

PACTEC

PACTEC MACROBAG REDUCES LLMW TREATMENT COSTS

Innovative packaging solution eliminates offsite treatment, allowing more efficient shipment of waste and immense cost savings.

BACKGROUND

Low Level Mixed Waste (LLMW) is a waste stream that is both a hazardous waste and a radioactive waste. This combination of hazards in one waste results in a limited number of treatment and disposal options for generators and subsequently high treatment and disposal costs. One of the US Department of Energy (DOE) national laboratories was looking to meet regulatory milestones and reduce costs for a massive planned cleanup effort, and engaged PacTec MacroBags®, the easy-to-use flexible packaging that meets US DOT shipping regulations AND is approved as MACRO TREATMENT, meeting the LDR requirement for disposal.

OUTCOME

PacTec engineers worked with their waste disposal and generator services team to develop a production and delivery schedule of MacroBags®. PacTec's patented multi-layered macroencapsulation packages are a more affordable alternative to their current method and met all their requirements - Packaging and Treatment in one easy step. The MacroBags® helped the customer eliminate offsite treatment of the LLMW so it could safely be loaded onsite and shipped directly for disposal. To date they have successfully completed 1,772 shipments composed of 40,115 containers/25,204 cubic meters of waste without incident.

Total savings since 2014 is estimated at nearly \$10 million.



CUSTOMER FEEDBACK

"Implementing the use of multi-layered, mixed low-level waste disposal bags [MacroBags®] have allowed us to save millions while safely and efficiently completing nearly 1,800 shipments offsite for disposal."

HIGHLIGHTS

- Annual cost savings of over \$1.25 million dollars compared to alternative solutions – total project savings ~\$10MM
- New treatment/packaging solution was developed, and patent protected.
- Customer was able to stay on schedule and meet all project milestones