

**OSAGE AGENCY  
STANDARD BEST MANAGEMENT PRACTICES  
DRILLING PERMITS**

The following best management practices (BMPs) shall be followed by lessees, their agents, operators, and contractors:

1. Avoid impacts to National Register-eligible or unevaluated cultural resources on well sites and access roads. If cultural resources are discovered during construction or operation stop work immediately, secure the affected site, and notify the BIA and Tribal Historic Preservation Officer. In the event of a discovery, work in that area shall halt and not resume until written authorization to proceed has been received from the BIA. All surface disturbances must be kept within the proposed ground disturbance area described in the EA. Expansion or relocation of the well pads, access roads, or other implementation of additional activities not included in the approved EA is prohibited unless an appropriate cultural resources survey has been submitted and determined adequate, approved by the BIA Osage Agency and all appropriate permits have been obtained.
2. Avoid or minimize soil and vegetation disturbance. Avoid removal of or damage to trees, shrubs, and groundcover to the extent possible. Avoid or minimize alteration of the natural topography and limit activities on steep slopes.
3. Erosion control measures are required for the duration of the construction, drilling and completion phases of the project. Erosion control measures must effectively minimize the movement of soil, debris or contaminants from the well site to adjacent lands and waterways.
4. All vehicles and equipment must utilize and stay confined to existing and new roads described in the approved EA. These roads must be maintained and upgraded as needed according to BIA direction and agreements between the operator and surface owner(s).
5. No venting or flaring of gas is allowed unless prior written approval of the BIA Osage Agency Superintendent has been obtained.
6. Store and label chemicals properly (including secondary containment). Do not store equipment or chemicals on site if they are not being used on site. Do not leave open containers of chemicals or wastes on site.

**OSAGE AGENCY  
STANDARD BEST MANAGEMENT PRACTICES  
DRILLING PERMITS**

7. Keep sites clean and free of any litter, trash, old equipment, contaminated soil or unused containers. Promptly dispose of any wastes at appropriate recycling facility, approved landfill or other approved location based on the type of waste. Remove any unused equipment not necessary to the operation of the lease after drilling activities have been completed.
8. If the well is successful, all production equipment, facilities and tanks including well-head and above-ground piping/equipment shall be properly enclosed to exclude livestock if present.
9. Tank batteries must have a Spill Prevention and Control and Countermeasure Plan (SPCC) in compliance with EPA Regulations under 40 CFR Part 112. A sufficiently fluid-impermeable secondary containment dike/berm must be constructed around any tank battery and facilities according to 40 CFR § 112.7. The dike/berm and entire containment area must be graveled. No water collected within the secondary containment shall be discharged. In accordance with the SPCC plan and BIA regulations, the Lessee will immediately notify the BIA of all spill incidents.
10. All pits (including tank batteries contained within a dike/berm) must be enclosed with a fence of at least four strands of barbed wire or an approved substitute.

No earthen pit, except those used in the drilling, completion, recompletion or workover of a well, shall be constructed, enlarged, reconstructed or used without approval of the Superintendent. Unlined earthen pits may only be used for the storage of fresh water and shall not be used for the temporary or continued storage of saltwater or other deleterious substances. Deleterious substances other than fresh water drilling fluids used in drilling or workover operations, which are displaced or produced in well completion or stimulation procedures, including but not limited to fracturing, acidizing, swabbing, and drill stem tests, shall be collected to a pit lined with plastic of at least 30 mil or a metal tank and maintained separately from above-mentioned drilling fluids to allow for separate disposal.

In accordance with policy issued by the Agency Superintendent on April 9, 2002, all pits needed for the drilling of a new well when utilizing mud rotary equipment must be emptied and closed within three months after the well is completed and all pits needed for the drilling of a new well when utilizing an air rig or cable tools must be emptied

**OSAGE AGENCY  
STANDARD BEST MANAGEMENT PRACTICES  
DRILLING PERMITS**

and closed within one month after the well is completed. All pits needed during workover and plugging operations must immediately be emptied and leveled after the completion of operations unless otherwise directed by the surface owner or user.

11. To the extent possible, minimize disturbance to land owners, wildlife, and natural resources due to noise, excessive traffic, dust or other impacts associated with operations.
12. Do not conduct activities within stream channels or wetlands without proper authorization. Avoid any discharge of soil or contaminants or removal of stream water that could result in a violation of applicable federally-approved water quality standards.
13. Return area to original contour or as directed by the surface owner. If needed, add clean soil to disturbed areas. Restore disturbed areas by re-establishing vegetation using seed, sod or other approved method. Restore with native species unless otherwise directed by the surface owner in writing. No noxious or invasive species may be used in revegetation and reclamation activities.
14. If well drilling, completion and development are successful, areas of surface disturbance (i.e. well pad, access road, pipeline, etc.) that are not needed or used in the production or operation of the well shall be promptly reclaimed as described in the approved EA. If well drilling, completion and development are not successful, reclamation of the entire area will begin promptly. After a completed well is no longer in production, reclamation of the site will begin promptly. Reclamation shall be completed not later than ninety (90) days following the date of rig removal, well abandonment or final plugging of a well, unless otherwise approved by the BIA.
15. The lessee shall conduct activities in a manner that avoids any potential incidental take or harm to federally-listed threatened and endangered species, and that complies with any permit or authorization issued by the U.S. Fish and Wildlife Service (USFWS). The Lessee will follow guidance set forth by USFWS in the “Oklahoma Ecological Services Field Office Migratory Bird and Eagle Impact Avoidance Measures for Actions Associated with Oil and Gas Projects” (April 2014).
16. The lessee will follow USFWS established protocol regarding areas where the American Burying Beetle (ABB) is known or suspected to exist.

**OSAGE AGENCY  
STANDARD BEST MANAGEMENT PRACTICES  
DRILLING PERMITS**

See <http://www.fws.gov/southwest/es/oklahoma/ABBICP.htm>. If proposed operations require the construction of a drilling pit or other excavation activity by heavy equipment, then the lessee must ensure that suitable habitat for the ABB does not exist. If proposed operations will impact suitable habitat for the ABB, it will be the responsibility of the lessee to obtain authorization from the USFWS to proceed with that portion of the project. If the proposed ground disturbing activities have not commenced by the beginning of the next active season, the lessee must perform new ABB presence absence surveys and submit those valid survey results to the results to the BIA and the USFWS. If subsequent surveys are positive for the presence of the ABB then additional consultation with USWS must be initiated between the BIA and the USFWS before drilling operations may commence.

- 17.** For proposed drilling operations in areas where formations having zones suspected of containing H<sub>2</sub>S of 100PPM in the gas stream will be penetrated, the lessee will implement the Air Quality BMPs listed in the Environmental Assessment (EA), which are hereby incorporated by reference.

\*\* In addition to the BMPs listed above, the BIA may impose additional site-specific BMPs as deemed necessary. The lessee must comply with all site-specific BMPs unless: (1) the lessee submits a written request for an exemption from a specific BMP and obtains the Superintendent's approval thereof; or (2) the Superintendent approved a set of equivalent BMPs that were developed by the lessee and incorporated in the EA.