

THE SOURCE

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GET TO KNOW

THE CLIVE LLRW DISPOSAL FACILITY

EnergySolutions is the owner-operator of the Clive Disposal Facility in Utah's West Desert, which has operated since 1988 and is licensed to dispose of Class A low-level radioactive waste (LLRW). The facility is readily accessible by rail and truck and is designed to receive bulk (e.g., intermodals, gondolas, etc.) and non-bulk (e.g., drums, boxes, etc.) containers.

Waste arrives daily at the Clive facility, the majority of which (80%) is shipped via rail, while the rest is received by truck. Most of the waste accepted for disposal is generated from decommissioning projects, DOE facilities, hospitals, and research laboratories.

There continues to be enough capacity to meet the demands from all of our customers. Currently, we are working on a license for a portion of the site that will be dedicated to very low-level waste and hope to receive license approval by the end of this year.



Licensed LLRW Disposal

- Class A
- 11e(2) – e.g., uranium milling waste and tailings
- Mixed (hazardous + radioactive)
- Naturally Occurring Radioactive Materials (NORM)

Specialty Waste

- Large components
- Decommissioning/outage waste
- Oversize debris
- Scrap metal
- Soil, liquids, and resins
- PCBs

DID YOU KNOW?

- Class A LLRW will decay within a 100-year period to a lower radiation level that does not present any hazards to people or the environment.
- LLRW is placed into engineered cells that are capped, monitored, and secure.
- Waste sent to the Clive facility is subject to at least three levels of review: the generator, EnergySolutions, and Utah regulators.

INSIDE

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In 2018, the Clive Disposal Facility received Voluntary Protection Program (VPP) status from the Utah Occupational Safety and Health Division (UOSH) of the Utah Labor Commission.

Cameron Ruppe, Division Director at UOSH, had this to say, "Achieving VPP status demonstrates an impressive level of dedication to employee safety, and I want to congratulate everyone who participated in the process. Employers like EnergySolutions play a key leadership role in keeping employees safe on the job throughout the state. Thank you to all of the hard-working employees at EnergySolutions for your example in fostering a strong safety culture in the State of Utah."

Only nine other companies have earned VPP status in Utah.



SUCCESS FOR SONGS D&D

In 2020, Clive received a 670-ton reactor pressure vessel for permanent disposal from the San Onofre Nuclear Generating Station decommissioning project.

The component traveled by rail from California to Nevada using a 36-axle Schnabel car, the largest in the world. Once the RPV arrived in Nevada, crews prepared the shipment to be transferred to a hydraulic platform trailer with 384 trailer tires for road transport. The road conveyance consisted of six large trucks that pushed and pulled the RPV trailer 400 miles through Nevada and into Utah with a maximum speed of 10 miles per hour over a 10-day period.



MEET THE GM: DAVE BOOTH



Mr. Dave Booth has been with EnergySolutions for almost 20 years. In March 2022, he became the General Manager of the Clive facility. Previously he served as the Engineering Director for EnergySolutions' Waste Management division, coordinating and providing engineering expertise to all waste management facilities. Dave's focus for the past 20 years has been at Clive where he served as chief engineer, engineering manager, quality control manager, and maintenance manager, gaining an in-depth working knowledge of all the necessary aspects to safely and compliantly managing waste at Clive.

Dave is an avid University of Utah fan and rarely misses a Ute football game. He is also an avid outdoorsman and recently was surprised by his wife with a 2021 Ford Bronco to explore the Utah backcountry. When at home Dave spends the majority of his time with his family.

WE ALSO DO THIS LIQUID WASTE TREATMENT

EnergySolutions' license and permit allow receipt of LLW, LAW, and MLLW liquid waste streams for solidification prior to land disposal and includes aqueous and non-aqueous solutions (e.g., oils, antifreeze, etc.). MLLW liquids can be treated and solidified at the treatment facility on site. The facility has two 10,000-gallon tanks that can be used to store bulk liquids during the treatment process.

The stabilization process consists of chemical stabilization, deactivation, neutralization, oxidation, reduction, hydration and precipitation of hazardous and radioactively contaminated elemental toxic metals and compounds. The process involves adding reagents to make hazardous constituents insoluble, mineralize lower levels of organics, or neutralize corrosives.



CLIVE SITE FEATURES

- Fleet of Super Gondola rail cars
- Rail unloading capabilities
- Intermodal wash and decon facility
- 6,000-hp metal shredder
- Rail line and switches
- Access control and infrastructure upgrades

UPCOMING ISSUES

- BARNWELL PROCESSING AND DISPOSAL
- LIQUID WASTE PROCESSING
- LINERS AND HICs
- SHIPPING CASKS
- PROFESSIONAL SHIPPERS AND BROKERS
- HITTMAN TRANSPORT SERVICES
- PHTS LOGISTICS
- MEMPHIS FACILITY—DECONTAMINATION SERVICES AND EQUIPMENT STORAGE