



# Columbia Ridge Landfill and Green Energy Plant

Columbia Ridge 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 and rail access. The site’s dry climate and unique geology support superior environmental performance, while the rural locale allows for a 10,000-acre buffer sustainably managed for agriculture and wildlife. Columbia Ridge is also a platform for wind power and green technologies that use waste to generate renewable energy.

Columbia Ridge is a modern Subtitle D landfill that accepts primarily municipal solid waste (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 the site’s environmental protection systems are operating properly. Monitoring data gathered by company and independent professionals is submitted to the Oregon Department of Environmental Quality 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 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.

### COLUMBIA RIDGE LANDFILL

18177 Cedar Springs Lane  
Arlington, OR 97812

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

### HOURS OF OPERATION

Monday – Friday, 6 am – 3:30 pm

### YEAR OPENED

1990

### PROJECTED LIFE REMAINING

120 years

### FACILITY ACREAGE

12,000 acres

### PERMITTED FOOTPRINT

700 acres

### REMAINING PERMITTED CAPACITY

320 million tons

### TONS PROCESSED ANNUALLY

2.8 million in 2021

### OWNERSHIP

Waste Management Disposal Services of Oregon

### PERMIT TYPE AND PERMIT #

DEQ Solid Waste Permit #391

### EMPLOYEES

140



## Landfill Gas Management

Columbia Ridge manages landfill gas to generate renewable energy, reduce emissions, and prevent odor. The system collects 9,400 cubic feet per minute of landfill gas through more than more than 100 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 and 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 into the landfill, to accelerate waste decomposition and enhance landfill gas production.

## Acceptable Material

Abrasive blast media	Construction and demolition (C&D) debris
Agricultural wastes	CERCLA wastes
Animal carcasses	Dredged wet sediments
Asbestos-containing material (friable and non friable)	Filter cake
Auto shredder residue	Incinerator ash
Biosolids	Industrial and special wastes
	Medical waste (treated)
	Treated wood

## Unacceptable Material

Appliances	Hazardous wastes
Batteries	Loose sharps
Discarded vehicles	Tires
Hazardous wastes	Used oil

## Additional Services

Electronic waste recycling	Transportation services
Household recycling drop-off	White goods recycling
	On-site rail spur

## Renewable Energy

The energy plant at Columbia Ridge uses landfill gas to generate renewable energy as part of WM's increasing focus on extracting value from waste. Gas collected from the landfill powers 12 engines to produce 12.8 megawatts of electricity—enough to power 12,500 homes in Seattle through an agreement with the City of Seattle.

In addition, Columbia Ridge is home to 92 wind turbines with the capacity to generate more than 150 megawatts.

## CONTACT

Technical Support  
TSC Portland  
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TSCwestern@wm.com

## COMMUNITY RELATIONS

Jackie Lang  
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## COMMUNITIES SERVED

Oregon  
Washington  
Idaho  
Alaska  
Canada



## Community Partnerships

Columbia Ridge is proud to be a valued community partner in ways that are visible in every direction across the Gilliam County landscape:

- » **Family-wage Jobs:** Columbia Ridge provides 140 family-wage jobs with full benefits, training and development opportunities.
- » **Infrastructure and Economic Development:** Columbia Ridge pays Gilliam County an annual host fee to support essential public sector services, capital improvements and economic development. WM voluntarily initiated the host fee agreement in 1990 as a demonstration of community partnership. In 2021, WM paid Gilliam County \$5.2 million in host fees.
- » **Community Donations:** WM donates generously to support youth and community vitality across Gilliam County. WM's contributions totaled more than \$50,000 — largely to support the chambers of commerce in Arlington and Condon, the Gilliam County Fair, the WM Community Partnership Scholarship Program (college scholarships for local students).

