

Instructions for Prioritization of Drilling Inspections

Drilling Inspections

The Bureau of Land Management (BLM) goal is to conduct a drilling inspection on all wells with a downhole priority rating of high. Therefore, Field Offices (FO) must determine a downhole inspection priority (high or low) for each well drilled. Offices must document that priority in the Application for Permit to Drill (APD) Engineering review screen in the Automated Fluid Minerals Support System (AFMSS). The ranking of each well will require coordination between the engineers, geologists, and Inspection and Enforcement (I&E) staff. This ranking is for the technical drilling inspection (DW) and not the environmental inspection (ES).

The ranking of each well will occur in two phases. The first phase occurs during the engineering review of the APD where the engineer will identify potential issues regarding the well. The second phase is after the BLM receives the spud notice, and the operator informs the BLM of the drilling rig and contractor it is using to drill the well. At that time, the BLM engineer must determine the priority based on the issues identified during the APD review, and potential issues with the drilling rig or contractor drilling the well. The main consideration during the ranking process is whether an inspection is necessary to ensure compliance in an area where specific drilling operations pose a high potential risk to public health and safety, the environment, and/or other resources.

APD Review

Petroleum engineers, in coordination with geologists, will identify downhole concerns during the engineering review of the APD. The engineer must document in the “Priority Reason” section of the APD Engineering Review screen, the downhole concerns identified, and the specific operations that may need to be witnessed (surface casing cementing, blowout prevention equipment test, etc.). Following are items the engineer should consider during the review:

- Operator is new to the area.
- Known operational/compliance/safety problems with operator/field.
- Geologic concerns.
- Formations will be penetrated which have zones known to contain or which could reasonably be expected to contain concentrations of hydrogen sulfide (H₂S) which require compliance with Onshore Order No. 6.
- When well is a wildcat and not part of an infill-drilling plan.
- High surface pressure anticipated (BOPE > 5M or third ram required).
- The intermediate or production casing must isolate usable water below the surface casing.
- Local area concerns or other specific concerns identified during the APD review.

The operator addresses many of these items in the drilling plan, and the engineer evaluates these items during the APD review. Therefore, just because one or more of these items exist, does not necessarily mean the engineer must rate the well as a high-priority. However, as stated above, the engineer will document any concerns in the “Priority Reason” section of the APD review screen. If the engineer identifies something during the APD review that a Petroleum Engineering Technician (PET) must inspect or witness, the engineer should rate the well as a high-priority. Otherwise, the engineer should rate the well as a low priority until the operator

provides the spud notice, at which time the engineer, in coordination with the I&E staff, will reevaluate the ranking. For wells rated as a low priority at the time of engineering review of the APD, the engineer will document, in the priority reason screen, any concerns that may warrant raising the well to a high priority and/or the reason the engineer rated the well as a low priority. With sufficient documentation in AFMSS, the engineer will not need to re-review the APD at the time of well spud.

Drilling Priority Inspection Ranking (Risk-based at time of well spud)

Final priority ranking of wells will be accomplished by the I&E staff (Supervisory or Lead PET for offices that have those positions) and the petroleum engineers when the FO receives notice that a well has been spud. Based on the risk factors for the drilling rig, drilling rig contractor, and the engineer's downhole concerns identified during the APD review, the FO will determine the priority and the type of inspection necessary. Following are items the FO should consider regarding the drilling rig and contractor:

- Drilling rig in the FO jurisdiction for the first time
 - o All drilling rigs in the FO jurisdiction for the first time must receive a high-priority rating.
- History of past issues with the drilling rig/drilling contractor
 - o This includes any operational incidents of noncompliance (INC) issued, as well as other concerns including safety, identified during past inspections that did not result in INCs being issued such as reoccurring problems with the BOPE requiring repairs that were corrected during previous inspection/witness. Other factors include the overall condition of the rig equipment.
- Number of wells drilled by the rig since the last BLM inspection
 - o As a rule of thumb, all drilling rigs should be inspected at least once every four wells drilled.

In order to identify potential issues with the drilling rig or drilling rig contractor, the FOs must be able to track the drilling rigs. Ideally, this tracking system would be part of the AFMSS database, but due to many factors, that is not feasible at this time. Therefore, the FOs must develop and maintain a drilling rig tracking system independent of AFMSS. Some FOs have already developed tracking systems, and they can continue to use those systems. For those offices that do not have a tracking system, attached is a spreadsheet that offices may use in lieu of creating their own tracking system.

Based on the drilling rig/contractor factors and the downhole concerns, the FO will determine a final priority rating for the well. The FO must update the priority and the Priority Reason in the APD Engineering review screen in AFMSS (screen GLB.79) with the final priority rating. If the FO changes the priority, the FO must leave the original remarks in the Priority Reason, and add additional remarks to indicate why the priority changed and to specify which operations require witnessing. If the FO does not change the priority, the FO must add "no changes" to the Priority Reason. The updated Priority Reason must also include the date of the update and the name of the person entering the update even if the priority remains unchanged.

FOs must not base the priority rating on availability of personnel to conduct the required inspection. FOs must base the priority rating on the drilling rig/contractor factors and downhole concerns regardless of whether there are inspection resources available to conduct the inspection, and AFMSS should accurately reflect that priority.

Oversight

Government Accountability Office [Report 14-238](#) dated May 2014, identified issues with the BLM not documenting a drilling inspection priority in AFMSS for many wells and not inspecting many of those rated as high priority. Therefore, the State Office (SO) I&E Coordinators from need to conduct additional oversight of drilling inspection priorities and drilling inspections. Each SO must:

- Review all Federal and Indian wells drilled to ensure that each well contains a priority ranking in AFMSS;
- Review the inspection priority for all Federal and Indian wells drilled to ensure compliance with the priority rating criteria (plus high-priority inspections completed); and
- Review the drilling inspections conducted by the FO to ensure the inspection of all high-priority wells.

The SOs must conduct these reviews at the end of the fiscal year. The SO must send a memorandum to Headquarters Fluid Minerals Division (HQ-310) by October 15, 2021, with the results of the review. The results must include the number of wells not containing a priority and the number of wells incorrectly prioritized. The memorandum must also include the reason(s) for the issues identified and the steps the SO is taking to correct the issues.



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