

THE SOURCE



GET TO KNOW **ERWIN RESIN SOLUTIONS**

Energy Solutions owns and operates the Erwin Resin Solutions (ERS) facility located in Erwin, Tennessee. This facility utilizes an innovative solution for spent ion-exchange resins from U.S. commercial nuclear power plants. The patented Steam Reforming Process safely dewateres, chemically reforms, homogenizes, and reduces the volume of spent ion-exchange resins into a solid-phase, stable waste form. Once the Steam Reforming Process has been applied, the residual solid material is packaged and prepped for transportation to the Energy Solutions Clive Disposal Facility located in Utah's West Desert.

What are ion exchange resins?

Ion-exchange resins are used to purify the water in nuclear power plants. During this process, the resins remove radioactive isotopes from the water and then must be disposed of as radioactive waste.

Is the steam reforming process used for waste blending?

Yes. Radioactive resins of various concentrations have long been and will continue to be processed using steam reforming or alternative processes. These processes are often referred to as blending, which is commonly done by radioactive waste processors and generators. Blending is not dilution. Dilution is defined as mixing clean material with radioactive waste.

What are the benefits of the steam reforming process?

The resin is processed into a superior waste form that is proven to be highly stable and homogeneous, an ideal combination for disposal.

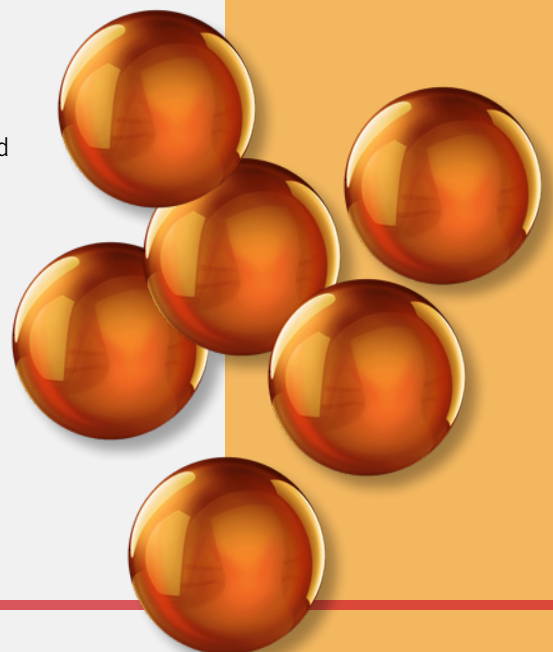
INSIDE

MEET GENERAL
MANAGER CHAD TIPTON

FACILITY FACTS

ABOUT THE STEAM
REFORM PROCESS

FACTS ABOUT ERS





THE FACILITY

- Heavily shielded and remote process building and unshielded ancillary building
- Liner storage building
- Administration building
- Maintenance shop
- Curie inventory: up to 2,000 Ci
- Encompasses more than 60,000 ft²

DID YOU KNOW?

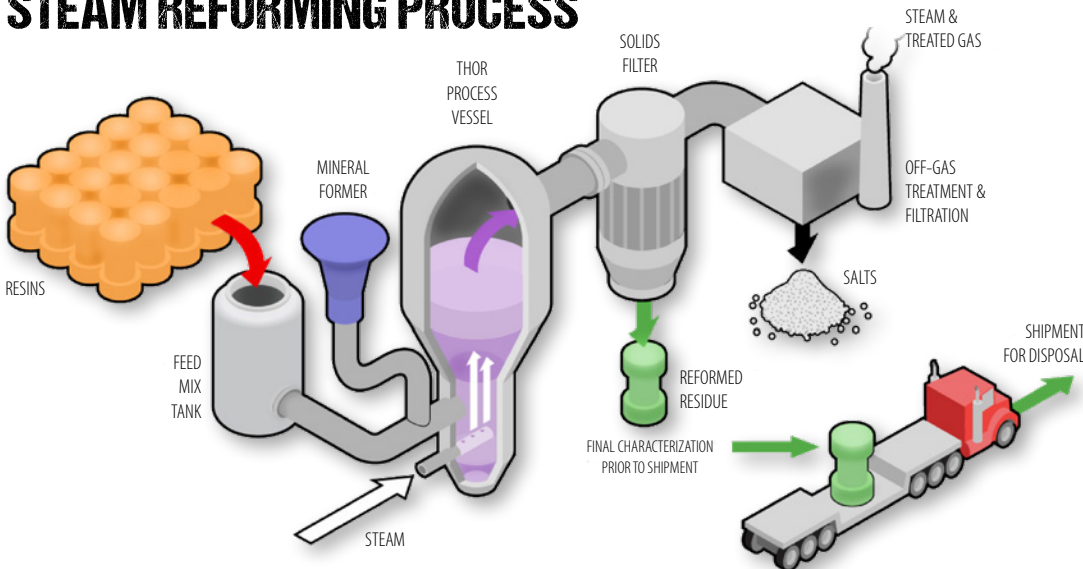
- The ERS license was issued in 1996 with 25 years of safe and compliant operations.
- ERS has successfully and compliantly dispositioned greater than half million cubic feet of resins; equivalent to more than 5,000 8-120 type liners.
- ERS takes title to U.S. Domestic generators' resins, in accordance with ERS RML.
- Using ERS services saves dose because at ERS resins do not need to be "final dewatered" to meet a disposal site acceptance criteria.



**MEET THE GM
CHAD TIPTON**

Mr. Chad Tipton has been with EnergySolutions for 20 years. He became the Operations Director of Erwin ResinSolutions last year after several years as the Operations Manager. Throughout his tenure, Chad has served in many roles at the Erwin facility such as Radwaste Operator, Truckbay Lead, Auxiliary Operator, Control Room Operator and Shift Supervisor. He has a solid working knowledge of the facility, its processes, and equipment. Chad's background enables him to bring a wealth of experience in mechanical, operational and maintenance areas. This experience, coupled with his strong work ethic makes for sound and practical leadership.

**HERE'S HOW IT WORKS
STEAM REFORMING PROCESS**



UPCOMING ISSUES

- CLIVE DISPOSAL OPERATIONS
- 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