Individual production facilities (tanks, treaters, etc.) will be adequately fenced off (if entire facility not already fenced off).
6. Any spilled or leaked oil, produced water, or treatment chemicals will be reported in accordance with NTL-3A 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.
7. Distribute stockpiled topsoil evenly over those areas not required for production and reseed as recommended.
8. 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.
9. Prior to construction of production facilities not specifically addressed in the APD/POD, the operator shall submit a Sundry Notice to the BLM Authorized Officer for approval.
10. 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.
11. Waterbars shall be installed on all reclaimed pipeline corridors.