



## Columbia Ridge Landfill & Green Energy Plant

Columbia Ridge Landfill provides safe and professional disposal services for communities, businesses and industries primarily from Oregon and Washington. Located in north central Oregon, the site provides convenient truck access from Portland and rail access from Seattle. In addition, the site's dry climate and unique geology support superior environmental performance, while the rural locale allows for a 10,000-acre buffer managed for agriculture and wildlife. Columbia Ridge is also a platform for wind power and green technologies that use waste to generate renewable energy and clean fuels.

Columbia Ridge is a modern Subtitle D landfill that accepts primarily municipal solid waste (MSW or household waste) as well as industrial and special wastes. It is engineered with overlapping environmental protection systems that meet or exceed rigorous state and federal regulations and are subject to highly regulated monitoring and reporting requirements. Columbia Ridge uses sophisticated monitoring protocols to verify that its environmental protection systems are operating properly. Monitoring data gathered by company and independent professionals is submitted to the Oregon Department of Environmental Quality (DEQ) and the US Environmental Protection Agency.

### Containment Design

Columbia Ridge has a multi-layer composite liner system that includes an engineered clay barrier and a 60-mil high-density polyethylene (HDPE) membrane to ensure that waste and wastewater (leachate) are contained and isolated from soil and groundwater.

### Groundwater Monitoring

The site's geology and hydrogeology provide unique natural protections because the groundwater is approximately 200-feet deep and separated from the waste by low permeability soils. Groundwater is monitored at seven wells, both upgradient and downgradient of the waste disposal footprint.

### Landfill Gas Management

Columbia Ridge manages landfill gas to generate renewable energy, reduce emissions, and prevent odor. The system collects 5,400 cubic feet per minute of landfill gas through more than 84 wells. A portion of the gas is sent to an on-site energy plant, with the remaining gas managed by flares per federal requirements.

### Leachate Collection & Treatment

The leachate collection and treatment system consists of a highly permeable gravel drainage layer covering the entire landfill base, with perforated pipes at low points to collect and route leachate to a double composite lined evaporation pond. It also includes a recirculation process that pumps leachate from the pond back in to the landfill, to accelerate waste decomposition and enhance landfill gas production.

#### WASTE MANAGEMENT COLUMBIA RIDGE LANDFILL

18177 Cedar Springs Lane  
Arlington, OR 97812

[www.wmnorthwest.com/landfill](http://www.wmnorthwest.com/landfill)

#### HOURS OF OPERATION

6:00am – 4:30pm  
Monday – Friday

#### YEAR OPENED

1990

#### PROJECTED LIFE REMAINING

143 years

#### FACILITY ACREAGE

12,000 acres

#### PERMITTED FOOTPRINT

700 acres

#### REMAINING PERMITTED CAPACITY

329 million tons

#### TONS PROCESSED ANNUALLY

2 million tons

#### OWNERSHIP

Waste Management Disposal Services  
of Oregon

#### PERMIT TYPE & PERMIT #

DEQ Solid Waste Permit #391

#### NUMBER OF EMPLOYEES

70

## Acceptable Material

Abrasive Blast Media  
Agricultural Wastes  
Animal Carcasses  
Asbestos-Containing Material (Friable & Non Friable)  
Auto Shredder Residue  
Biosolids  
Construction & Demolition (C&D) Debris  
CERCLA Wastes  
Dredged Wet Sediments

Filter Cake  
Incinerator Ash  
Industrial & Special Wastes  
Medical Waste (Treated)  
Municipal Solid Waste (MSW)  
Petroleum Contaminated Soil  
Sludge  
Treated Wood

## Unacceptable Material

Appliances  
Batteries  
Discarded Vehicles  
Hazardous Wastes

Loose Sharps  
Tires  
Used Oil

## Additional Services Provided

Electronic Waste Recycling  
Household Recycling Drop-off  
On-site Rail Spur

Transportation Services  
White Goods Recycling

## Renewable Energy

- The energy plant at Columbia Ridge uses landfill gas to generate renewable energy as part of Waste Management's increasing focus on extracting value from waste. Gas collected from the landfill powers 12 engines which produce 12.8 MW of electricity. The electricity currently powers 12,500 homes in Seattle through an agreement with the City of Seattle.
- In addition, Columbia Ridge is home to more than 90 wind turbines with the capacity to generate 150 MW.

## Community Partnerships and Involvement

Columbia Ridge is proud to be an active supporter of community events and programs that make Gilliam County a strong and healthy place to live, work and play.



### CONTACT

#### Technical Support

TSC Portland  
800 685 8001 or 800 963 4776  
TSCPortland@wm.com

### COMMUNITY RELATIONS

#### Jackie Lang

503 493 7848 or jjlang@wm.com

### COMMUNITIES SERVED

Oregon  
Washington  
Idaho  
Alaska  
Canada