

# STANDARDS FOR TRANSFER STATIONS IN MANITOBA

## DEPARTMENT OF SUSTAINABLE DEVELOPMENT

2016

### FORWARD

The Government of Manitoba has developed this document and it is intended to outline minimum requirements for basic siting, design, operation, monitoring, planning, closure and post closure activities for new and existing Solid Waste Transfer Stations.

This document replaces the draft guideline "Manitoba Guidelines for Solid Waste Transfer Stations", published by KGS Group for Manitoba Conservation, June, 2001.

#### Comments or inquiries regarding this document may be directed to:

Manitoba Sustainable Development Environmental Stewardship Division Environmental Approvals Branch General Inquiry Line: 1 (204) 945-8321 http://www.gov.mb.ca/conservation/eal/index.html

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### DEFINITIONS

**"Access Road"** means a road that leads from a Provincial Trunk Highway, Provincial Road, or a municipal road onto a site.

"Act" means The Environment Act.

"**Approved**" means approved by the Director or designated Environment Officer in writing.

"Berm" means an embankment or ridge that forms a barrier.

**"Building"** means a structure used for residential or business purposes, other than a building used in the operation or maintenance of a waste management facility.

**"Buffer"** means a strip of land that is managed to reduce or eliminate the impacts of land use practices on sensitive areas or natural features.

"Bulky Metallic Waste" means large metallic waste that can be recycled or reused, such as motor vehicles, farm and industrial machinery, large appliances and sheet metal.

"Cell" means an area of a landfill in which solid waste has been, or is to be, deposited.

"**Certified Technician**" means an individual who is qualified and authorized for the removal, discharge, handling and disposal of refrigerants that contain ozone depleting substances and other hydrocarbons.

"Closure Plan" means a plan indicating the actions to be taken for the closure of the transfer station, or a portion of the transfer station.

"Compost" means solid mature product resulting from composting.

**"Composting"** means a managed process of bio-oxidation of a solid heterogeneous organic substrate including a thermophilic phase.

**"Contaminant"** means a contaminant as defined in *The Dangerous Goods Handling and Transportation Act.* 

"Director" means an employee so designated pursuant to The Environment Act.

**"Environment Officer"** means an employee so designated pursuant to *The Environment Act*.

"Final Cover" means earth compacted to a thickness of at least 0.5 metre applied to

the surface of the compacted waste cell that has achieved the final elevation for cell closure, and is graded to minimize ponding of water on the surface.

"Groundwater" means water under the surface of the ground, whether in liquid or solid form.

"Hazardous Waste" means a product, substance or organism as defined in *The Dangerous Goods Handling and Transportation Act*, or any amendments thereto.

"Landfill" means a facility at which solid waste is disposed of by placing it on or in land.

"Landfill Gas" means a mixture of gases generated by the microbial decomposition and chemical reactions between wastes in a landfill.

**"Leachate"** means liquid that has percolated though solid waste and contains dissolved and/or suspended materials from the solid waste.

"Licence" means a licence issued under the Act.

"Liquid Waste" means waste that has a slump of more than 150 mm using the Canadian Standards Association Slump Test Method A23.2-5C.

**"Monitoring Well"** means a well drilled to measure groundwater levels and collect groundwater samples for analysis to determine the concentration of groundwater constituents.

"Pollutant" means a pollutant as defined in *The Environment Act*.

"**Operator**", in relation to a waste management facility, means the holder of a licence or permit issued in respect of the waste management facility.

**"Permit"** means a permit issued under section 5 under the Waste Management Facilities Regulation.

"Qualified Professional" means an individual properly trained and authorized to practice in a specific area or field which may include assessment, design, or providing consultation for an aspect of the transfer station; to include but not be limited to Professional Engineers, Geoscientists or Landscape Architects.

"Site" means the area both permanent and temporary which is required for the construction and operation of the transfer station.

"Solid Waste" means any waste in solid form, including dead animals.

"Surface Water" means any naturally or artificially created body of flowing or standing water that is above the surface of land.

**"Transfer Station"** means a facility at which solid waste is received and temporarily stored for the purpose of transporting it to another site for processing, recycling, or disposal.

"Waste Disposal Ground" means a parcel of land that is used for the disposal of solid or industrial waste, also referred to as a landfill.

**"Waste Management Facility"** means a landfill, a composting facility, a transfer station, a material recovery facility, or a remote seasonal waste facility.

#### **1.0 REGULATORY REQUIREMENTS**

Solid waste management and disposal in Manitoba is regulated under the Waste Management Facilities Regulation (MR 37/2016) (the Regulation) under *The Environment Act* (C.C.S.M. c. E 125) (the Act). The most up to date version of the Regulation and the Act can be found on the Manitoba Laws <u>website</u>. The regulation is organized as follows:

- Part 1: Interpretation
- Part 2: Licences and Permits for Waste Management Facilities
- Part 3: Waste Management Facility Operating Requirements
- Part 4: Closure Requirements
- Part 5: Miscellaneous
- Part 6: Transitional and Repeal
- Schedule A: Waste Management Facility Permit Application
- Schedule B: Landfill Requirements
- Schedule C: Transfer Station Requirements
- Schedule D: Composting Facility Requirements
- Schedule E: Material Recovery Facility Requirements
- Schedule F: Remote Seasonable Waste Facility Requirements

#### 2.0 APPROVAL PROCESS

Prior to constructing, modifying, or operating a Solid Waste Transfer Station (transfer station), an appropriate approval must be obtained. The following subsections provide basic information and guidance about the approval process.

#### 2.1 Permits

A Transfer Station Permit is required for a facility that accepts municipal solid waste and temporarily collects and stores or combines the waste until it is transported to a landfill for disposal. Many transfer stations also collect, and possibly segregate and temporarily store other recyclable materials such as tires, paper, cardboard, metals, e-waste, etc.

If the transfer station collects any types of hazardous waste (batteries, used oil or filters, paint, agricultural pesticides containers, etc.) authorization may be required under *The Dangerous Goods Handling and Transportation Act* and its associated regulations. Please contact Manitoba Sustainable Development staff for additional information.

If the transfer station is limited to only a waste bin (i.e. a dumpster), it is not considered a transfer station by the Department, and no Permit is required. If an Operator requires additional information or clarification on whether the facility is deemed to be a transfer station, the operator can contact Manitoba Sustainable Development staff.

#### 2.2 Permit Application and Renewal

Operators are required to apply for a Transfer Station Permit by completing and submitting the Permit application form approved by the Director, including the information set out in Schedule A of the Regulation.

The Director has the authority to, and may require the applicant to provide additional information considered necessary to assess the application. The Director may also issue a Permit that imposes terms and conditions considered necessary to protect human health and the environment, or refuse to issue a Permit if it is evident that the facility will have a negative impact on human health or the environment. Refusals will be communicated to the proponent within 30 days of the decision, in writing, with reasons for the refusal.

Permit renewals are required every 5 years under the Regulation. Renewal forms are available online on the Manitoba Sustainable Development Solid Waste Program website. All renewal applications must be submitted to the Director at a minimum 90 days prior to the expiration of the current Permit.

#### 2.3 Permits Under Former Regulation

Permits issued under the former Waste Disposal Grounds Regulation are required to be renewed under the current Waste Management Facilities Regulation and will remain in effect until a new Permit is issued.

Note that the amount of solid waste received in a year will determine when the Permit renewal is required for those facilities that currently have Permits <u>without expiry dates</u>. Any existing transfer stations that have an expiry date indicated on the Permit will be required to renew a minimum of 90 days prior to the expiry date listed on the Permit.

All Permit renewals will occur as outlined in Table 1 below:

Tonnage Accumulation	Permit Renewal Timeline
Accepts between 1,001 - 5,000 tonnes in a year	2 years
Accepts between 501 tonnes - 1,000 tonnes in a year	3 years
Accepts between 0 - 500 tonnes in a year	4 years

#### Table 1– Permit Renewal Timeline

The transfer station is subject to the terms and conditions in its Permit. The Permit may also be suspended, revoked, or amended in accordance with the Waste Management Facilities Regulation.

#### 2.4 Conversion from a Landfill to a Transfer Station

When a landfill no longer meets the requirements to operate as a landfill, or the landfill has reached capacity, the facility is required to submit a landfill site closure and apply for a Transfer Station Permit in order to continue to operate. The process to obtain a Permit is outlined in the Waste Management Facilities Regulation.

#### **3.0 SITING CRITERIA**

The following section provides basic information and guidance on acceptable siting for a transfer station in Manitoba and applicable siting requirements.

There are several items that should be considered prior to siting a transfer station, such as:

- social issues (service locations, traffic, noise, surrounding land use, population location, etc.);
- the environment of the site and surrounding area (site drainage, sensitive areas, prevailing winds, etc.);
- site economics (cost of land, cost to build/service, transportation costs hauling to/away, etc.); and
- regulatory requirements.

#### 3.1 Setback Requirements

A setback requirement (setback) is the minimum distance required between the site and a specific feature that may be impacted by the operation of the transfer station. The setbacks specified in the Waste Management Facilities Regulation are provided in Table 2, below.

Upon written request from the proponent a variance with or without conditions, may be issued with regard to the setback requirements of a particular transfer station. Variances will only be considered if no suitable location alternatives are available, and the variance does not result in unacceptable degradation of the environment.

Established facilities that are operating in non-compliance with the required setbacks will be evaluated on a site by site basis during the Permit renewal and review process to determine if any environmental concern exists or additional protection is required.

#### Table 2 – Setback Requirements for Transfer Stations

DEVELOPMENT OR FEATURE	SETBACK	REFERENCE
Potable water well	30 metres	Waste Management Facilities
		Regulation 37/2016
Building	30 metres	Waste Management Facilities
-		Regulation 37/2016
Surface water	30 metres	Waste Management Facilities
		Regulation 37/2016

#### 3.2 Site Investigation

A detailed geotechnical investigation is not required for the construction of a transfer station; however the soils should be evaluated to ensure the base is stable enough for its use. Vehicle access points and associated driving surfaces should be adequately compacted to bear the weight of heavy trucks, and storage locations of materials or containers should be adequately stable to bear the weight of full material bins. This is especially important for those on or near a closed waste disposal ground cell.

Depth to groundwater should also be noted on the application, and if there are any locations where bedrock reaches the surface.

#### 4.0 TRANSFER STATION DESIGN AND CONSTRUCTION

The following subsections provide and summarize information required for transfer station design and construction in Manitoba. Note that transfer station construction must occur in accordance with plans approved by the Director: **Always refer to the Permit or Licence for additional or specific construction requirements.** 

#### 4.1 Qualified Professionals

Transfer stations have the potential to create long term negative impacts on the environment. Therefore, Manitoba requires that the design and construction of transfer stations must be overseen by qualified professionals who understand and can identify potential factors that may harm the environment, and can provide methods to reduce actual or potential harm and incorporate these methods into the design.

#### 4.2 Design

The layout of the transfer station must consider the types of materials that will be handled at the facility and the appropriate method of containment for the materials. Additionally, the type of waste collection system operating at the transfer station will influence the design decisions. Examples of waste collection systems that may be present at a transfer station may include, but not be limited to:

- a transfer station that accepts from a commercial collection system;
- urban collection systems that feed into the transfer station; or
- individuals hauling directly to the transfer station.

Transfer stations are required to provide containers that are leak proof, vector proof and provide a means of covering the waste materials. Several different options are available for Municipal Solid Waste (MSW) vessels at transfer stations, from roll off bins, to compaction units, to truck trailer units. A qualified professional may be able to assist in determining which type of unit would best suit the needs of the facility.

Design consideration is also required for the storage and handling of other materials at the transfer facility (eg. recycling, burn areas, tires, e-waste, hazardous wastes, etc.) which would have storage considerations, and may have additional registration or licensing requirements.

If composting is to occur at the facility, the base of the composting area must be designed so that runoff (leachate) from the composting activities do not penetrate into the soils and that the machinery used in the compost process do not damage the integrity of the surface. Other factors to consider when designing or developing a

composting facility at a transfer station is surface area for the operation, access to water to maintain moisture levels during composting, storage areas for curing compost and access in wet weather conditions for feedstock delivery and compost turning.

#### 4.3 Construction

The type of collection containers selected, along with the site layout and design, will dictate the construction effort needed at a site prior to its operation. Construction must take place in accordance with the plans approved by the Director, and any additional requirements that were included in the Permit.

Any new or expanding transfer stations must comply with the following:

- Submission of design plans for any construction. Level of detail and construction supervision is dependent upon site conditions.
- Notification to the assigned Environment Officer five days prior to proceeding with any **approved** construction or modification activity at the facility.
- Waste collection areas and material storage areas must be designed, constructed or fenced to retain loose garbage and materials in order to reduce windblown litter.
- No person shall bury or permanently dispose of any waste at a transfer station without written authorization by the Director.

In Manitoba, transfer stations are often developed at the location of former waste disposal grounds. When this occurs, the public is often familiar with the site and its former recyclable and other material drop off locations. In such instances the only construction effort required would be a new location for waste material collection.

Often a bunker wall or bin wall with a ramp is constructed at a transfer station so that residents who haul directly to the site may haul their waste up an access ramp to an elevation that allows easy access for dropping waste directly into the bin. In these instances the ramp and supporting wall should be designed by a qualified professional that understands soil properties and soil structure to ensure the safety of the public and the Operator.

#### 5.0 TRANSFER STATION OPERATION

#### 5.1 Operation Manual

Operators of transfer stations are required to maintain an Operation Manual that includes an Emergency Response Plan, waste acceptance procedures and policies, a site drawing, and process descriptions necessary for the safe and efficient operation of the facility. The Operation Manual must be reviewed and updated every 5 years and submitted to the Director upon request. The Operation Manual must also be accessible to every person who is working at the facility.

Information for Operation Manuals may include, but should not be limited to the following:

- Introduction
  - o site summary
  - o site management
  - site security measures (e.g. site Operator, contact information, hours of operation, gate, applicable signage, etc.)
- Station Design and Construction
  - o transfer station layout
    - surface water control
    - site access and fencing
    - waste storage
    - recyclable materials storage areas
    - stormwater control
- General Operations
  - o litter control
  - o site supervision
  - o signage
  - o general safety
- Disposal Operations
  - o waste collection and delivery
  - o method of waste handling to the waste storage area
  - waste storage site construction and waste placement
  - o operation schedule (e.g. dedicated machine, contract, and municipal equipment)
  - o acceptable materials
  - o prohibited materials

- o burning
- o animal and insect control
- o the waste receiving facility details and tipping frequency
- Site Inspection and Maintenance
  - o general site inspection
  - o **roads**
  - o ditches
  - o operating and maintenance records
  - o annual report
- Site Safety
  - o public safety
  - o employee personal protective equipment
  - o employee training
- Fire Prevention and Emergency Response Plan
- Contingency plans
- Closure and Reclamation Plan

#### 5.2 Record Keeping and Reporting

The following records must be maintained by the transfer station Operator in an approved location. Note that this list is not exhaustive:

- a copy of the Permit;
- development and construction drawings;
- operational records;
- inspection records;
- training procedures;
- operation manual;
- closure and post closure plans;
- monitoring results and reports;
- leachate volumes pumped; and
- copies of all annual reports.

In addition to the above, reports that may be required are detailed in the following sections.

#### 5.2.1 Assessment and Recommendation

The Director may require the Operator to prepare, or arrange to have prepared by a qualified professional, a report detailing any matter related to the construction and operation of the facility that the Director considers necessary to protect human health and the environment.

#### 5.2.2 Tonnage Records

The Operator shall maintain a record of the annual received tonnage records. Ashes from burned waste are also included in the disposal total.

#### 5.2.3 Annual Report

Unless otherwise exempt in the Permit, the Operator shall submit on or before the 15<sup>th</sup> day of April of each year, an annual report with respect to all activities at the transfer station conducted pursuant to the Permit during the previous calendar year. This may include, at a minimum, the information addressing the following areas:

- total volume or tonnage accepted at the transfer station;
- approved design volume;
- operational plan for next 12 months;
- leachate, water monitoring data and interpretation (if operating on site of closed WDG);
- volume of leachate collected, treated and disposed (if operating on site of closed WDG);
- any changes from approved reports, plans and specifications; and
- an up to date contingency plan, noting any amendments made to the plan during the year.

#### 5.3 Site Security and Safety

#### 5.3.1 Contingency and Emergency Response Plan

The emergency response plan should be posted at the site for all staff to use. The plan must include the following:

- Hazard identification;
- Fire suppression plan and resources;
- Emergency personnel list;
- Outside contacts;
- Evacuation plans;
- Emergency response procedures;

- Equipment listing;
- Maps/drawings; and
- Hazardous materials list.

Guidebooks that provide more information on Emergency Response Planning can be obtained <u>online</u>.

#### 5.3.2 Site Supervision

Transfer stations may require an Operator when the facility is open to the public. If the Operator is not on duty, or the facility is closed, the gate must be closed and locked or barricaded to prevent access to the site.

Operator tasks may include:

- controlling the entrance and checking loads for wastes prohibited at the facility;
- directing traffic to appropriate storage areas;
- ensuring safety procedures are followed by visitors;
- recording waste volumes and accepting fees (if applicable);
- conducting routine inspections and maintenance; and
- operational activities as required (eg. equipment operation for storing wastes, cutting grass, pushing snow, road maintenance, etc).

#### 5.3.3 Access Road

All transfer stations must be serviced by an access road designed and maintained to accommodate site traffic during the hours of operation. It should comply with any road restrictions.

#### 5.3.4 Site Access

All facilities must maintain natural or artificial barriers along the perimeter of the facility to control public access and vehicular traffic onto the site. The type of barrier will depend on the security needs of the site (eg. limiting access to wildlife and/or trespassers, etc.). Public access to the site may be controlled by using barriers or locked gates outside of operating hours.

#### 5.3.5 Signage

Transfer station signage is required to bring attention to site hazards and to avoid injury. Additional signage inside the facility may be posted to direct traffic, identify waste and recycling storage areas, and suggested speed limits and safety procedures. All transfer stations must post and maintain signs at the entrance of the facility that indicate the following:

- the name of the facility;
- the operating hours of the facility;
- the types of materials that may be deposited at the facility;
- the types of materials that are not accepted at the facility; and
- a 24-hour emergency contact telephone number.

Signs must be maintained in good condition.

#### 5.3.6 Scavenging

Scavenging is prohibited within the main domestic mixed waste storage area. Separated or repurposed materials may be recovered from designated areas where applicable.

#### 5.3.7 Fire Protection

The occurrence of fires at transfer stations are not uncommon. Embers in a hot load, careless smoking, reactive substances, lightning strike, arson, and spontaneous combustion are all possible ignition sources for fires. Understanding waste fires and their prevention can significantly decrease the cost and severity of environmental and property damages.

#### 5.3.7.1 Fire Prevention ALL TRANSFER STATIONS MUST HAVE A STRICT, AND ENFORCED, NO SMOKING POLICY.

Common ways to prevent and minimize fires at a transfer station include:

- non-combustible containment for stored wastes;
- disposal of hot loads in non-combustible areas;
- storage of tires away the burn area;
- ensuring hot ashes are not disposed of in the facility; and
- controlling and monitoring all burning activities.

#### 5.3.7.2 Fire Control

A source of water, such as a hydrant or pond, should be available at all facilities. Agreements should be made with local fire services for infrastructure (buildings, equipment, etc).

Considerations when fighting fires at a transfer station:

- Type of waste;
- Use of foam (types of foam);
- Soil availability;
- Use of quenching pits;
- Availability of equipment;
- Residential and commercial development in area;
- Access to the burning area;
- Personal Protective Equipment for heat, smoke, toxins, etc. (Respiratory protection is mandatory and must be specific to the types of contaminants; otherwise a full Self Contained Breathing Apparatus (SCBA) is required. Gas meters should also be considered.); and
- Fire fighter exhaustion.

If a fire occurs due to an accident, natural causes, or vandalism, the Operator of the facility must report the fire and the actions taken to extinguish it by phoning the Manitoba Sustainable Development Emergency Response Team at 204-944-4888 or 1-855-944-4888 and reporting the information to the person who answers the call.

#### 5.4 Site Activities

#### 5.4.1 Burning

The Operator must not burn unless authorized under the Permit issued for the facility. Only separated and readily combustible materials such as boughs, leaves, loose straw, paper products, cardboard, non-salvageable untreated wood, and packaging materials derived from wood may be burned, and only when there is an appropriate volume of this material to burn and weather conditions are favorable. Burning of any other materials is prohibited. Examples of prohibited materials include, but are not limited to the following:

- Garbage
- Plywood
- Plastics
- Rubber
- Chemically treated fabrics
- Finished Furniture
- Railway ties
- Waste oil

- Composite board
- Composites
- Carpet
- Manure
- Mattresses
- Man-made synthetics
- Metallic waste
- Pesticide containers
- Materials constructed with glues, finishes, or preservatives

Requirements for controlled burning include, but are not limited to the following:

- The burn area must be enclosed on three sides by a berm that is at least 1.8 metres high or enclosed in a metal burn containment vessel or cage. Other burning containment vessels or structures may be approved by the Director upon request;
- The burn area must be graded to prevent the collection of water;
- The burn can occur only during daylight hours; and
- The burn must be under constant supervision and occur when wind direction and speed will prevent smoke and odour from entering nearby properties and roads.

The ashes from the burn area must be regularly removed once completely extinguished and placed into the transfer station bin or container for disposal.

Setback distances for burning are listed in Table 3, below.

#### Table 3 – Location Requirements for Siting a Burn Area

FACILITY	SETBACK	REFERENCE
Building not located at the waste	400 metres	Waste Management Facilities
transfer station		Regulation 37/2016
Mixed domestic waste storage	50 metres	Waste Management Facilities
area		Regulation 37/2016
Compost or area used to collect	50 metres	Waste Management Facilities
flammable materials		Regulation 37/2016

If the transfer station is authorized to burn, burn records must be maintained that include, but are not limited to the following:

- the date, time and duration of the burn;
- the volume and types of waste burned;
- the weather conditions during the burn;
- any deviations from normal operations in respect to the burn; and
- any complaints received in respect to the burn.

These records must be maintained at the landfill for at least 5 years and must be provided to an Environment Officer or the Director upon request.

If a fire occurs due to an accident, natural causes, or vandalism, the Operator of the facility must report the fire and the actions taken to extinguish it by phoning the Manitoba Sustainable Development Emergency Response Line at 204-944-4888 or 1-855-944-4888 and reporting the information to the person who answers the call.

#### 5.4.2 Composting

Composting is the breakdown of organic matter in a controlled aerobic manner. The diversion of organic matter from landfilling is beneficial, as it reduces the production of green house gases and landfill leachate and returns valuable nutrients to the soil. Composting activities may occur within a transfer station where the necessary requirements are met and authorization has been written in the licence or Permit. In order to create a valuable end product, Operators must have an understanding of the issues related to composting organic matter. Some areas for consideration when developing a composting program include the following:

- Type of materials to be composted (i.e., leaf and yard waste only, kitchen waste, other materials such as pet waste, institutional waste);
- Feedstock management (seasonal variations, storage, incorporation of putrescible materials, C:N ratio, bulking materials, etc);
- Access roads;
- Composting base and working surface;
- Leachate management;
- Water supply for moisture control during composting;
- Odour controls;
- Wildlife controls;
- Fire prevention;
- Cold weather operations;

- Equipment and corrosion controls;
- Screening;
- · Curing and storing; and
- Ultimate use (i.e., sale, own use, give away).

#### 5.4.3 Surface Water Drainage

The control of surface water drainage is required to minimize leachate production from waste storage areas, and minimize surface water contamination from waste storage area runoff.

A storm water drainage system should also be constructed to control rainfall runoff and limit sediment flow to surface water bodies.

#### 5.5 Nuisances

Facility Operators must take steps to eliminate or reduce odour, noise, and other nuisances resulting from transfer station operations. The following subsections detail the requirements for controlling on- and offsite nuisances associated with transfer station operations.

#### 5.5.1 Odour and Noise Control

Odour control can be accomplished by removing the waste from the storage area on a regular basis. Keeping segregated materials in a clean, organized storage area can also aid in odour control.

Noise control measures include the use of buffer zones and barriers, equipment maintenance, regulated operating hours, and selection of a remote location for the transfer station. Access routes for vehicles hauling waste or other materials should be selected to minimize noise impact on property owners.

An odour and noise control plan may be required if multiple written complaints from different affected parties are submitted.

#### 5.5.2 Dust Control

Dust created within the facility should be controlled to prevent public complaints. Control methods and materials must be approved by the Director. Options may include spraying water with a suitable approved dust control agent.

#### 5.5.3 Litter Management

The Operator is responsible for collecting litter on adjacent properties outside the transfer station property boundary and litter accumulated at the facility. Suggested measures to reduce the escape of waste or other materials are provided in the following:

- Use natural or artificial barriers;
- Manage a small secure storage area;
- Increase the transfer frequency for stored wastes; and
- Conduct regular litter clean up.

Storage area fencing should be located to account for the prevailing winds. It is also recommended that litter fencing be located around the unloading area of the storage area. Fencing must be kept clean in order to be an effective litter collection device.

#### 5.5.4 Animal and Insect Management

Control options to minimize the presence of animals and insects at the facility include, but are not limited to:

- Minimizing the food supply by regular bin or container removal;
- Preventing opportunities for shelter by mowing grass and weeds regularly;
- Removing bulky items to prevent shelter opportunities;
- Providing positive drainage as rodents and vectors are discouraged by lack of access to a water supply; and
- Implementing a baiting program through an exterminator to reduce the population size (a pesticide Permit must be obtained from Manitoba Sustainable Development).

#### 5.6 Prohibited Waste

Unless otherwise authorized, the following materials shall not be accepted at a transfer station:

- Asbestos;
- hazardous waste (used oil or filters, pesticide containers, e-waste, paint cans, lead acid batteries, CFL lights, etc);
- liquid waste;
- petroleum contaminated soils;
- biomedical waste;
- PCB contaminated material;

- radioactive waste; and
- dead animals.

#### 5.7 Designated Storage Areas

Facility Operators may take steps to designate storage areas resulting from transfer station operations. The following subsections detail the requirements for potential approved storage areas associated with transfer station operations.

#### 5.7.1 Source Separated Materials

If approved under the Permit, designated areas to provide storage for the following items may be established. Please note that this list is not exhaustive:

- Tires
- Glass
- Electronic Waste
- Combustibles
- Cardboard/Paper
- Asphalt Shingles
- Metals
- White Goods
- Propane Cylinders

- Recyclables
- Plastics
- Pesticide Containers \*\*
- Household Hazardous \*\*
- Waste Oil \*\*
- Used Oil Filters and Containers \*\*
- Batteries \*\*
- Solvents/Paints\*\*

\*\* These items require additional permitting from Manitoba Sustainable Development under *The Dangerous Goods Handling and Transportation Act.* 

All waste is to be stored above grade within the transfer station and stored for a period no longer than one year prior to making recycling arrangements.

#### 5.7.2 White Goods

White goods are to be stored above grade in a separate area in an upright position. It is recommended that refrigeration and air conditioning equipment not be accepted unless ozone depleting substances (ODS) have been recovered and marked by a certified technician in accordance with the *Ozone Depleting Substances Regulation*.

If white goods are accepted and contain ODS, they are to be separated from the remaining white goods above grade and in an upright position. The Operator is required to have a certified technician recover the ODS in a safe manner.

#### 5.7.3 Tires

Tires are to be stored in a separate area above grade at the transfer station. Operators must:

- Accept tires that are clean with rims removed;
- Store tires in rows according to size to allow easy loading;
- Store tires in an accessible area and with adequate fire protection; and
- Store tires a minimum of 50 m away from the burning area or the collection area for flammable materials.

#### 5.7.4 Electronic Waste

Electronic waste (e-waste) is to be stored on covered pallets. The Operator is required to contact EPRA for shipment and acceptance requirements.

#### 5.7.5 Pesticide Containers

Pesticide containers can be stored in a separate area above grade at the transfer station if authorized in the Permit. The Operator is required to arrange for pick up and final disposal offsite. A separate Permit is required from Manitoba Sustainable Development to accept and store pesticide containers.

#### 5.7.6 Bulky Metallic Waste

Bulky metallic waste can be stored in a separate area above grade at the transfer station if authorized in the Permit for no longer than one year. The Operator will arrange for pick up and final disposal offsite as required.

#### 5.7.7 Shingles

Due to tipping fees at landfills, it is recommended that transfer stations do not accept shingles for disposal. If accepted, shingles must be stored away from the burn area or other flammable materials.

#### 5.8 Material Recovery

There are thirteen producer responsibility organizations to enhance material recycling in Manitoba. It is recommended facilities to encourage more recycling and diversion from landfills. For more information on the materials they recycle and program activities, Operators can contact Green Manitoba or visit the <u>website</u>.

#### 6.0 MONITORING AND REPORTING PROGRAMS

The Director may require the Operator of a transfer station to develop and implement a monitoring and reporting program to detect and report the release of pollutants from the facility. The monitoring and reporting program requirements may vary depending on site specific conditions, but will encompass, at a minimum, both groundwater and surface water monitoring. Additional monitoring programs for leachate and landfill gas may be required by the Director.

The Operator must contact Manitoba Sustainable Development if the transfer station is operating on a closed landfill site as additional long-term monitoring may be required. Monitoring may be required for:

- Groundwater;
- Surface water;
- Leachate; and
- Landfill gas.

The monitoring and reporting program must be submitted to the Director upon request, report on any results, and comply with the program as approved. If the Director finds that the monitoring and reporting program plans are deficient, the Operator will be notified and required to address in writing all deficiencies as outlined by the Director.

#### 7.0 TRANSFER STATION CLOSURE

A transfer station closure is required when the site is no longer in use. Proper transfer station closures ensure that the long term sustainability and security of the site is maintained and that human health and the environment are protected.

#### 7.1 Preliminary Closure Plan

A preliminary closure plan is required for any transfer station preparing to cease full or partial operation. The preliminary closure plan shall include, but not be limited to the following:

- A site plan illustrating the location of storage areas, collection basins, wells, sinkholes, watercourses, monitoring wells, and property boundaries;
- A schedule for decommissioning and removal of buildings, storage areas, processing areas or any other facilities on the property that will no longer be required;
- A description of the final cover system, as well as the installation methods and procedures used; and
- A description of how the following elements have been or will be addressed:
  - o the final use of the site;
  - o drainage restoration;
  - o soil replacement;
  - o final cover slopes;
  - o erosion control;
  - o revegetation and conditioning of the site;
  - o subsidence remediation; and
  - o environmental monitoring.

#### 7.2 Final Closure Notification and Plan

The Operator of a transfer station shall submit a final closure notification and plan in writing to the Director a minimum of six months prior to the permanent closure of the transfer station or portion thereof.

Closure notification requirements may include but not be limited to:

- A schedule for completion of the final closure;
- Details regarding the removal of all solid waste;
- Details regarding the removal of all finished compost and bulky metallic waste from the facility;
- Description of the revegetation of the facility site;
- Design for erosion control and restoration of surface water drainage;

- A schedule for decommissioning and removal of buildings, storage areas, processing areas or any other facilities on the property that will no longer be required;
- Confirmation that access will be blocked to the site after closure, or explanation of why access will not be blocked;
- Confirmation that signs will be posted indicating that the transfer station is closed, and noting the location of the nearest landfill or transfer station with a contact number for reporting; and
- Indication of the end use of the facility (eg. recreation, etc.).

Once approved, the Operator shall complete the Closure Plan as authorized in writing by the Director. The closure must be completed no later than 12 months after the date on which the closure began. The Operator shall notify Manitoba Sustainable Development once the closure is complete.

#### 7.3 Final Use

## Construction of buildings on landfills, or abandoned landfills, or within 400m of an active or closed landfill is prohibited under the regulation.

In the event the transfer station was sited on a former landfill, and an interested party wishes to construct within the prohibited area noted above, a variance may be issued by the Director. To obtain a variance, an assessment, supporting documentation, lab results and a report by a qualified professional is required to be submitted for the Director's review and consideration. The report must evaluate the risks, recommended mitigation measures and alternatives (if appropriate).

No construction activity may begin prior to obtaining written Director authorization.

Indication of the final use of the facility should be included in the final closure plan. Formally closed landfills can be used for passive recreational activities such as green space, public parks, golf courses, ski hills and picnic areas. Areas with the highest public use may need additional cover or maintenance to ensure that the public is protected from any safety hazards due to waste settlement, erosion of cover or venting of landfill gas.

The following end uses are prohibited on former landfill sites unless approved by the Director:

- Use for agricultural purposes;
- Construction of buildings; and
- Excavation of final cover or waste material.

#### 8.0 INSPECTION AND ENFORCEMENT

Inspection and enforcement is an important aspect of waste management and is carried out by Manitoba Sustainable Development. Environment Officers inspect all transfer stations on a periodic basis to determine compliance with the Permit, the most recent version of the Waste Management Facilities Regulation, as well as other applicable legislation.

The inspection frequency can range based on a number of criteria, but inspections may be more frequent if issues of recurring noncompliance or complaints arise from the transfer station operations. Inspections may be announced or unannounced at the discretion of the Environment Officer. After an inspection any deficiencies are noted and brought forward to the owner and Operator of the transfer station to take corrective action, usually within a specified timeframe. If the deficiency poses a significant risk or is a recurring non-compliance issue, enforcement actions may be taken against the owner or Operators.

Failure to comply with a condition under a Regulation or Permit may be an offence and a range of penalties may be assessed on the owner of the Facility. Enforcement actions can include, but not be limited to Warnings, Emergency Action Required Notice, Director's Orders, Offence Notices, or penalties as set out under the Act. Manitoba Sustainable Development also has the power to take immediate action to prevent, contain and/or mitigate any emergent situation at the facility that has the potential to cause harm to human health or the environment.