RADIOACTIVE MATERIAL LICENSE NO. UT 2300478

STATEMENT OF BASIS

for

AMENDMENT 3

Low Level Radioactive Waste Disposal Facility

Energy*Solutions*, LLC 299 South Main Street, Suite 1700 Salt Lake City, UT 84111

July 13, 2021

Purpose

This statement of basis establishes the foundation on which Radioactive Material License No. UT 2300478 (RML) was recommended for amendment. The revised License is designated as Amendment 2. The proposed revisions were submitted by Energy *Solutions*, LLC (ES) in two separate requests. The revisions reviewed by staff for Amendment 3 are listed chronologically below with several brief details:

On October 19, 2020 (CD-2020-157), ES submitted a request as a Amendment and Modification Request to Reduce Capacity and Disposal Footprint and update surety condition 9.15 (Amendment 2) to the Director of the Division of Waste Management and Radiation Control (Director) to amend the capacity Condition 8, Design footprint Coordinates and Drawings update Table 3 and Appendix M Ground Water Permit UGW450005, and Condition 9.15 surety update.

On February 26, 2021(CD-2021-030), ES submitted at the request to division staff Engineering drawings to replace the drawings submitted on October 19, 2020, updating, and replacing drawings 20001-G01, 20001-C01, 20001-C02, 20001-C03, 20001-C04, 20001-C05, 20001-C06, 20001-U01, and 20001-C02 of Appendix M Ground Water Permit UGW450005.

The Director has reviewed the submitted information and other than a proposed revision to License amendment each revision proposed for Amendment 2 was deemed appropriate. The changes requested are considered major but will reduce public health concerns with reduce waste in the 11.e(2) disposal embankment. However, the Director has determined that in accordance with UAC R313-17-2, a public comment period is required for these major requests to get comment from all stake holders' including the Department of Energy.

Additionally, minor administrative changes were made to clarify and improve the License text. Throughout the document several terms, some phraseology, and punctuation was revised or corrected. The following are examples of revised terms and phases.

The changes considered below succeed the previous License and will be incorporated into Amendment 3 of the License.

License Change Summary

License Condition	Minor/Major Change	Description of Changes and Basis for Changes
3	Minor	Amendment #2 to Amendment #3
8	Major	Change the Maximum quantity License may possess at any one time 5,048,965 Cubic Yards changed to 1,629,255 Cubic Yards.
9.15	Major	The Combined annual surety is \$80,149,535.08 with the 11e. (2) subtotal of \$10,870,016.43 changed to The Combined annual surety is \$82,460,030.51 with the 11e. (2) subtotal of \$6,943,999.48.
10.14(c)	Major	The total embankment capacity shall not exceed 1,629,255 Cubic Yards.
Table 3 Permit UGW450005	Major	Change footprint coordinates from larger footprint to a reduced footprint.
Appendix M	Major	Replacement drawings revision to Engineering drawings 20001-G01, 20001-C01, 20001-C02, 20001-C03, 20001-C04, 20001-C05, 20001-C05, 20001-UT01, and 20001-UT02.

Statement of Basis to Amend License

License Conditions 3 through 10.14 (c), and Appendix M, Table 3.

The Division as part of this Statement of Basis has reviewed two submittals (October 19, 2020 and February 26, 2021) attached. The Division makes this submittals part and accept as part of the statement of basis EnergySolutions analysis and Statement of basis in data and regulatory guide for Basis. Please see the attached EnergySolutions Amendment and Modification request to reduce capacity and disposal footprint letters CD-2020-157 (DRC-2020-017343) and CD-2021-130 (DRC-2021-003475) as part of the Statement of Basis and Amendment request.

The two submittals include an updated license in redline strike. Storm water and drainage design and ditch design. The basis for reducing the footprint due to waste volume reduction over time show in Figure 1-1 in the October 19, 2020 request. The updated coordinates from the updated engineering drawings from old footprint to the new footprint. The updated engineering drawings showing embankment, buffer zone, waste set back, all requirements in regulation and design between the 11e.(2) embankment and future embankment.

License Condition 9.15 – Surety Update

Statement of Basis to Amend License Condition 9.15

License Condition 9.15 of the 11e.(2) Radioactive Material License (UT 2300478) lists the approved combined annual surety amount for the Clive site and the individual surety amount for the 11e.(2) Facility. Changes to the combined surety and individual facility amounts are updated annually based on physical changes at the facility and inflation calculations. Occasionally intermediate revisions may be approved by the Director.

The Director has approved the 2019 Annual Surety update revision with an approval letter dated June 22, 2020. These 2019 Annual Surety values are being incorporated into this License as Amendment 2.

Based on a Division review of the annual update submission, Condition 9.15 of the 11e.(2) Radioactive Material License shall be revised as indicated in the following paragraphs:

The current License Condition is as follows:

9.15. The combined annual surety is \$80,149,535.08 with the 11e.(2) subtotal of \$10,870.016.43 as approved in the Director's letter dated October 11, 2019.

The amended License Condition 9.15 is as follows:

9.15 The combined annual surety is \$82,460,030.51 with the 11e.(2) subtotal of \$6,943,999.48 as approved in the Director's letter dated June 22, 2020.

References

- Energy Solutions, LLC. 2019. Radioactive Material License UT2300249, Radioactive Material License UT2300478, EPA ID Number UTD982598898, 2018 Combined Surety Annual Review, Class 1 Permit Modification, and LLRW, and 11e.(2) License Amendment Requests. CD19-0075. March 29, 2019. DRC-2019-002923.
- Utah Department of Environmental Quality, Division of Waste Management and Radiation Control (UDEQ-DWMRC), 2019, 2018 Combined Surety Review, dated October 11, 2019. DSHW-2019-012382.