



State of Utah

SPENCER J. COX  
*Governor*

DEIDRE HENDERSON  
*Lieutenant Governor*

Department of  
Environmental Quality

Kimberly D. Shelley  
*Executive Director*

DIVISION OF WASTE MANAGEMENT  
AND RADIATION CONTROL  
Douglas J. Hansen  
*Director*

August 28, 2023

The Deseret News  
Legal Advertising Department

EMAIL: [legals@deseretnews.com](mailto:legals@deseretnews.com)

RE: Account #53606

To Whom It May Concern:

This email constitutes authorization to publish the attached NOTICE in the Deseret News on Wednesday, August 30, 2023.

Please send invoice and affidavit of publication to:

Douglas J. Hansen, Director  
Division of Waste Management and Radiation Control  
P.O. Box 144880  
Salt Lake City, UT 84114-4880

Enclosure: Public Notice

c: Jeff Coombs, EHS, Health Officer, Tooele County Health Department  
Bryan Slade, Environmental Health Director, Tooele County Health Department  
EnergySolutions General Correspondence Email  
LLRW General Correspondence Email  
Ashley Sumner, EDO (Email), Kaci McNeill, DWMRC (Email), Tom Ball, DWMRC (Email)  
Doug Hansen, DWMRC (Email), Larene Wyss, DHRM (Email)  
Facility File, Public Participation File, Alisa Westenskow



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The Salt Lake Tribune  
Legal Advertising Department

EMAIL: [legals@sltrib.com](mailto:legals@sltrib.com)

RE: Account #SLT0010250

To Whom It May Concern:

This email constitutes authorization to publish the attached NOTICE in the Salt Lake Tribune on Wednesday, August 30, 2023.

Please send invoice and affidavit of publication to:

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Tooele Transcript Bulletin  
Legal Advertising Department

EMAIL: [tbp@tooeletranscript.com](mailto:tbp@tooeletranscript.com)

RE: Account #02100050

To Whom It May Concern:

This email constitutes authorization to publish the attached NOTICE in the Tooele Transcript Bulletin on Wednesday, August 30, 2023.

Please send invoice and affidavit of publication to:

Douglas J. Hansen, Director  
Division of Waste Management and Radiation Control  
P.O. Box 144880  
Salt Lake City, UT 84114-4880

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Doug Hansen, DWMRC (Email), Larene Wyss, DHRM (Email)  
Facility File, Public Participation File, Alisa Westenskow

**Notice of Public Comment on  
EnergySolutions LLC, Mixed Waste Facility  
Treatment Variance Request for the disposal of High Concentration Arsenic Waste**

EnergySolutions requests approval to stabilize, macroencapsulate and dispose of approximately 250 cubic feet of Natural Gas Sweetener Filter Media, clay pellets, and rinse water that will be characteristically hazardous for arsenic, cadmium, and benzene. Analysis of a sample of waste received in June 2023, detected arsenic at 14,400 mg/L in the aqueous liquid phase (approx. 20 cubic feet) and 4,600 mg/L in the solid phase. The stabilization treatment process will meet Universal Treatment Standards (described in Utah Administrative Code R315-268) for all contaminants except arsenic. All actions requested in this variance will be performed in accordance with EnergySolutions' state-issued Part B Permit.

Similar waste from the same generator was received at the Clive Facility in 2015 and 2019. In 2015, analysis of a sample of that waste detected arsenic at 69,700 mg/L in the aqueous liquid phase and 1,800 mg/L in the solid. Over the course of two months, eight separate treatability studies of increasing intensity were conducted on that waste. Both single phase and multiple phase formulas were attempted with all contaminants meeting treatment standards except arsenic. Arsenic was reduced from the baseline concentration and plateaued at around 130 mg/L (a reduction factor of approximately 16) with a formula dilution up to 5:1 reagent to waste. This concentration is greatly reduced from the baseline concentration, but remained greater than 25 times the treatment standard of 5.0 mg/L.

Utah Administrative Code R315-268-44(h)(1) allows a variance if it can be demonstrated that "because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method." The treatment standard was developed using a fine-grained soil-like material; the filter media of this waste stream is physically different in that it is coarse clay pellets. In this media, it is much more difficult for intimate reagent-waste contact to treat the high concentration arsenic down to the treatment standard. Furthermore, the results described above demonstrate that large amounts of absorbent would be needed to meet the treatment standard, if it could be met. This would bring into question whether actual treatment was occurring or whether dilution was causing the reduction in arsenic concentration.

As an alternative to chemical treatment of arsenic to its treatment standard, EnergySolutions proposes to first treat the waste such that all contaminants other than arsenic meet their respective treatment standards, then macroencapsulate the treatment residual in accordance with requirements in Attachment II-1-5, *Macroencapsulation Plan*, of the state-issued Part B Permit. EnergySolutions proposes to macroencapsulate the waste, thereby isolating the waste from potentially leaching media. Macroencapsulation is a permitted process utilized at the Clive facility that significantly reduces the potential for migration (leaching) of waste. Macroencapsulation requires less handling of the waste and creates a waste form for disposal that is protective of human health and the environment.

Prior to disposal all other contaminants associated with this waste will be treated using EnergySolutions' permitted stabilization methods and will meet disposal requirements at the Facility. Final disposal of the waste is proposed to occur in the Mixed Waste Landfill Cell at the EnergySolutions Mixed Waste Facility.

A 30-day public comment period to receive comments on this Treatment Variance Request will commence on Thursday, August 31, 2023 and end on Friday, September 29, 2023. A public hearing on these issues will be held upon request.

Documents related to this application can be reviewed on the Internet at:

<https://deq.utah.gov/waste-management-and-radiation-control/waste-management-radiation-control-public-notice>

For further information or assistance in obtaining a copy of the documents is required, contact Tyler Hegburg 385-622-1875.

Written comments will be accepted if received by 5:00 p.m. on Friday, September 29, 2023. Comments should be submitted to the address below or by electronic mail as detailed below.

Douglas J. Hansen, Director  
Division of Waste Management and Radiation Control  
Department of Environmental Quality  
P.O. Box 144880  
Salt Lake City, UT 84114-4880

Comments can also be sent by electronic mail to: [dwmrcpublic@utah.gov](mailto:dwmrcpublic@utah.gov). Comments sent in electronic format should be identified by putting the following in the subject line: "Public Comment on EnergySolutions Treatment Variance Request." All documents included in comments should be submitted as ASCII (text) files or in pdf format.

Under Utah Code Section 19-1-301.5 a person who wishes to challenge a Permit Order may only raise an issue or argument during an adjudicatory proceeding that was raised during the public comment period and was supported with sufficient information or documentation to enable the director to fully consider the substance and significance of the issue.

In compliance with the Americans with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Larene Wyss, Office of Human Resources at 801-503-5618, Telecommunications Relay Service 711, or by email at [lwyss@utah.gov](mailto:lwyss@utah.gov).