

# **ADVANTEK CAVERN SOLUTIONS** Beneficial Reuse Material Emplacement Facility Hutchinson, Kansas



# A Cleaner Disposal option: Landfill Diversion through Cavern Stabilization

## About our state-of-the-art Kansas Facility

Top of Salt Cavern SW12: 528 ft

Bottom of Salt Cavern SW12: 781 ft

Capacity: 10,000 bbls/day or 420,000 gallons/day

Accepted Material:

- Drilling & Completion Material: Muds, Cuttings, Cement
- High Chloride Material from Salt Formation Drilling
- Hydrotest Materials
- Non-hazardous Industrial Solid Waste Streams (particles, flakes, granules, pulp)
- Non-hazardous Industrial Wastewater
- Pipeline Leak/Repair Material/ Pipeline Excavation materials
- Tank Battery Area Clean Up

# Our team commercialized the process of Beneficial Reuse Material (BRM) emplacement in the State of Kansas

Our facility provides a solution to backfill, emplace and contain non-hazardous semi-solid and/or solid material into plugged and abandoned undergroound cavern wells. Emplacement enables any liquid or sludge material to be disposed with the smallest footprint and lowest long-term liability.

The process is monitored daily to provide assurance of a safe operation. Data is transmitted to our headquarters to our specialized team of engineers to verify that process conditions are optimal for a secure and permanent emplacement into the targeted salt formation.

#### LOCATION

7513 S K14 Highway Hutchinso<u>n, Kansas</u> 67<u>501</u>

#### INJECTED WASTES

- Oilfield Waste
- Non-hazardous industrial waste streams
- Other inert materials derived from various industries

#### VOLUMES

Over 200,000 bbls of of BRM emplaced into salt caverns.

# ENVIRONMENTAL

#### SOLUTION

- Provides a clean landfill diversion option
- No surface liabilities
- No additional treatment or transportation
- Permanent safe disposal
- Greater protection for surface and undergraound acquifers



# FREQUENTLY ASKED QUESTIONS

Q: What is BRM? A: BRM stands for Benefical Reuse Material, which we use for formation stabilzation. Essentially, BRM is material that becomes benefical when it is repurposed.

Q: Why evaluate this technology?

A: The status-quo is not enough and is not sustainable.

Q: How to start a waste

emplacement project?

A: Advantek can help you through permitting, design,

transportation, operations, and monitoring.

For more information on any of our products or services please visit us on the Web at: www.advantekwms.com





#### THE NEED

A zero landfill alternative in the midwest region for companies to repurpose unique waste streams in an environmentally responsible process.

#### THE SOLUTION

Emplacement at Advantek Cavern Solutions manages BRM with significant environmental benefits. This provides the formation with enhanced stabilization. Through appropriate geological salt formation, well design, and advanced monitoring, BRM can be conditioned and emplaced into the salt formations, ensuring permanent containment while benefitting the immediate and surrounding environment.

#### THE PROCESS

Sequestering contaminated solids by emplacement into a subsurface salt formation using a slurry material is the most safe, inexpensive, and permanent solution for managing complex materials.

- 1. Material Emplacement Permit application and approval
- 2. Material is captured
- 3. Injection operations follow controlled operational design and risk mitigation procedures
- 4. Daily monitoring of the operations is required to predict and mitigate any risks

#### OUR SUPPORT

Advantek and our principals have been instrumental in inventing and promulgating emplacement technologies across the world over the past 35 years. Our engineers and operational teams have the expertise to design and manage projects from start to finish with best practices acquired over decades. We closely work with regulators to ensure full compliance with state requirements and we help our clients to navigate through regulatory framework to make their projects possible.

### CONTACT US





Advantek Cavern Solutions 7513 S K14 Highway, Hutchinson, Kansas 67501 (620) 662-6367

Advantek Waste Management Services LLC Corporate HQ 11000 Richmond Ave Ste 195, Houston, Texas 77042 (713) 532-7627 www.advantekwms.com