

August 16, 2023

CD-2023-163

Mr. Doug Hansen
Director
Division of Waste Management and Radiation Control
195 North 1950 West
Salt Lake City, UT 84114-4880

Subject: EPA ID Number UTD982598898 – Request for a Site-Specific Treatment Variance for Ash with Dioxin/Furan Contamination

Dear Mr. Hansen,

EnergySolutions hereby requests a variance from Utah Administrative Code (UAC) R315-268-40(a)(3) for an incinerator ash waste that meets all treatment standards except those for dioxins and furans as Underlying Hazardous Constituents (UHCs). This request is submitted in accordance with the requirements of UAC R315-260-19.

The regulatory requirement authorizing this request is found in UAC R315-268-44 which allows a site-specific variance from an applicable treatment standard provided that the following condition is met:

UAC R315-268-44268.44(h)(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible.

EnergySolutions requests approval to receive ash from incinerator and metal recycling processes that contains dibenzo-p-dioxin and dibenzofuran UHCs above their respective treatment standards denoted with the Universal Treatment Standards (UTS) in R315-268-48. All other required treatment standards associated with the waste will be met prior to disposal.

Requiring the waste to meet the dioxin and furan treatment standards is inappropriate based on the processes that generate the waste. Because of the waste generation processes, all of the ash waste contains dioxins and furans; however, in accordance with regulations, only a portion of the waste needs to be treated for those contaminants. The generator has previously analyzed each container of ash for metals contamination. If metals were below the toxicity characteristic concentrations described in 40 CFR 261.24 (R315-261-24), the waste would be shipped to the Clive facility as Low-Level Radioactive Waste (LLRW) and disposed in the Class A Embankment. If metals were above the Toxicity Characteristic concentrations, then the waste would need treated for those metals as well as all UHCs, including dioxins and furans. It is inappropriate to require treatment of dioxin and furan contaminants in instances where characteristic metals are found in the waste when treatment is not required if metals are below characteristic concentrations in the waste.

Furthermore, prior to receiving this variance, the stabilized ash was re-incinerated in an attempt to reduce the concentration of dioxins and furans in the ash. Re-incineration results in very little



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intrinsic value. It is inappropriate to require this additional incineration in order to attempt to meet the standards.

EnergySolutions proposes to confirm the waste meets all required treatment standards with the exception of the dioxin and furan UHC standards and then to macroencapsulate the residue in MACRO Vaults using requirements approved in the state-issued Part B Permit. This will provide additional isolation of the waste from the environment (relative to direct disposal in the Class A Embankment) and will avoid unnecessary additional incineration of the waste.

EnergySolutions requested this same variance for this generator in letters dated June 27, 2018 (CD18-0120), August 23, 2019 (CD19-0179), June 16, 2021 (CD-2021-072), and July 20, 2022 (CD-2022-131). The previous requests were approved by the Waste Management and Radiation Control Board on September 13, 2018, November 14, 2019, September 9, 2021, and October 13, 2022, respectively. Over the previous year this variance was in effect, the EnergySolutions Clive facility received approximately 30 tons (eight shipments) of this ash for treatment. EnergySolutions forecasts similar amounts of this waste over the next year.

This variance is being requested for approximately 30 tons of ash that will contain elevated concentrations of dioxins and furans.

EnergySolutions requests that a variance be granted to macroencapsulate ash waste that meets all required treatment standards except those for dioxin and furan UHCs.

The name, phone number, and address of the person who should be contacted to notify EnergySolutions of decisions by the Director is:

Mr. Vern Rogers
Director of Regulatory Affairs
EnergySolutions LLC
299 South Main Street, Suite 1700
Salt Lake City, UT 84111
(801) 649-2000

Should there be any questions to this request, please contact me at (801) 649-2043.

Sincerely,

Digitally signed by Steve D. Gurr
Date: 2023.08.16 12:45:23
-06'00'

Steve D. Gurr
Environmental Engineer

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.