

**R313-25-9 Technical Analysis (Formally R313-25-8)**  
**History of Rulemaking**

**Background**

1. 1981-82: The Nuclear Regulatory Commission (NRC) developed its waste classification system and concentration limits for near surface land disposal of low-level radioactive waste, now found in 10 CFR Part 61, based on modeling that determined the maximum levels of radioactivity that would meet 10 CFR Part 61 performance objectives. For this analysis, NRC did not evaluate the environmental impacts of land disposal for significant quantities of depleted uranium.
2. October 2000: NRC issued NUREG-1573, *A Performance Assessment Methodology for Low-Level Radioactive Waste Disposal Facilities* -- guidance to meet regulatory requirements for conducting site-specific performance assessments for radioactive waste land disposal facilities. See <https://www.nrc.gov/docs/ML0532/ML053250352.pdf>
3. October 19, 2005: The NRC Commissioners ordered its staff to determine whether significant quantities of depleted uranium in the waste stream from uranium enrichment facilities warranted reclassification of depleted uranium or other amendments to NRC's regulations. Memorandum and Order CLI05-20 ([see document](#))
4. October 7, 2008: NRC, SECY-08-0147 ([see document](#)) - Staff response to NRC Commissioner's Memorandum and Order CLI-05-20. Based on the staff's technical analysis of near surface disposal of significant quantities of depleted uranium, the SECY-08-0147 states that small quantities of depleted uranium (1-10 metric tons) could be disposed at shallow depths and meet the performance objectives of Part 61. Disposal of quantities greater than that, would require a site-specific performance assessment. NRC's performance assessment working group recommended a performance period for a typical commercial LLW facility of 10,000 years and peak dose. SECY-08-0147 describes that for depleted uranium, peak dose occurs beyond 1 million years. In its order, the NRC Commissioner asked whether the classification tables for low-level radioactive waste in 10 CFR 61 should be amended to include depleted uranium. The NRC staff recommended "conducting a limited rulemaking to revise [10 CFR] 61 to specify the need for a disposal facility licensee . . . to conduct a site-specific analysis that addresses the unique characteristics of the waste and additional considerations required for disposal of large

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quantities of depleted uranium and other unique waste streams such as reprocessing waste.”

5. March 18, 2009: NRC Commission Staff Requirements Memo SECY-08-0147 (see <https://www.nrc.gov/reading-rm/doc-collections/commission/srm/2008/2008-0147srm.pdf>). The Commission authorized the staff to “proceed with rulemaking in 10 CFR Part 61 to specify a requirement for a site-specific analysis for the disposal of large quantities of depleted uranium and the technical requirements of such an analysis . . . and to develop a guidance document for public comment that outlines the parameters and assumption to be used.” The Commission stated:

*it recognized that the analysis supporting [10 CFR Part 61] did not address the disposal of large quantities of depleted uranium . . . and [that] there may be a need to place additional restrictions on the disposal of the depleted uranium at a specific site or deny such disposal based on unique site characteristics and those restrictions should be determined by a site specific analysis which satisfies the requirements of the proposed new 61.55(a)(9).*

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**Utah Radiation Control Board**

**Board Members - During the Time of Rulemaking:**

Peter A. Jenkins, M.S., CHP, Chair  
Elizabeth Goryunova, M.S., Vice Chair  
Dane L. Finerfrock, Executive Secretary  
Scott Bird  
Patrick D. Cone (Attended by Conf. Call)  
Frank D. DeRosso, MSPH, CIH  
Christian K. Gardner  
Douglas S. Kimball, DMD  
Joseph K. Miner, M.D., MSPH  
Amanda Smith, DEQ Executive Director  
John W. Thomson, M.D.

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David A. Tripp, Ph.D.  
Colleen Johnson  
Edd Johnson

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**April 14, 2009 Board Meeting**

[Minutes](#)

DRC Staff presentation (DRC Director Dane Finerfrock) that the NRC plans on conducting rulemaking for depleted uranium in 10 CFR 61. The Board is provided a copy of the October 7, 2008 SECY-08-0147 in their Board Packet.

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**May 12, 2009 Board Meeting**

[Minutes](#)

Heal Utah presentation (Christopher Thomas & Vanessa Pierce) requests the Board to place a temporary moratorium to not allow EnergySolutions to accept depleted uranium until the NRC completes its rulemaking regarding the disposal of significant quantities of depleted uranium. EnergySolutions is expected to receive three depleted uranium shipments (totaling approximately 10,000 tons) from the Savannah River Site (SRS). Heal Utah claims these are the first of many shipments as the U.S. DOE has a large amount of depleted uranium in their inventory (700,000 tons) needing disposal.

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**June 9, 2009 Board Meeting**

[Minutes](#)

Presentation from EnergySolutions in response to Heal Utah's request for a moratorium on depleted uranium. EnergySolutions outside counsel (Jim Holkamp) provided a presentation regarding the "Utah stringency rule" (1987 HB57). He described that a moratorium on depleted uranium would be more stringent than federal regulations.

Board members acknowledge (including Board Chairman Peter Jenkins) in the meeting that they understood that anything above 10 metric tons of depleted uranium is considered a significant quantity. Some Board members

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mentioned that they would support a moratorium. One Board member (Patrick Cone) asked EnergySolutions if they would be willing to wait on any contracts with depleted uranium until the NRC completes rulemaking on depleted uranium. Val Christensen, EnergySolutions, stated they will follow the current law which allows them to receive the material.

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**July 14, 2009 Board Meeting**

[Minutes](#)

DRC gives presentation entitled: "Technical aspects of depleted uranium disposal" to educate the Board about depleted uranium and what is included in a Performance Assessment.

Board discussed whether the it should move forward with a moratorium.

The Board discussed the stringency issue and if the moratorium was granted it would be just temporary.

Heal Utah (Christopher Thomas) and Stephen Nelson provided a presentation regarding an inadvertent intruder and the return of Lake Bonneville and the effect it would have on the Clive Disposal Site.

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**September 21, 2009 EnergySolutions letter to Amanda Smith,  
Executive Director of the Utah Department of Environmental Quality.**

[Letter](#)

Rather than a moratorium on depleted uranium, in the letter, EnergySolutions proposed instead to have their license amended. In the letter, EnergySolutions committed to:

- 1) Dispose of the depleted uranium drums at the bottom of the disposal embankment;
- 2) Perform a new performance assessment for depleted uranium; and
- 3) Revise the design of the disposal embankment.

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**September 22, 2009 Board Meeting**

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[Minutes](#)

Presentation from the NRC (Larry Camper, David Esh, and Duncan White) regarding the NRC rulemaking for the disposal of large quantities of depleted uranium. Mr. Camper said that the NRC staff was to proceed with a rulemaking that would require a "Site Specific Performance Assessment" to be conducted whenever large quantities of depleted uranium are disposed. He also explained that the NRC expected the rulemaking to be completed in 2011. Mr. Camper also explained the NRC had purposely chosen to hold depleted uranium workshop in Salt Lake City, Utah, because of the potential for depleted uranium to come to the Clive site.

After the NRC's presentation, the Board members discussed the proposed moratorium and whether it was urgently necessary to issue a moratorium in order to protect the health and safety of the Citizens of Utah. Some Board members felt that there could be potential problems with implementing a moratorium or a "stay." They felt if the moratorium was challenged, they would have accomplished nothing.

The Board also discussed the length of time it would take for the NRC to complete the rulemaking on depleted uranium versus the time it would take to issue a moratorium.

The Board members agreed that there should be some type of rule put in place for the disposal of depleted uranium, but the Board members differed in what the rule and conditions should be. Some members felt that there would be inherent problems in issuing a moratorium—they felt that it would take as long a time to implement a moratorium as it would for the NRC to finalize its rulemaking. Additionally, the NRC and attorneys had interpreted that the adoption of a moratorium may cause some very significant issues.

The Board discussed the possibility of a cooperative agreement with EnergySolutions. If the Board started the process to amend EnergySolutions' license, the Board would be in a better position to accomplish what they had intended to accomplish: to assure that the disposal of the depleted uranium was accomplished with consideration for the environment and future generations of Utah citizens.

**Motion made by Edd Johnson** that the Board *reject the Heal Utah proposal of a moratorium for depleted uranium.*

**Amended motion by Amanda Smith** requiring EnergySolutions to take a retroactive look at any new waste that they may accept in the interim between now and the final NRC's rulemaking.

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**Amended motion by Amanda Smith** that the Board adopts the September 21, 2009 letter from EnergySolutions and the commitments made in the letter will be added as a license condition in the EnergySolutions license.

**Amendment motion by Joseph K. Miner** that the license condition will include the removal of the depleted uranium waste and dispose it in a more suitable geologic site if is deemed necessary after the NRC rulemaking.

**Motion Passed and Carried: 8-Yes, 3-No, 1 Abstention**

(minutes for September 2009 Board Meeting attached)

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**September 23-24, 2009:** NRC held a Workshop on depleted uranium at the University of Utah. The panel includes: NRC Staff, Dane Finerfrock (DRC Director), Christopher Thomas (Heal Utah), DOE Staff, representatives from EnergySolutions, representatives from other Agreement States with LLRW programs (i.e. Washington, South Carolina, and proposed Texas WCS Site).  
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**October 13, 2009 Board Meeting**

[Minutes](#)

Fred Nelson, Utah Attorney General's Office, described the process to follow under the Administrative Procedures Act when considering changing Condition 35 in the EnergySolutions license. Chairman Peter Jenkins explained how he wanted to proceed with the proposed revised License Condition 35. He made a motion that the Board Members vote to change the language in the proposed license condition. The Board voted in favor to make necessary changes to the license condition.

The Board considered the proposed revised License Condition 35 drafted by EnergySolutions in its letter dated October 1, 2009 ([see letter](#)). The version of the language presented to the Board also included input from the DRC Director Dane Finerfrock and Laura Lockhart, Utah Attorney General's Office. Frank DeRosso of the Board asked how the Performance Assessment 10,000-year timeframe was determined. Chairman Jenkins responded and

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stated that timeframe was the minimum timeframe recommended by the NRC in the SECY-08-0147 document.

Chairman Jenkins then asked Dan Shrum, EnergySolutions, if he had anything to add. Mr. Shrum explained he participated in two roundtable discussions on depleted uranium and there was a general consensus that in NUREG guidance documents (NUREG-1573) a general time period for performance assessments was 10,000 years and beyond that for a qualitative analysis.

Chairman Peter Jenkins explained that the State of Texas has a rule that requires a Performance Assessment for a time period for up to peak dose before acceptance of the waste.

Chairman Peter Jenkins asked members of the public to comment on this issue. Four members of the public provided comment, including Christopher Thomas from Heal Utah. Mr. Thomas voiced support of the revised license condition.

**Motion by Peter Jenkins** that the Board is in favor of requiring a Performance Assessment and that Performance Assessment must be approved by the Director of the DRC before depleted uranium waste is accepted for disposal.

**Motion Passed and Carried: 8-Yes, 1-No, 1 Abstention**

The Board discussed the language in proposed License Condition 35 and voted on the conditions. After much discussion, Mr. Shrum, EnergySolutions, came forward and questioned whether the Board was following the correct procedure. Mr. Shrum explained that at the last Board meeting, EnergySolutions agreed that they would incorporate the conditions that were mentioned in their October 1, 2009, letter—the letter provided to the Board at that meeting. Mr. Shrum said that the Board was now requiring that EnergySolutions remove the depleted uranium, and the license conditions were changing significantly.

Chairman Peter Jenkins asked for advice from Fred Nelson, Utah Attorney General's Office. Fred Nelson said that although the action in the conditions was different from what EnergySolutions had originally agreed to in the letter, it was not outside of the Board's prerogative to move forward on issuing a "Notice of Agency Action." The Board could seek comments from the public and develop the final wording in the license condition and go forward to issue a "Notice of Agency Action."

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The Board continued with the discussion on changes to the license condition, and the Board also discussed sending the license condition out for public comment. They agreed on a 30-day comment period. After public comment, the Board could choose to make additional changes. The Board would vote on the final license condition at the December 2009 Board meeting.

The following are the Board's final changes to the license condition:

1. Condition 35.A. Background: There was a suggested change, the Board members voted and the majority agreed that no changes were necessary. The condition will remain the same as written.
2. Condition 35.B. Burial Depth: There were no changes. The condition will remain the same as written.

*As submitted:*

3. Condition 35.C. Performance Assessment: A performance assessment, in general conformance with the approach used by the Nuclear Regulatory Commission (NRC) in SECY-08-0147, shall be submitted for Executive Secretary review and **approved no later than December 31, 2010**. The performance assessment shall be revised as needed to reflect ongoing guidance and rulemaking from NRC. For purposes of this performance assessment, the compliance period will be a minimum of 10,000 years. Additional simulations will be performed for a minimum of a 1,000,000-year time frame for qualitative analysis.

*Changed by the Board to Read:*

Condition 35.C. Performance Assessment: A performance assessment, in general conformance with the approach used by the Nuclear Regulatory Commission (NRC) in SECY-08-0147, shall be submitted for Executive Secretary review and **be approved prior to receipt of significant quantities (more than 1 metric ton)<sup>1</sup> of depleted uranium waste**. The performance assessment shall be revised as needed to reflect ongoing guidance and rulemaking from NRC. For purposes of this performance assessment, the compliance period will

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<sup>1</sup> October 2009 Board Meeting 2:18:30 – 2:19:43 & 2:25:56 – 2:26:25.

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be a minimum of 10,000 years.<sup>2</sup> Additional simulations will be performed for a minimum of a 1,000,000-year time frame for qualitative analysis.

4. Condition 35.D. Revised disposal embankment design: There were no suggested changes. The condition will remain the same as written.

*As submitted:*

5. Condition 35. E. Remediation: If, following the completion of NRC's and DRC's regulatory processes described in paragraph 35A, the disposal of depleted uranium as preformed after the date of this license condition would not have met the requirements of those new regulatory and performance standards, the facility will undertake remediation to ensure that those new regulatory and performance standards are met, or if that is not possible, shall remove the depleted uranium and transport it off-site to licensed facility. Before accepting **substantial** quantities of depleted uranium for disposal after the effective date of this license condition, EnergySolutions shall provide evidence that it is feasible to meet this **condition 35.E**. Compliance with this provision is required even if EnergySolutions has complied with paragraph 35D.

*Changed by the Board to Read:*

Condition 35. E. Remediation: If, following the completion of NRC's and DRC's regulatory processes described in paragraph 35A, the disposal of depleted uranium as preformed after the date of this license condition would not have met the requirements of those new regulatory and performance standards, the facility will undertake remediation to ensure that those new regulatory and performance standards are met, or if that is not possible, shall remove the depleted uranium and transport it off-site to licensed facility. Before accepting **significant** quantities of depleted uranium for disposal after the effective date of this license condition, EnergySolutions shall provide evidence that it is feasible to meet this condition. Compliance with this

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<sup>2</sup> Dan Shrum comment 2:20:22 – 2:20:55 : ES did not voice a concern about this language in the October 2009 Board Meeting. Peter Jenkins regarding timeframe period and using NRC guidance 2:23:46 – 2:24:25.

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provision is required even if EnergySolutions has complied with paragraph 35D.

6. Condition 35. F. Surety: There were no changes. The condition will remain the same as written.

**Motion by John W. Thomson** that the Board accept the changes as shown above and to issue a Notice to Propose of Agency Action with a 30-day public comment and for it to be an action item at the December 2009 Board Meeting.

**Motion Passed and Carried: 7-Yes, 1-No, 2 Abstention**

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**November 10, 2009 Board Meeting**

[Minutes](#)

Agenda Item, V – EnergySolutions requested to address the Board. After EnergySolutions' presentation, Heal Utah has also requested the opportunity to address the board.

EnergySolutions, represented by Craig Galli (Holland and Hart) - stated that EnergySolutions was surprised by the outcome of the October 2009 meeting, as the proposed substitute license amendment was not on the Board's agenda. Mr. Galli said that looking back at what happened last month, the Board did not give EnergySolutions full consideration of all of the legal and public-policy implications of the October 2009 Action. EnergySolutions believes that the Board is imposing a moratorium on depleted uranium by way of a substitute license condition. Mr. Galli questioned whether the Board changing agreed upon language negotiated between EnergySolutions and the Director is consistent under applicable law. Mr. Galli argued that the ability to issue licenses lies with the Director, not the Board.

EnergySolutions requested that the Board reconsider the October 2009 Action Item by rescinding the action of the October 2009 meeting and replace it with either 1) the submitted September 2009 version of License Condition 35 or 2) remand (send both versions of L.C. 35) to the Director to conduct additional technical analysis and present his findings to the Board on the preferred version. Then provide public comment on the selected version. EnergySolutions stated they preferred option 1.

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Heal Utah, represented by Christopher Thomas and Janelle Eurich (Attorney for Heal Utah) - Explained that EnergySolutions just presented on the powers of the Executive Secretary and didn't say anything about the authority of the Board. Ms. Eurich explained that the Act and Rules allow the Board to issue orders. This gives the Board the authority to suggested changes to license condition language in the license as long as the purpose is to minimize any danger to public health and safety of the environment. Mr. Thomas explained that License Condition 35 is much different than a moratorium as License Condition 35 clearly spells out ways that EnergySolutions would be allowed to bring depleted uranium, as long as that it's demonstrated to be safe over the timespan which depleted uranium presents a hazard. That's a clear path for EnergySolutions to accept the waste. Mr. Thomas stated: "the fact that the study hasn't been done isn't the Board's or the public's fault. A moratorium is a blanket statement saying this would not be permitted. License Condition 35 says it will be permitted when you satisfy the conditions that it is safe for the public." Mr. Thomas recommended that if the Board thinks a Rule is more "water tight" than a license condition, he suggested that Board run both a license condition and a new Rule at the same time.

*Rebuttal*

Chairman Peter Jenkins allowed both EnergySolutions and Heal Utah an opportunity for rebuttal on what was said from both parties.

EnergySolutions - Mr. Galli reiterated that once the proposed License Condition 35 goes into effect, it will have the same effect as a moratorium as EnergySolutions will only be allowed to take 1 metric ton of depleted uranium thereafter until the NRC completes rulemaking.

Heal Utah - Ms. Eurich reiterated that the Board had the authority to do what they did in the October 2009 Board meeting. The Rules allows the Board to make orders and the Board is making an order to revise License Condition 35. Mr. Thomas said the NRC is proceeding with rulemaking regarding depleted uranium because they saw a gap in the regulations.

Chairman Jenkins stated that in the Meeting Agenda it mentioned that the Chair might entertain a motion for Executive meeting that is closed to the public to discuss legal arguments presented by both sides in the meeting.

Fred Nelson, Utah Attorney General's Office, explained the circumstances that the Board could conduct a closed meeting. The reasons included a discussion of matters involving pending litigation. Litigation has been asserted by the parties involved in this matter. Also, because this is an

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adjudicative proceeding, the meeting could be closed for adjudicative deliberation pursuant to a Utah Supreme Court decision. Mr. Nelson also stated that it required a 2/3 vote from the members of the Board, a recording must be kept, and that the closed meeting could only be for purposes of discussion, and any decision must be made in an open meeting.

**Motion by David A. Trip** that the Utah Radiation Control Board conduct a closed Executive Session, based on the reason stated by Mr. Nelson; to discuss legal issues on the License Amendment and regulation of depleted uranium. The Board also requested their legal counsel be present.

Representatives of the Deseret News and the Salt Lake Tribune registered objections to closing the meeting. Mr. Nelson responded that EnergySolutions had indicated a distinct possibility of litigation. He said based on the fact that it is an adjudicative proceeding and deliberation is allowed, the session could be closed.

**Motion Passed and Carried: 9-Yes, 1 Abstention**

Chairman Peter Jenkins explained that after the Board finished the Closed Executive Session, the Board would invite the public to come back, and the Board would re-enter into a normal or regular board meeting.

**Closed Executive Meeting from 4:06-5:13 p.m.**

Chairman Peter Jenkins reopened the meeting and said that he would like the Board to discuss the issues that they had heard today and move toward a motion of how to respond to EnergySolutions' request and address the proposal regarding License Condition 35. Chairman Jenkins said that before proceeding on this item, the Board would, first, hear comments from the public.

Nine individuals provided public comment and voiced their opinion in favor that a site compatibility study should be completed for depleted uranium.

EnergySolutions and Heal Utah were asked to provide their final comment. Both repeated their same comments as before.

Chairman Peter Jenkins said that EnergySolutions had made a request to the Board and the Board needed to respond. He asked Board members, if they would entertain a motion for further discussion on the issue of depleted uranium or if there would be a motion and a response to EnergySolutions' request.

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**Motion by Patrick D. Cone** to rescind the action of the Board in October 2009 and accept the License Condition 35 as was submitted to the Board in September 2009 wording, and enter a rulemaking procedure to adopt those changes made during the October 2009 Board Meeting with a draft document for the Board's December 2009 meeting. Directed the Executive Secretary and DRC staff to produce such a rule by the next meeting.

**Motion Passed and Carried: 9-Yes, 1 Abstention**

There was discussion on the rule by Board members. David A. Tripp suggested that maybe a subcommittee of Board members could assist the Executive Secretary and DRC staff in drafting the rule. Chairman Jenkins asked for volunteers for the subcommittee, the following people volunteered: Elizabeth Goryunova, Douglas S. Kimball, David A. Tripp, Patrick D. Cone and Christian K. Gardner.

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**December 8, 2009 Board Meeting**

[Minutes](#)

John Hultquist, DRC Section Manger, informed the Board that the public comment period for License Condition 35 began on November 23, 2009 and would end the close of business on December 23, 2009. The public notice and the proposed changes to License Condition 35 were posted on the DRC's web page.

**Consideration of Rule for Depleted Uranium Disposal (Board Action Item)**

Laura Lockhart, Attorney General's Office, to report to the Board on: (1) Regulatory and Factual Background; (2) Summary of Preliminary Bases for Actions; (3) Impacts of Rulemaking; (4) Additional Documentation; (5) Statement Regarding Utah Code Annotated §19-3-104; and (6) the Proposed Rule.

**Discussion by the Board**

Board Member Patrick D. Cone reported that the subcommittee met with John Hultquist, DRC Section Manager, and other DRC staff, and they discussed the proposed Administrative Rule for depleted uranium disposal.

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Mr. Cone asked about the origination of the “10,000-year time-frame for depleted uranium disposal.” He said the “depleted uranium 10,000-year, containment time-frame” should be discussed further by the Board. Mr. Cone said he would like to know, if 10,000-years would be an adequate containment. He also said that he would like the Board to discuss the geologic processes of infiltration at the site. The site will conceivably need to account for inundation of water—in case anything like Lake Bonneville happened again.

Chairman Peter Jenkins said that the purpose of today’s Board meeting would be to send the proposed, draft rule out for public comment. The public-comment period would allow interested parties and people who have expertise in depleted uranium disposal to make comment.

David A. Tripp referred back to the rule. He said that it read “a minimum of 10,000-years.” He said the question is being asked “is the minimum of 10,000-years” an appropriate time. Dr. Tripp said that he did feel it was appropriate.

Chairman Peter Jenkins said that the sentence read: “any such performance assessment shall be revised as needed to reflect on-going guidance and rulemaking from the NRC.” He said Mr. Cone asked where the “10,000-year time-frame” came from. Chairman Jenkins said it came from the SECY document. He said the rule captures an on-going guidance and rulemaking from the U.S. Nuclear Regulatory Commission (NRC).

Discussion by the Board followed. Some of the issues the Board members discussed on License Condition 35 were: (1) the qualitative analysis for the time-period where peak-dose occurs--whether it was definitive enough; (2) the protection of inadvertent intruders; (3) Lake Bonneville, and if they had actually modeled the radioactive-site as if it were underwater; and (4) whether they should discuss the infiltration question.

**Motion by Frank D. DeRosso** for the Board to send the Draft Rule out for public comment.

**Motion Passed and Carried: 9-Yes, 1 Abstention**

**Motion by David A. Trip** that the Division presents the results of the public comments at the February 2010 Board Meeting.

**Motion Passed and Carried: 10-Yes**

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**Motion by Patrick D. Cone** to send the draft Rule out for a 30-day public comment period.

**Motion Passed and Carried: 10-Yes**

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**December 20, 2009:** A train carrying significant quantities of depleted uranium (3,577 metric tons in 5,304 drums) from the Savannah River Site (SRS) arrive at the EnergySolutions Clive facility. This shipment was the planned first of three carrying depleted uranium from SRS to Clive. The remaining additional shipments are planned in the coming months as EnergySolutions puts new safeguards in place to ensure the material's safe disposal.

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**January 12, 2010 Board Meeting**

[Minutes](#)

**Update: Amendment to EnergySolutions License – License Condition 35 (Board Information Item)**

John Hultquist, Section Manager, said that the Division had received 20 comments from eight individuals. He summarized the comments that were received. He reported that both the "extended, public-comment-period request" and the public hearing request were denied by the Division Director. They were denied because there had been ample opportunity during the rulemaking process to add additional comments. Additionally, a public hearing was held associated with the licensing action. Mr. Hultquist said that the Division was currently working on responding to the public comments.

**Utah Governor's and DOE Agreement on depleted uranium Disposal (Board Information Item)**

Amanda Smith, DEQ Executive Director, reported to the Board on this item. Ms. Smith said that the Department of Energy issued a letter addressed to Governor Herbert regarding the agreement on depleted uranium disposal in Utah. Ms. Smith said that there were parts of the letter that the Governor agreed with, but there were issues and new issues that were being negotiated—issues that were not specifically addressed in the DOE's letter to Governor Herbert. The Executive Director said that she was not at liberty to

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share what the specifics were in DOE's letter. She said that most of the issues being negotiated with Utah were about the terms of the second and third rail shipments—DEQ would be working with EnergySolutions about the specifics. As soon as DEQ had finalized the agreement with DOE, she would e-mail it to the Board members.

Ms. Smith said that, today, the Governor had asked the Department and the Division to complete independent testing on drums that had been received by EnergySolutions from the Savannah River site. She said that EnergySolutions had already completed testing some of the drums, but they had not received the results yet. She said that DEQ would be sending staff out to conduct independent testing, and that she would bring the results to the Board. The Governor felt that there had been enough questions raised, and as the regulator, the Division should do independent testing. Ms. Smith explained that the Department would not be allowing a contractor to do the testing; but rather, the Division of Radiation Control's staff would be doing the testing and looking at the containers. The samples would be sent to another entity for lab analysis. Dane Finerfrock stated that the Governor guidance was that the sampling should be statistically meaningful.

**Extension Request for Rule R313-25-8 public comment period**

Chairman Peter Jenkins stated the Board received a request from EnergySolutions requesting a 30-day extension to the public comment period for depleted uranium. Mr. Jenkins asked the Board members to recall that last month they had a lengthy discussion regarding the length of the public comment period. They voted and agreed on 30-days. He said that because of the deadlines for filing the public notice on the public comment, there were two or three weeks when no formal action could be taken. Chairman Jenkins said that the public comment period would end on February 2, 2010, and there would be a public hearing on January 26, 2010.

Tom Magette from EnergySolutions and Stephen T. Nelson a member of the public both explained why an additional 30 days was warranted.

**Motion by Patrick D. Cone** to reject the extended time requested by EnergySolutions and keep the original public comment period of 30-day, which would expire on February 2, 2010.

**Motion Passed and Carried: 7-Yes, 1-No, 1 Abstention**

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**February 9, 2010 Board Meeting**

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[Minutes](#)

**Update on Proposed License Condition 35, EnergySolutions, UT  
2300249  
(Board Information Item)**

Dane Finerfrock, Executive Secretary, asked how the Board wanted to address the comments received on proposed License Condition 35.

Chairman Peter Jenkins asked Fred Nelson, Attorney General's Office, for his opinion regarding the issue. Mr. Nelson explained that because it was a license condition, it should be the Executive Secretary that would make the decision based on the comments. If it were appealed, it would be appealed to the Board. Mr. Nelson said that his recommendation was that the Board simply advise the Executive Secretary of the process he should go through in making the decision. If someone appealed the decision the Board would review it.

**Update on the Proposed Depleted Uranium Rule (R313-25-8)**

Dane Finerfrock, Executive Secretary, said that he had the comments with him that had been received by the Division on the depleted uranium rulemaking. Mr. Finerfrock said that there were extensive comments; and once again, he would like to ask the Board what involvement they wanted to have in reading the comments and responding to them.

A discussion followed by the Board as to who should review the comments. The final recommendation by Chairman Jenkins was that the Executive Secretary have the Division staff scan and distribute the comments electronically and then Board could respond to them, if they wished-- otherwise the Executive Secretary could continue the process as he normally would and respond to them.

Laura Lockhart, Attorney General's Office, explained that the Board had 120 days from when the rule was published to either file a "Notice of Effective Date," or to file a "Notice of Proposed Rule Change."

Chairman Peter Jenkins asked the board members to have a response to the depleted uranium comments to Dane Finerfrock no later than April 3, 2010.

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**February 22, 2010:** Utah Governor Herbert announced an agreement with U.S. Department of Energy (DOE) that the two additional planned depleted uranium shipments to be sent to Clive for disposal would be sent elsewhere.

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**February 22-23, 2010:** DRC Staff (Ryan Johnson, Boyd Imai, John Hultquist, Kevin Carney) collected samples from the depleted uranium drums from SRS and perform analysis for technium-99. The analysis showed with a 95% confidence that the material is Class A.

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**March 9, 2010 Board Meeting**

**Minutes**

**Update on Proposed License Condition 35, EnergySolutions, UT 2300249 (Board Information Item)**

Dane Finerfrock, Executive Secretary, reported that Radioactive Material License No. UT 2300249 had been amended to include License Condition 35. The license was signed on March 2, 2010 and License Condition 35 was now in effect.

**Savannah River Depleted Uranium Sampling (Board Information Item)**

Dane Finerfrock, Executive Secretary, reported the Division collected samples from 171 drums from Savannah River and sent the final batch of samples to Eberline Laboratory in Oak Ridge, Tennessee. Technitium-99 is the isotope that the Division asked the lab to provide data on as it is the only isotope that could cause the waste to be greater than Class A. The results were expected before the end of the month.

Amanda Smith, DEQ Executive Director, explained that Governor Herbert invited the U.S. Department of Energy to attend the April 13, 2010 Board Meeting. Ms. Smith said hopefully the Division will have the results of the sampling then and the Board could discuss the results with the DOE.

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**April 13, 2010 Board Meeting**

**R313-25-9 Technical Analysis (Formally R313-25-8)  
History of Rulemaking**

**Minutes**

**Proposed Depleted Uranium Rule, R313-25-8 (renumbered R313-25-9(5))**

**I. Approval: Findings and Opinion Regarding Adequacy of Corresponding Federal Regulations (Board Action Item)**

Laura Lockhart, Attorney General's Office, discussed the proposed rule and response to comments received regarding the proposed amendments to Utah Administrative Code R313-25-8 addressing depleted uranium. The Nuclear Regulatory Commission (NRC) recommended that three changes be made to the Rule.

**Motion made by Patrick Cone** to adopt the three changes suggested by the Nuclear Regulatory Commission as shown in Attachment 2 of the Board Packet.

**Motion Passed and Carried: 10-Yes, 1 Abstention**

**Approval: Recommended Changes to the Proposed Rule (Board Action Item)**

**Motion made by David A. Tripp** to adopt the minimum time period of 30 days for the public notice for adoption of the Rule.

**Motion Passed and Carried: 10-Yes, 1 Abstention**

**\*Effective Date of the Rule is June 1, 2010**