

Applicant Submission

Received 2023 April 26



2023-March-07

Company: Alberta Waste and Recycling Ltd.
Applicant: Dan Zembal

Re: Applicant's Submission

Alberta Waste and Recycling Ltd. (AWR) was granted a Development Permit (DP) in 2017 for Recyclable Construction Material Collection Depot (temporary), section 274.1 of The City of Calgary Land Use Bylaw 1P2007 (LUB), at the address 14010 52 Street NE (the property). AWR has operated a construction material collection business at the property continuously since being awarded the DP. The property is currently designated Special Purpose – Future Urban Development (S-FUD) land use.

Revision 44P2022 to LUB have rendered the current operations of the site ineligible for the same Development Permit type previously awarded, as a definition of waste was added which determines a mixed stockpile of waste & recycling to be considered waste.

The operation of the site is such that loads of construction recyclables are delivered by trucks from nearby construction sites, such as residential homes. Material is then inspected, sorted, and cleaned in preparation for delivery to a recycling facility. By the nature of the truck deliveries, some defined waste does enter the site mixed in with the loads of recyclable materials. While section 274.1 allows for recyclables to be stored uncovered, that allowance does not extend to waste and the requirements of an S-FUD land use designation stipulate that waste must be stored indoors or in an approved container.

It would not be practical for the business to erect a building large enough to contain the entire mixed waste pile on site to meet the was storage requirements of an S-FUD land use. The use of outdoor piles is essential to allow for operation of equipment and movement of recyclable & waste materials on site.

Given the constraints created by the revised LUB, it is determined that a Land Use Redesignation is required to allow continued operation of the on-site business. It is proposed to designate a Direct Control district which uses S-FUD as the basis but allows the *use of Waste Storage Site*, as defined in section 332.1 of the LUB. This will allow waste to be stored in piles, thus removing the requirement to erect a large building on site.

A site Operations Plan is attached to this letter, outlining further details of the business.

Sincerely,

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August 19, 2022

North Calgary Resource Recovery Depot

Operations Plan

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Environmentally Sustainable Recycling Solutions



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Table of Contents

1. Resource Recovery Depots - Recycling Construction Materials	2
2. Facility Design	3
3. Operations Plan	3
a. Access and Security	3
b. Product Acceptance Procedures	4
c. Site Controls	4
d. Contingency Plan for Handling Unwanted Hazardous Materials	5
e. Fire Prevention	5
f. Record Keeping	5
4. Emergency Contacts	5
5. Site Plan	5



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1.0 Resource Recovery Depots - Recycling Construction Materials

Alberta Waste and Recycling Limited has successfully developed and implemented a proven business model that delivers innovative, practical and environmentally sustainable waste management solutions. The company develops and provides waste management and recycling services to developers, contractors, builders & waste haulers.

In spring 2008, Alberta Waste and Recycling (AWR) opened its first Resource Recovery Depot for managing sorted construction recyclables. Our Airdrie Recycling Depot has been recycling wood, drywall, asphalt shingles, concrete and asphalt since 2008. In 2010, AWR opened a second Recycling Depot in northeast Calgary. The Redstone Recycling Depot accepted and recycled sorted construction waste including wood, drywall and asphalt shingles. The Redstone Recycling Depot was closed in the fall of 2011 and replaced by a third Resource Recovery Depot (Sage Hill) which opened in northwest Calgary in 2012. The Sage Hill Facility closed in the fall of 2012 and was relocated to nearby Evansland and reopened in 2013. Our fourth Resource Recovery Depot (Pine Creek – South Calgary) opened in 2012 to service builders in south Calgary. The Evansland and Pine Creek facilities operated as full construction waste sorting facilities. In the summer of 2017, the North Calgary Resource Recovery Depot replaced the former Evansland site in north Calgary.

Alberta Waste and Recycling currently operates two types of construction waste recycling facilities. The first type of resource recovery depot accepts “sorted” construction waste: wood; drywall; asphalt shingles and concrete/asphalt. Materials accepted at these facilities must be sorted into individual materials by load; mixed loads are not accepted. These “sorted” recycling depots are achieving over 97% waste diversion. The second type of resource recovery depot accepts all mixed construction waste and sorts the material. Mixed construction waste recycling depots typically achieve 50% waste diversion. Mixed construction waste recycling depots also accept sorted loads of wood, drywall, and asphalt shingles. Mixed construction waste recycling facilities sort out a variety of recyclables including: wood; drywall; asphalt shingles; cardboard; and metal. Non-recyclable material (residual) is loaded onto trucks and hauled to landfill for disposal.

In Calgary, construction waste recycling depots operate under the City of Calgary’s “Recyclable Construction Material Collection Depot (temporary)” designation. Resource Recovery Depots are strategically located at or close to new developments or residential subdivisions where significant quantities of construction waste are produced and which can be recycled. Locating these facilities as close as possible to developing areas further enhances the environmental benefits by minimizing hauling distances for trucks, thereby saving time, money and reducing harmful emissions.



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2. Facility Design

While the layout of each of Alberta Waste and Recycling's Resource Recovery Depots varies depending on the site shape, size and location; the overall facility design is functionally similar across all sites. All sites are gated with a perimeter fence, screening and earth berm. Entrance roads lead to a truck scale where all incoming and outgoing loads are weighed. Sorted loads are directed to a "sorted" material storage area and "mixed" loads are unloaded at the "mixed" construction waste storage area. Sorted material is inspected, mechanically and manually "cleaned", stockpiled and then loaded into trucks for delivery to a recycler for further processing. Mixed construction material is mechanically and manually sorted; and, the material is placed in the appropriate containment bunker. Sorted recyclable materials include wood, cardboard and metal. Material that is non-conforming or unable to be recycled is placed into a "non-recyclable" material containment area. The non-recyclable material is sent to landfill for disposal. Material containment piles are stockpiled up to a maximum 5 metre height.

All sites are sloped for surface water drainage into a dry pond/containment area designed to contain surface runoff.

3. Operations Plan – Evansland Resource Recovery Depot

The North Calgary Resource Recovery Depot is located at 14010 52 Street NE, Calgary. The 5.0 acre site is situated on land owned by Walton Developments.

a) Access and Security

The site is contained by 2 metre high earth berm on all sides. A 2.4 metre wood fence runs across the front (west side) and the north side of the site. A 2.4 metre chain link fence with screening and with an additional 1.3 litter control netting on top runs along the east and south side of the site. The facility is accessed off Metis Trail (paved) onto 144 Avenue (gravel) and then on 52 street (gravel) with 52 street entrances at the NW and SW corners of the site. Trucks enter through the entrance gate and stop at the scale and report to the scale attendant. Facility operating hours are 7:00 am – 4:30 pm Monday to Friday.

The gates are locked during non-operating hours and customers are not allowed access during non-operating hours. The sign at the site entrance lists the site name; company name and phone number; hours of operation and accepted materials.



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b) Product Acceptance Procedures

Trucks are weighed at the scale office. Drivers inform the scale attendant as to the type of material they are bringing on to the site. Acceptable material includes:

- Mixed construction waste
- Drywall
- Wood

The driver is then directed to proceed to one of the four unloading areas. A site attendant inspects the incoming load at the unloading area to determine if the load conforms to the accepted material list. Loads that are deemed conforming are unloaded into the appropriate material containment bunker for processing.

Accepted drywall is manually "cleaned" of any debris (typically pieces of plastic, insulation and mud pails), then pushed into a drywall stockpile. Cleaned drywall material is loaded into trucks and transported to a drywall processing facility.

Accepted wood is manually "cleaned" of any debris (typically pieces of plastic, metal and cardboard), then pushed into a wood stockpile. Cleaned wood material is processed and then loaded and transported to the end user.

Mixed construction waste is unloaded in the sorting area and the material is mechanically and manually sorted into recyclables and non-recyclables. Recyclable material collected at the sorting station is loaded into the appropriate bin or containment area and then removed from the site for further processing.

Non-recyclable material collected during the "cleaning" process and at the sorting area is placed into a "garbage" containment area and transferred to landfill.

c) Site Controls

The earth berm built around the site serves four main purposes: site security; visual barrier; surface water run-off on-site containment; and, litter control. A natural tree windbreak along the south side; and, a litter control fence around the perimeter of the site adds further litter control.

Additional control measures include:

- Daily litter pick-up on-site and surrounding/adjacent areas.
- On-going communication with neighbours and permission to collect errant wind blown debris that might escape the site during sudden major wind events.
- Adapting schedules to changing extreme weather conditions



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d) Contingency Plan for Handling Unwanted Hazardous Materials

Occasionally construction waste loads may contain unwanted hazardous materials such as paint, automotive and equipment batteries, propane tanks, etc.. All loads are inspected at the unloading area. All identified hazardous materials are placed in an appropriate secondary containment for removal from the site. Hazardous materials are removed from the site and taken to appropriate local facilities for disposal or recycling.

e) Fire Prevention

Equipment on site is equipped with fire extinguishers. Staff are instructed in the location and use of fire extinguishers. The City of Calgary Fire Department is notified and views the site. Traffic lanes in and out of the facility have been designed to allow ample access for emergency vehicles into and around the perimeter of the site.

f) Record Keeping

All construction waste loads coming into the site are weighed on the truck scale. A copy of the sequentially numbered scale ticket is provided to the waste hauler. Original scale tickets are kept in the scale house and submitted to the head office on a weekly basis for review and storage. The daily summary sheet of all material and loads coming into the site and of all material and loads leaving the site is completed at the end of each operating day. This daily information is then summarized monthly and annually.

4.0 Emergency Contacts

- Main Contact – Michele Patrosh, General Manager
- Operations Manager – Miro Kastmiller
- Fire – 911
- Other Emergency – 911

5.0 Site Plan

See attached Site Plan