ENVIRONMENTAL SOLUTIONS

# Thermal Treatment Solutions

**Regulatory compliant thermal treatment of non-hazardous contaminated soils and sediments in Alaska.**

REPUBLIC SERVICES®

Sustainability in Action

# Thermal Treatment Solutions

**The 2026 DoW Updated Interim Guidance on Destruction or Disposal of Materials Containing Per- and Polyfluoroalkyl Substances in the United States identifies Thermal Desorption Units (TDU) as one of the commercially available options for managing PFAS-contaminated materials.**

We provide customers a compliant, environmentally safe and cost-effective solution for treating and disposing of materials contaminated with PFAS, petroleum or oil and lubricants through our permitted Thermal Desorption Unit in Moose Creek, Alaska. This unit is designed to treat contaminated soils through controlled heating, gas collection and thermal oxidation. Once certified clean, soil can be used for compactable fill in a variety of applications.

## Thermal Treatment Equipment

Republic Services uses a proven high temperature thermal oxidizer that consistently remediates any level of hydrocarbon contamination, all while accomplishing superior clean up levels with a wet scrubber that assures air quality levels nearly five times cleaner than stringent Alaskan Department of Environmental Conservation (ADEC) regulations. Our thermal soil remediation returns clean soil available for reuse or resell.

## Lined Storage and Treatment Areas

With approximately two acres of lined storage and treatment areas, contaminated material is stored on site, placed on a membrane liner and, in accordance with ADEC guidelines for thermal soil treatment is covered until treated.

## Our Capabilities

Our Thermal Treatment technology accepts several types of non-hazardous waste, including:

- Non-hazardous petroleum
- PFAS/PFOA contaminated soil and sediment
- Treatable granular media

## Why Republic Services?

- ✓ Reduce risk/environmental impact
- ✓ Off-gas capture, thermal oxidation, and wet scrubber systems for complete HF emissions control
- ✓ OTM 45–compliant air emissions testing, verified using EPA's most current PFAS stack testing methodology
- ✓ Returns soil 5x cleaner than ADEC (Alaska Department of Environmental Conservation) regulations

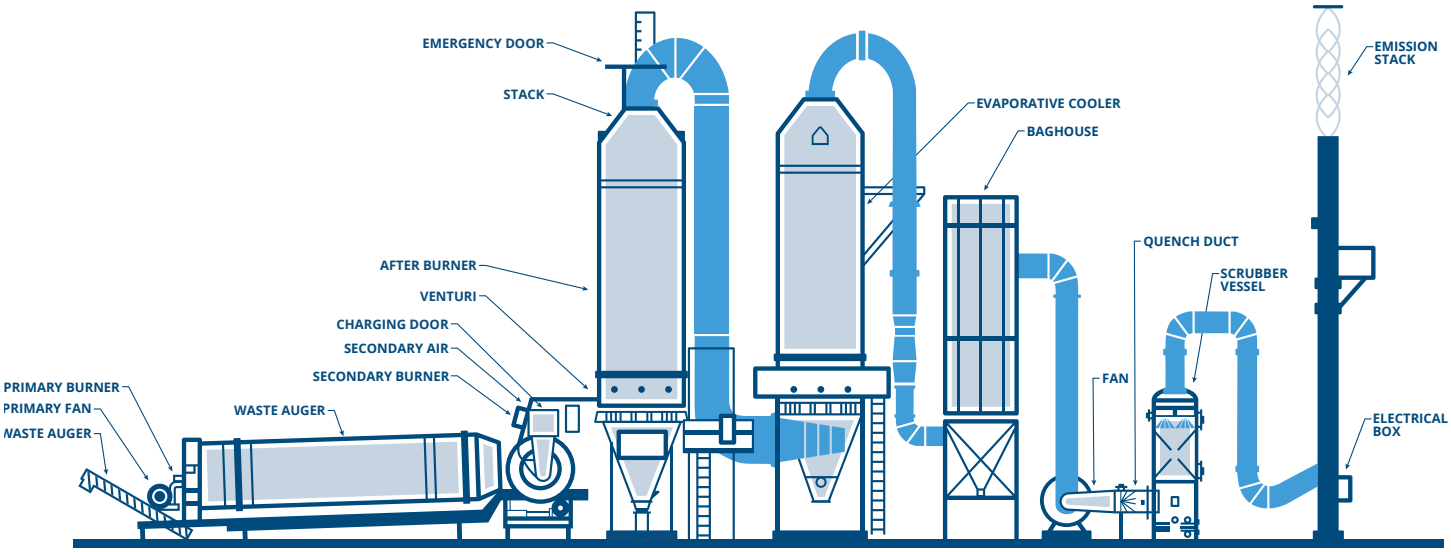

# The Thermal Treatment Process

1. Ensure materials are non-RCRA or RCRA exempt
2. Inject contaminated soil into a kiln
3. Heat the soil to 800-1200°F
4. Draw gas vapors and particulates into secondary combustion chamber to destroy PFAS compounds with 1500-2000°F temperatures
5. In the cooling tower, spray gases and particulates with water to cool to 350°F
6. Cool exhaust gases in quench duct before they enter scrubber
7. Neutralize exhaust gases using caustic solution
8. Exhaust gases through a stack on top of scrubber

## Our Thermal Facilities

### Alaska, Moose Creek Facility

- High temperature thermal oxidizer
- Remediates any level of hydrocarbon contamination
- Superior cleanup with wet scrubber
- Assures air quality is 5x cleaner than stringent state regulations



Visit RepublicServices.com or call 800.592.5489 for more information, or contact your Sales Representative.

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