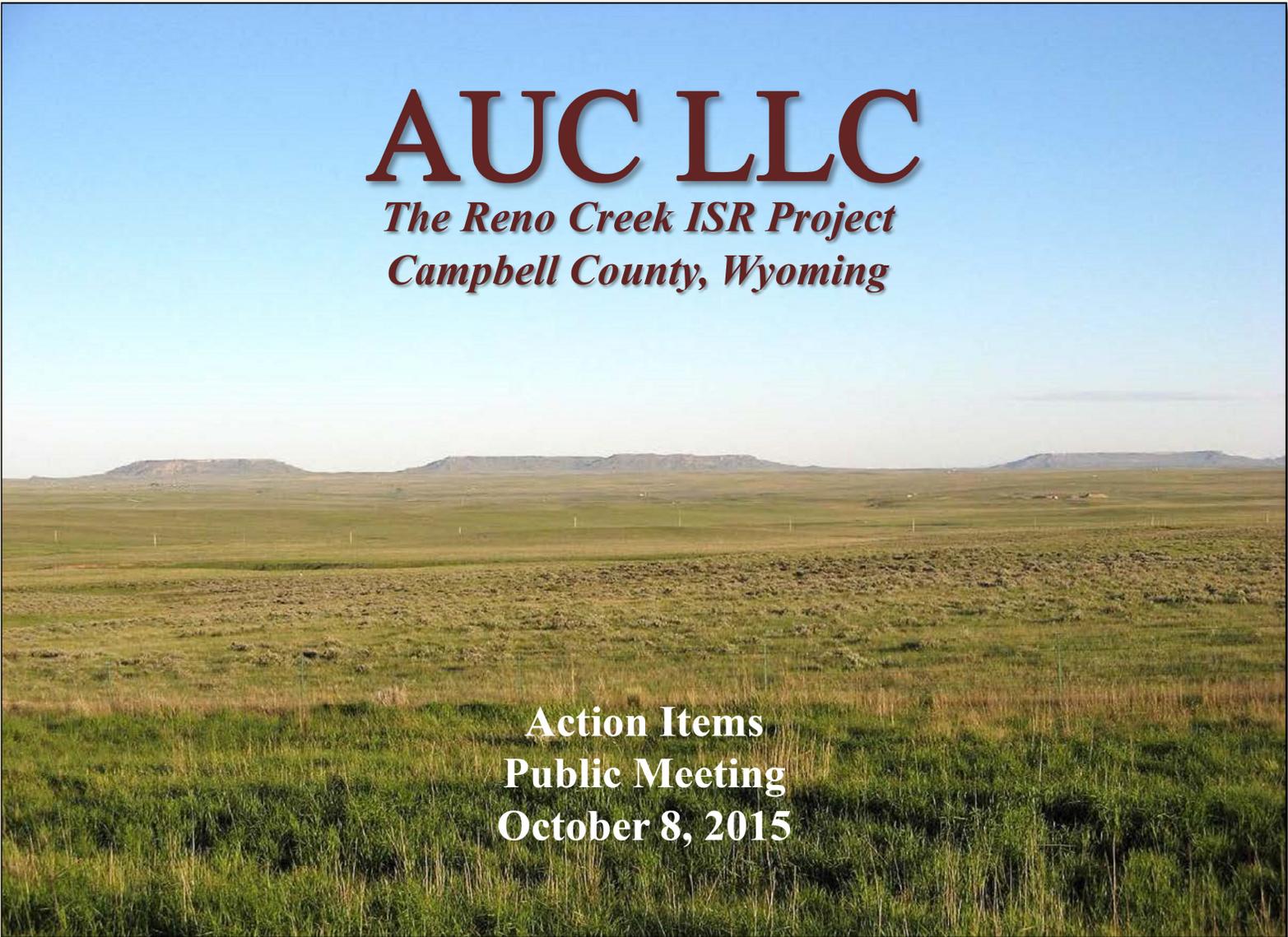


USNRC APPLICATION
Combined Source and 11e.(2)
Byproduct Material License



AUC LLC
The Reno Creek ISR Project
Campbell County, Wyoming

Action Items
Public Meeting
October 8, 2015

AUC LLC
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TABLE OF CONTENTS

Action Items..... 1

NRC Action Item Draft LC 9.7..... 1

 Draft LC 9.7 Response 1

NRC Action Item Draft LC 9.8..... 2

 Draft LC 9.8 Response 2

NRC Action Item Draft LC 10.4..... 2

 Draft LC 10.4 Response 2

NRC Action Item Draft LC 10.5..... 2

 Draft LC 10.5 Response 2

NRC Action Item Draft LC 10.10..... 3

 Draft LC 10.10 Response 3

NRC Action Item Draft LC 10.11..... 4

 Draft LC 10.11 Response 4

NRC Action Item Draft LC 10.12..... 5

 Draft LC 10.12 Response 5

NRC Action Item Draft LC 10.19..... 5

 Draft LC 10.19 Response 5

NRC Action Item Draft LC 12.15..... 5

 Draft LC 12.15 Response 5

ACTION ITEMS

NRC Action Item Draft LC 9.7

Part 1: AUC agrees with no change to following wording in 5th sentence of 2nd paragraph: “Reports generated by the designee will be reviewed by the RSP or RST as soon as practical, but not later than 3 hours from the beginning of the next work day following an absence, weekend, or holiday.” In meeting discussion, AUC and NRC staff acknowledged that the RSO or RST review of designee generated reports only documents that completion of initial review within the 3 hour timeframe and does not constitute RSO or RST agreement with contents of this report or final action with respect to the report. For draft LC 9.7, Part 2: AUC to submit additional information to further clarify and support request that “...for the Thanksgiving holiday, the DO may perform the inspections for up to four consecutive days.”

Draft LC 9.7 Response

Part 1: AUC agrees with staff that the wording in the 5th sentence of the 2nd paragraph will not be revised. AUC also agrees with the meeting discussion point that a signature from the RSO or RST indicates a review of a designee generated report within the required three hour timeframe, but it does not constitute agreement with the content of the report nor does it preclude the RSO or RST to conduct further inquiries based on a report’s contents.

Part 2: AUC proposes the following revised language for the fourth sentence in the second paragraph as follows to include the Thanksgiving holiday:

“A designee shall not perform daily inspections for more than two consecutive days except in the event of a Federal or company holiday, whereby the designee will not exceed more than three consecutive days with one exception; the DO may perform the inspections for up to four consecutive days for the Thanksgiving holiday.”

Supporting Information:

AUC designates the day of Thanksgiving and the day after Thanksgiving as company holidays, therefore the DO will perform daily inspections for four consecutive days including the weekend for these company holidays.

NRC Action Item Draft LC 9.8

NRC staff to coordinate with AUC to investigate revision of the direct APE based on tribal survey

Draft LC 9.8 Response

AUC awaits NRC staff's revisions.

NRC Action Item Draft LC 10.4

NRC staff to identify one example of a licensee's listing of SOPs developed in preparation for the preoperational inspection. AUC to provide revised language for this draft LC in place of language in AUC's original comment.

Draft LC 10.4 Response

AUC proposes to withdraw its original comment and retain the original proposed draft license condition language as follows:

“A. All routine operational activities involving radioactive and non-radioactive materials associated with licensed activities that are handled, processed, stored, or transported by employees.”

Supporting Information:

AUC received a publicly available list of SOPs developed by another ISR operator from NRC staff. Based the list of SOPs and after our meeting discussion with NRC staff AUC has agreed to retain the non-radioactive term in the license condition, which is standard language.

NRC Action Item Draft LC 10.5

AUC accepts language in draft LC, but requests that words “monitoring well” be removed from the draft LC because monitoring wells are normally not included in MIT. NRC staff to consider removing these words from draft LC.

Draft LC 10.5 Response

AUC proposes the following text changes to LC 10.5, which retains the words “monitoring wells” for initial MITs only.

“Mechanical Integrity Tests. The licensee shall construct all wells in accordance with methods described in Section 3.1.3 of the approved license application. Initially, mechanical integrity tests shall be performed on all wells (injection, extraction, and monitoring wells) before the well is utilized and on wells that have been serviced with equipment or procedures that could damage the well casing. Each injection and recovery well shall be retested at least once every five years it is in use. Integrity tests shall be performed in accordance with Section 3.1.3.3 of the licensee’s approved license application. Any failed well casing that cannot be repaired to pass the integrity test shall be appropriately plugged and abandoned in accordance with Section 3.1.3.3 of the approved license application.”

Supporting Information:

AUC committed to do an initial test on all monitoring wells prior to being placed into service in its approved Wyoming Department of Environmental Quality Permit to Mine (Permit). The Permit is consistent with TR Section 3.1.3.3, Well Mechanical Integrity Testing (MIT) in that only the recovery and injection wells will be tested every 5 years thereafter while still in operation. Therefore AUC has proposed a revision to the draft LC 10.5 to be consistent with the approved Permit.

NRC Action Item Draft LC 10.10

AUC to propose revision to language in draft LC and provide pointers to supporting discussion in the TR and ER. NRC staff to review related information in TR Section 6.1.4.4.

Draft LC 10.10 Response

AUC proposes the following revised language for LC 10.10:

“The licensee shall submit to NRC staff, for review and approval, plans for equipment and procedures prior to the use, storage, handling and transport of biological or chemical materials other than sodium sulfide for reductant injections during restoration.”

Supporting Information:

AUC has included sodium sulfide as a proposed chemical reductant for use in groundwater restoration in the license application in TR Section 6.1.4.3. Within this section AUC references ER Section 4.12.1.2.2.1, which discusses the development of a Standard Operating Procedure for training operators in the safe use of sodium sulfide. In addition AUC covered employee training and engineering controls to ensure safe use, storage and

handling of sodium sulfide in TR Section 3.2.2.7. Therefore AUC believes it has met the criteria for the use of sodium sulfide discussed in LC 10.10 in the license application.

NRC Action Item Draft LC 10.11

AUC to propose alternative language to language in NRC response for paragraph (B) along with supporting information.

Draft LC 10.11 Response

AUC proposes the following revised language for LC 10.11:

“The licensee may, in its Wellfield Package submittals, elect to abandon downgradient historical drillholes located between the perimeter well ring and the Point of Exposure/Aquifer Exemption Boundary of each wellfield prior to the start of operations or prior to submittal of an ACL application pursuant to 10 CFR Part 40 Appendix A Criterion 5B(5)(c). If the licensee elects to abandon such drillholes after the start of operations of each wellfield, the licensee will be required to verify the location of such drillholes prior to the start of operations of each wellfield and provide cost to cover the eventual abandonment of the drillholes in the surety.”

Supporting Information:

NRC staff has done an excellent job of distilling the license condition terms of Paragraph B into the last two sentences of its proposed language. AUC suggests language that provides additional clarity and certainty to the license condition, but accepts the principle embodied in staff’s proposal.

AUC believes that NRC staff’s generalized language about ACLs and the issue relating to the consideration of the hydrologic consequences of the potential presence of unplugged historical drillholes lying between the perimeter well ring and the POE/AE reasonably describes some but not all of the requirements of an ACL application. AUC acknowledges that, if in the future AUC submits an ACL application, the detailed hydrologic and geochemical evaluation may include the potential for the existence of unplugged historical drillholes between the perimeter well ring and the POE/AE. However, such hydrologic evaluation is only one small portion of an ACL application. To specifically reference either one small portion or all ACL requirements in a License Condition does not appear necessary. NRC Regulations and guidance and the long standing practices of ACL applications and evaluation are sufficiently clear and comprehensive. AUC is aware of its potential future technical obligations under an ACL application. Further, AUC, in its

suggested revised language, undertakes to bond for any potential unplugged historical drillholes located in the zone between the perimeter well ring and the POE/AE.

NRC Action Item Draft LC 10.12

NRC to delete the word “not” from first sentence of paragraph (a) and revise the last sentence of paragraph (b) to “If the non-AUC controlled well is screened within the ore zone, the licensee will submit to NRC, for review and approval, a plan documenting any proposed resolution including discussions with the owners of that well.”

Draft LC 10.12 Response

AUC agrees with the proposed staff changes to the text of LC 10.12.

NRC Action Item Draft LC 10.19

NRC to revise 1st sentence of 2nd paragraph to “The licensee will obtain the necessary permits and construct at least one Class I UIC deep disposal well prior to the commencement of operations of the Reno Creek Project.” NRC will also add following statement after 3rd sentence of 2nd paragraph: “In the event of a decrease in disposal capacity, the licensee shall decrease or stop its production rate (except to maintain an inward gradient per LC 10.7) to adequately dispose of all liquid effluents and increase its disposal capacity by completing another of the approved deep disposal wells.”

Draft LC 10.19 Response

AUC agrees with the proposed changes to the text of LC 10.19.

NRC Action Item Draft LC 12.15

In place of this draft LC, NRC staff agrees with the AUC comment and commitment to add the proposed wording to TR along with AUC’s commitment to provide references to public sources supporting the justification for a fracture gradient of 0.8 psi/foot.

Draft LC 12.15 Response

During the meeting discussion AUC committed to search for references to public sources supporting the use of 0.8 psi/ft for the fracture gradient. AUC discussed this issue with our consultants and other operators, and while the 0.8 psi/ft is commonly employed in the

Wasatch Formation, and seems widely accepted, we have not yet identified a publicly available published source.

However, AUC did find in the Nichols Ranch NRC prepared Safety Evaluation Report (SUA-1597), that the approved formation fracture pressure for Nichols Ranch is 0.8 psi/ft. Since the Nichols Ranch Project is conducting uranium recovery operations in the same formation (Eocene Wasatch Formation) as the Reno Creek Project, AUC determined that 0.8 psi/ft is an appropriate value to use for the formation fracture gradient.