

March 15, 2017

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 40-8943-MLA-2
CROW BUTTE RESOURCES, INC.	)	
	)	ASLBP No. 13-926-01-MLA-BD01
(Marsland Expansion Area)	)	

JOINT REPORT ON STATUS OF OPEN ISSUES

In a February 3, 2017 Memorandum and Order, the Atomic Safety and Licensing Board noted that the circumstances outlined in the NRC Staff’s letter dated February 1, 2017, and the letter from Crow Butte Resources (“CBR”) dated January 10, 2017, create uncertainty as to when the NRC Staff’s review will be completed and the hearing can be held.<sup>1</sup> Therefore, the Board requested that the NRC Staff and CBR submit a joint report “that outlines the status of efforts to resolve CBR’s radon monitoring program concerns such that CBR can provide a response to the staff’s pending HP RAI[s] [(Requests for Additional Information)].”<sup>2</sup> The Board also asked that, “to the degree possible,” the status report provide “estimates or other information, including information regarding the status of CBR’s outstanding non-health physics related RAI responses” pertinent to the NRC Staff’s establishment of a schedule for completing its environmental and safety reviews.<sup>3</sup>

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<sup>1</sup> Memorandum and Order (Requesting Status Information) at 4 (Feb. 3, 2017).

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

A. Status of Efforts to Resolve Open Issues Related to Health Physics

The remaining open (unresolved) technical issues associated with the Marsland Expansion Area (“MEA”) application are identified in the written summary of a June 14, 2016 public meeting between the NRC Staff and CBR (Agencywide Documents Access and Management System (ADAMS) accession number ML16176A198). In that summary, the two health-physics-related issues are Open Issue 6 (beta surveys) and Open Issue 7 (radon). Both issues were originally identified during the review of the license renewal application for the main CBR facility and relate to license conditions imposed by the NRC Staff in the renewed license for that facility (issued in November 2014). In addition, the same issue was identified and discussed with CBR in the review of the license amendment application for the North Trend Expansion Area (“NTEA”) (*see, e.g.*, ML083170842 (radon issue 5.7.7), ML093060326 and ML100680217 (summaries of public meetings to discuss radon and/or beta surveys at the NTEA)). Below is a summary of the efforts to date to resolve these open issues and the expected path forward.

1. *Open Issue 6 (Beta Surveys)*

a. Overview

This issue relates to MEA RAIs 28 and 32 (ML13177A344), which were sent to CBR on July 3, 2013. The same issue was raised in the NRC Staff’s review for renewal of the license for the main CBR processing facility, which will process uranium from the MEA. As discussed in the Safety Evaluation Report for the CBR license renewal (“LR SER”), the NRC Staff imposed license condition (“LC”) 11.10 to address the issue of beta surveys. As discussed in Section 5.7.7.4 of the LR SER (ML14149A433), this LC requires CBR to develop a program

to survey beta/gamma contamination and submit it to the NRC Staff for review and written verification. The program will apply to both the main facility and the MEA (as well as NTEA).

On December 12, 2013, the NRC Staff held a public meeting (summary at ML13339A418) with CBR to discuss, among other things, how CBR intended to address draft LC 11.10 and LC 11.11 (pertaining to Open Issue 7) (*see* ML14212A068). On September 14, 2014, the NRC Staff provided a list of issues that needed to be addressed prior to commencing detailed review (ML14254A048). On December 19, 2014, CBR provided its response to LC 11.10 (ML14364A196), and the NRC Staff began its detailed technical review of that submittal. On February 24, 2016, the NRC Staff responded to CBR's December 19, 2014 submittal with requests for clarification (ML16050A513). On March 15, 2016, CBR informed the NRC Staff that it would respond to the NRC's requests for clarification by April 30, 2016 (ML16092A091). On September 7, 2016, the NRC Staff held a public meeting with the in-situ recovery industry, including CBR (summary at ML16270A042), to discuss various health physics issues, including beta surveys and radon (Open Issue 7).

The NRC Staff has imposed a license condition similar to LC 11.10 at other in-situ uranium recovery ("ISR") facilities, and has reviewed and verified beta survey programs at Nichols Ranch in April 2014 (ML14087A244), Strata Ross in October 2015 (ML15295A045), and Lost Creek in March 2016 (ML15279A572). However, CBR notes that those facilities were new, which simplified efforts to develop a beta survey program as compared to an existing facility like CBR, which must account for the effects of past operation. CBR's resolution of the open issue was delayed due to the need to identify an appropriate survey methodology for use at an existing facility.

b. Planned Resolution of Open Issue 6

Based on information provided during the September 2016 public meeting, CBR has identified a proposed path forward that includes use of an appropriate analytical method. As a result, CBR now expects to provide the NRC Staff with the information necessary to address the open issue no later than the end of the second quarter of 2017 (end of June 2017). Prior to that date, if requested by CBR, the NRC Staff will hold a public meeting for CBR to present its proposed approach for complying with LC 11.10.

2. *Open Issue 7 – Radon Monitoring*

a. Overview

The issue of radon monitoring applies at the main CBR facility and the proposed expansion facilities, including the MEA. As part of the license renewal for the main CBR facility, the Staff imposed LC 11.11 to address the issue of radon monitoring (as part of the airborne and effluent monitoring program). As discussed in Section 5.7.8 of the LR SER (ML14149A433), this LC requires CBR to provide information regarding the airborne effluent and environmental monitoring program and to develop written procedures for NRC written verification.

On January 2, 2015 (ML15009A031), CBR submitted the information required under LC 11.11. On April 2, 2015, the NRC Staff sent RAIs (ML15090A526) to CBR. CBR initially responded on June 30, 2015 (ML15217A332), and provided additional responses on September 21, November 24, and December 4, 2015 (ML15310A373, ML15335A040, and ML15341A030). On January 6, 2016, the NRC Staff verified CBR's submittal for LC 11.11 (ML15345A256).

With regard to the MEA application, the NRC Staff held a public meeting with CBR on June 14, 2016 (summary at ML16176A198) to discuss open issues. For Open Issue 7, the NRC Staff asked CBR to update the MEA application to reflect commitments made to address LC 11.11 for the main facility, and to specifically address those aspects of the facility that would have to be submitted at a later date (*e.g.*, tank vents and general ventilation discharge points). In a written response to the meeting summary dated July 13, 2016 (ML16208A110), CBR stated that the necessary information to address this open issue would be submitted in the third quarter of 2016. In September 2016, the NRC Staff held a public meeting with industry where this issue and the beta survey issue (Open Issue 6) were discussed. On December 12, 2016, the NRC Staff sent a letter to CBR requesting an update on the status of the remaining MEA RAI responses — health physics and otherwise (ML16336A248). On January 10, 2017, CBR responded to the NRC Staff's letter (ML17025A075). That response was cited by the NRC Staff in its February 1 letter to the Board.

b. Planned Resolution of Open Issue 7

CBR intends to update the MEA application to reflect commitments made to address LC 11.11 for the main facility. CBR expects to provide the NRC Staff with the information necessary to address the open issue no later than the end of the second quarter of 2017 (end of June 2017).

B. Status of Efforts to Resolve Open Issues Not Related to Health Physics

CBR indicated in its January 10, 2017 letter that it will provide information to address Open Issues 13 and 14 from the June 2016 public meeting (*see* ML16208A110) by the end of the second quarter of 2017 (end of June 2017). This schedule has not changed. With regard to other open issues discussed at the June 2016 public meeting (Open Issues 1-5, 8-12,

and 15), CBR also will provide the necessary information to address these open issues by the end of the second quarter of 2017 (end of June 2017).

Respectfully submitted,

/s/ signed electronically by  
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COUNSEL FOR CROW BUTTE  
RESOURCES, INC.

Dated at San Francisco, California  
this 15th day of March 2017

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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CERTIFICATE OF SERVICE

I hereby certify that copies of “JOINT REPORT ON STATUS OF OPEN ISSUES” in the captioned proceeding have been served this this 15th day of March 2017 via the Electronic Information Exchange (“EIE”), which to the best of my knowledge resulted in transmittal of the foregoing to all those on the EIE Service List for the captioned proceeding.

/s/ signed electronically by \_\_\_\_\_  
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