



## THORHILD LANDFILL

61308 Hwy 63  
Newbrook, AB T0A 2P0  
587.735.0462

## BUSINESS HOURS

**Monday - Friday:**  
7:00am – 6:00pm

**Saturday:**  
8:00am – 2:00pm

**Holidays:**  
8:00am - 2:00pm

# Thorhild Landfill

WM of Canada's disposal facilities employ the latest advances in landfill technology. Thorhild Landfill provides safe and convenient disposal services for communities, businesses and industries serving central and northern Alberta. This regional facility is engineered with environmental protection systems designed to meet or exceed rigorous government requirements.

Thorhild Landfill uses a three-legged stool for groundwater and environmental protection. First, the site is situated optimally on top of low permeability clay. Second, it leverages advanced landfill engineering designs and operations. Lastly, system performance is verified through a series of checks and balances, including environmental monitoring systems for surface and groundwater, to provide proof of environmental protection.

## Liner System

The landfill cells at the Facility are lined in accordance with AESRD approvals. These systems meet or exceed regulations for Class II landfills. The liner system for each cell consists of the following layers (top to bottom):

1. 2.0m Protective Material (select waste),
2. 0.3m Granular Leachate Collection Layer,
3. Geotextile cushion,
4. Geomembrane Liner (60-mil HDPE),
5. Geocomposite,
6. Geomembrane Liner (60-mil HDPE),
7. 0.6m Compacted Clay, and
8. Prepared Subgrade.

## Leachate Collection & Conveyance

The Leachate Collection and Removal System is composed of a highly permeable gravel drainage layer covering the entire landfill base. Currently, there leachate collection sumps with an automated electronic monitoring system which transmits real-time liquid levels to both on and offsite staff. More will be installed as the landfill cells are developed. Leachate is collected and managed in a double-lined evaporation pond.

## Environmental Monitoring

The groundwater monitoring program for Thorhild Landfill is based on the requirements of both the Standards for Landfills in Alberta (AENV, 2010) and the Environmental Protection and Enhancement Act Approval No. 23628-00-00. The monitoring program provides baseline information on groundwater quality. Baseline monitoring will occur for the first four years of operation, and once every third year, thereafter. Detection monitoring will occur once a baseline has been established, continuing through operations and into the post-closure period. Both baseline and detection monitoring will be completed on a semi-annual basis.

The groundwater monitoring network will be developed on a progressive basis concurrent with landfill development. The initial well network includes nine monitoring locations

**YEAR OPENED**  
2015

**PROJECTED LIFE REMANING**  
70+ years

**FACILITY ACREAGE**  
454 hectares

**PERMITTED FOOTPRINT**  
85 hectares

**REMAINING PERMITTED CAPACITY**  
23 million m<sup>3</sup>

**TONS PROCESSED ANNUALLY**  
200,000 – 400,000 +/-

**OWNERSHIP**  
WM of Canada

**PERMIT TYPE & PERMIT #**  
Province of Alberta EPEA  
236328-00-00 (Provincial Operations Approval) & Ministerial Order  
29/2013  
(Appeal No. 11-025 et al.)

Province of Alberta WA  
0266612-00-00 (Provincial Approval under Water Act) County of Thorhild Development Permit for CLASS II Private Landfill and Wetland Restoration

County of Thorhild Development Permit  
for CLASS II Private Landfill and Wetland Restoration

**# OF SITE EMPLOYEES**  
16

established around the perimeter of the initial landfill cell.

Monitoring results are submitted to both Thorhild County and Alberta Environment.

## Security

Thorhild Landfill limits access to the facility, having both perimeter fencing and an electrified bear fence. The facility can only be accessed via a single gate, which directs all traffic to a gatehouse occupied during business hours by trained personnel. During non-business hours, the gate is locked and monitored by electronic surveillance.

## Acceptable Materials

Asbestos (Friable & Non-Friable)	Municipal Waste Incinerator Ash/
Residues	
Ash	Off-Spec Products
Auto Shredder Fluff	Process Waste*
Bottom Ash	Soils*
Construction & Demolition Debris	Special Waste
Dead Animals, Animal Parts, Meat & Bone Meal	Wastewater Sludge
Exploration & Production Wastes*	Yard Waste
Fly Ash	Other: Oil Field Waste*
Industrial Waste*	Other: Treated Biomedical Waste
Municipal Solid Waste (MSW)	

## Unacceptable Materials

Bulk Liquid Wastes	Hazardous Waste	Soils Containing Clubroot
Dangerous Oilfield Waste (DOW)	Household Hazardous Waste	Radioactive Wastes
Domestic Wastewater	Ozone-Depleting Substances	
Explosives	Untreated Biomedical Wastes	

## Future Services

Rail Service	Solidification
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## Approval Process

WM has a defined waste screening protocol for each of its non-hazardous waste facilities, which protects employees and the environment. For industrial and special waste streams, the generator or agent must complete a waste profile for review by our technical staff. Waste profiles can be completed online at [WMSolutions.com](http://WMSolutions.com).

## Recycling Services

Metals	White Goods	Wood
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## Risk Mitigation

WM provides the highest level of services, backed with state-of-the-art site design and management systems to minimize potential risks and reduce liabilities.

## Community Partnerships & Involvement

WM of Canada is proud to lend our support to the communities where we conduct business. Since 2006, WM introduced a Community Investment Fund to Thorhild County and has provided more than \$900K in community investment funding to important local projects within the County of Thorhild. WM is committed to continuous annual support of the County's non-profit organizations and being a valued community partner and environmental steward.



## CONTACT

### Sales

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### Technical Support

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### Landfill

Scalehouse  
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## Community & Media Relations

Solomiya Lyaskovska  
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## COMMUNITIES SERVED

Central and Northern Alberta  
Thorhild County  
City of Edmonton