

Radioactive Waste Disposal: Prohibited in Oregon

Radioactive waste disposal is prohibited in Oregon, as outlined in Revised Statute 469.525 and Oregon Administrative Rule 345 Division 50. The Oregon Department of Energy Nuclear Safety and Emergency Preparedness Division is responsible for determining whether a suspect waste material meets the state-specific definition of “radioactive waste.”

Did you know? There are many wastes containing Naturally Occurring Radioactive Materials (NORM) and Technologically Enhanced NORM (TENORM) that may qualify as radioactive waste — and therefore may not be disposed of in Oregon.

Natural radioactivity is present in trace amounts in the earth’s crust and waters. Many industrial processes that utilize or come in contact with natural raw materials, such as water, soils, rock, or sand, may generate TENORM. In high enough concentrations, the resulting wastes that contain NORM or TENORM can present health and safety hazards to humans and the environment if they are not handled and disposed of properly.

Wastes containing NORM or TENORM may include refractory brick materials used in industrial settings, some byproduct materials from metals refining, pipe scale from drilling or water treatment, or sludges and filtration wastes from the oil and gas industry. Oil and gas TENORM wastes have been a particular concern in recent years because their volume has been increasing, they have been difficult to dispose in their originating states, and some businesses may be looking for opportunities to export these wastes to other states such as Oregon.

Landfill Operators Have a Responsibility to be Vigilant

We are asking landfill operators in Oregon to be aware of these wastes and to familiarize yourselves with the Oregon regulations concerning the disposal of radioactive materials. If a generator is seeking to dispose of wastes that you suspect may be radioactive wastes (TENORM or otherwise), operators should contact us and direct generators to consult the Oregon Department of Energy Nuclear Safety and Emergency Preparedness Division to verify whether a specific waste is legal to dispose in the state.

Repercussions from violating the state prohibition on radioactive waste disposal can be severe.

TENORM waste generation is commonly associated with specific industries and practices. Examples include conventional uranium mining and mining overburden, phosphate waste, coal waste, petroleum production scale and sludge, drinking water treatment sludge, mineral mining/overburden and processing/extraction, mineral processors, and geothermal wastes. In high enough concentrations, both NORM and TENORM wastes have the potential to adversely affect human health and the environment through ingestion, inhalation, direct exposure, or radon emanation. OAR 345-050 contains the criteria by which NORM and TENORM wastes would be defined as “radioactive waste” prohibited from disposal in Oregon.