Guidance for Transfer Stations

Saskatchewan

Contents

INTRODUCTION

The Transfer Station (TS) Chapter (Chapter) of the Saskatchewan Environmental Code (Code) provides regulation of waste transfer station siting, design, construction, operation and closure. The objectives of the Chapter are to reduce red tape and provide flexibility for applicants to meet environmental compliance for transfer stations, while avoiding environmental risk.

PURPOSE OF THE GUIDANCE DOCUMENT

This guidance document provides support in meeting the Chapter's acceptable solution and alternative solution requirements for siting, designing, operating, and closing phases for the three scenarios under which a TS can be established.

The guidance document contains additional information on the following topics:

- The responsibilities and use of qualified persons (QP) under the Chapter requirements.
- Online notification to the ministry by owners and operators.
- Site suitability, design plan, and construction verification, operation and closure needs.
- The environmental protection plans (EPP) under the alternative solution.
- Resource recovery and best practices for waste storage and diversion.

REGULATING TRANSFER STATIONS UNDER THE CODE CHAPTER

The objective of the Chapter is ***to limit the probability of unacceptable adverse effects due to waste storage***. It provides requirements for siting, design and construction, operation and closure of a TS. It outlines requirements under three parts:

- **Part 1 – General:** is intended for use by those responsible for a TS such as owners or operators and qualified persons.
- **Part 2 – Alternative Solution:** is intended for use by those who cannot or choose not to proceed with the acceptable solution requirements of establishing a TS.
- **Part 3 – Acceptable Solutions:** is a step-by-step process outlining requirements that need to be met to establish a conventional TS.

It is mandatory to comply with the requirements outlined in the general section (part 1) and either alternative solution (part 2) or acceptable solution (part 3) of the Chapter. Under this Chapter, a TS can

be established from any of these three scenarios:

1. Transitioning an existing TS when the Chapter comes into force. The requirements for this specific scenario are outlined in section 1-4 subsections (1) - (5) of the Chapter.
2. Establishing a new TS at a closed landfill.
3. Establishing a new TS at a new location.

An alternative solution applies when proposing a different approach for siting and/or construction of a TS or when the conditions of the acceptable solution cannot be met. These applications require preparation of an environmental protection plan (EPP). TSs with an EPP are regulated under section (27) of *The Environmental Management and Protection Act, 2010* (EMPA, 2010).

It is an offence to fail to comply with the Chapter once it has come into force. TSs that will be required to comply with this Chapter are those that have waste bins together with temporary stockpiled and segregated piles on the ground. These can include scrap metal, white goods, compost piles, and clean construction, renovation and demolition (CRD) type of waste. Failure to comply is a TS established without notification or operated in a manner not described in the Chapter.

REQUIREMENTS FOR EXISITING TRANSFER STATIONS (PERMITTED PRIOR TO MARCH 17, 2023)

Requirements for Notification of a currently permitted TS

TSs that are currently permitted are required to provide notification by uploading their existing operations plan and emergency response plan (ERP) into the ENV portal. This information must be provided by Sept. 17, 2023.

For assistance with the notification or reporting process contact the Client Service Office to speak to an Environmental Protection Officer at 1-800-567-4224 (toll free in Canada) or Centre.inquiry@gov.sk.ca.

The ministry's environmental online business portal (ENV portal), https://envrbrportal.crm.saskatchewan.ca/ allows for the selection of the TS notification and reporting options.

If a TS owner does not already have an account in the system, they can create an account for submissions here: https://envrbrportal.crm.saskatchewan.ca/login/

If the owner or operator had an account set up for submission on the ENV portal prior to coming into force of this Chapter, the same account can be used for uploading the site documents.

How to upload your documents:

1. Select LANDFILL submission type.
2. Select Notification to Establish or Expand Transfer Station or Notification to Operate Transfer Station.
3. Upload appropriate documents. This includes an operations plan, an ERP or a combined operations plan and ERP document.

Once these plans are uploaded, the transitioning TS will be in compliance with the Chapter.

GENERAL REQUIREMENTS FOR TRANSFER STATIONS

Part 1 of the Chapter covers the general requirements for all TS. This includes: the application of the code (the regulatory definition of a TS), the notification process, qualified persons (QPs) and operational and reporting requirements.

Notification requirements for new transfer stations

Prospective owners or operators are required to notify the of their intent to establish or operate a TS. This is done through the ministry's business portal (ENV portal).

If a TS owner does not already have an account in the system, they can create an account for submissions here: https://envrbrportal.crm.saskatchewan.ca/login/

The ministry's environmental online business portal (ENV portal) can be accessed here: https://envrbrportal.crm.saskatchewan.ca/.

To complete a submission for notification or other documents and reporting, select the appropriate submission group (Business, Municipal or Individual), select **LANDFILLS** and Notification to Establish or Expand Transfer Station or Notification to Operate Transfer Station. Either submission type will allow the uploading of all the required plans and reports (e.g. site suitability, design plan, operations plan, ERP).

DOCUMENTS REQUIRED:

The required documents for notification are dependent on the proposed location of the TS (e.g., at a closed landfill or new location) and the solution selected (e.g. Acceptable or Alternative), which will be discussed in detail in sections below. See Appendix G.

For acceptable solution submissions, once all required plans and reports are uploaded, the TS will be in compliance with the Chapter. For **alternative solution submissions**, the Ministry will provide a response upon review and an approval is required. An acceptance of notification letter to acknowledge the submission have been reviewed and accepted will then be issued to the owner or operator.

NOTE:

Upon notification, a **transaction/notification number** will be generated. This number shall remain as the site identification number for the lifetime of the operation.

If there is a transfer of ownership for a TS, a new owner is required to provide notification of the ownership change, including a letter with proof of sale through the ENV portal. Records must be transferred from the previous owner to the new owner to ensure all records are kept for the lifetime of the facility. If there is any expansion or new construction at the facility accompanying the transfer of ownership, a new notification will be required.

Qualified persons and certificates

Generally, QPs are associated with a professional body of practice such as applied science technologist, professional agrologist, professional engineer, etc. These QPs must be in good standing with their professional associations. For individuals that are not associated with a class of QPs listed in the Chapter,

they can request to be designated by the Minister to become a QP, provided they have acquired the education and experience required to perform the specific task. QP competency requirements are available in the Guidance Document: Qualified Person Designation.

Ultimately, the responsibility for the protection of the environment and human health and safety lies with the owners of a TS. The QP may also prepare the operations plan and emergency response plan if assistance is requested by the TS owners and operators. However, this is not a requirement under the Chapter. The ministry has examples of an operations plan and an emergency response plan available: https://www.saskatchewan.ca/residents/environment-public-health-and-safety/solid-waste-management-facilities/transfer-stations.

OPERATIONAL AND REPORTING REQUIREMENTS FOR ALL TRANSFER STATIONS

General Records

There is no requirement under the Chapter for submission of annual reports to the Ministry. Owners and operators of TSs are required to record, maintain, and retain documented records for the lifetime of the TS. Section 1-8(a)-(f) lists all the records to be documented and retained.

The TS may be audited at any time in addition to regular compliance inspections by the Ministry. All records required to be kept pursuant to the TS Chapter need to be available for review and assessment during these compliance assurance activities.

Reporting Obligations

Section 1-9 of the Chapter outlines reporting obligations that a TS owner or operator must complete. These are classified as either incident reporting or as submissions that are related to completion of environmental monitoring plan (EMP), if required.

For incident reporting, the following must be reported by owners and operators immediately:

- Burning of waste or materials other than clean wood (considered a discharge).
- Spills/discharges of substances that meet the criteria set out in the Discharge and Discovery Reporting Standard (DDR standard).

Reporting a Spill, Discharge, or Discovery under the Discharge and Discovery Reporting Standard

Reporting a discovery of historical environmental impacts or a current discharge (e.g. spill of hazardous materials, burning of prohibited material) causing adverse effects is mandatory under the Discharge and Discovery Reporting (DDR) Chapter. Under this DDR Chapter, a DDR standard is also established on how and what substances, and their thresholds, to report.

Immediate reporting of discharged or discovered contaminants and pollutants helps to ensure adverse effects are addressed properly, and minimized, if possible, to safeguard the public and protect the environment.

At a TS, typical discharges are related to spills of used oil or burning of prohibited material. Discoveries are typically found when doing an environmental assessment (discharges not previously identified).

The person who discharges, allows the discharge, or has control of the substance discharged is responsible for reporting. Discharges must be reported to the ministry at the first available opportunity as soon as that person knows or ought to know of the discharge.

Reports can be made by phoning: 1-800-667-7525 (toll-free, 24 hours-a-day). A written report must be submitted to the ministry within 30 days following the discharge incident.

When a discharge or discovery is reported, the ministry will confirm the adequacy of measures taken to contain and clean up (if applicable) the discharge or discovery and/or give instructions on measures to be taken.

Discoveries of historical impacts where the substance may still pose a serious risk to the environment or public health must immediately be reported to the ministry as well. The discoveries must be reported via a submission of a written discovery report through the online services (portal) as soon as possible.

For further information on managing impacted sites, or more details on when to report a discharge or discovery, refer to The Impacted Sites Guidance Document.

Reporting Requirements for an Environmental Monitoring Plan
An environmental monitoring plan (EMP) is used to obtain information about any adverse impact in the groundwater and surface water quality resulting from TS operations. The Chapter provides the requirements for all TSs for environmental samples and laboratory analysis in Section 1-7. **Most TSs will not require an EMP.**

A QP may recommend an EMP for TSs that require a means to provide timely detection of any substance that may cause or is causing an adverse effect. This may be required as part of environmental protection plan discussed in Part 2. Transfer stations established at closed landfills that have an EMP as part of landfill closure are still required to adhere to the EMP.

For information on EMPs and the requirements for environmental samples and laboratory analysis, refer to Appendix D.

Prohibited waste at a TS
The ability to pre-screen waste at a TS is an important function for diverting materials for recycling and appropriate handling of solid waste. Prohibited waste is most likely to be intercepted at the pre-screening stage. The TS operator needs to provide viable alternatives for disposal and management of prohibited waste to protect the environment and both human health and safety.

Section 1-10 of the Chapter lists items that are prohibited waste for storage at a TS, unless there is an approval from the Minister. If this approval exists, section 3-7 of the Chapter specifically requires that an operations plan provide protocols and procedures for waste inspection to identify the types of waste and handling of the waste. Emergency response plans are also required and will be adjusted according to on-site risks. The following are prohibited wastes unless otherwise approved by the Ministry or through other regulatory processes and approvals (such as an approval to store Hazardous Substances Waste Dangerous Goods):

- Liquid waste that contains free liquids, other than liquid that is normally contained in household

wastes (e.g. fish slurry);
- Hazardous waste – as specified in the *Hazardous Substances and Waste Dangerous Goods (HSWDG) regulations*;
- Asbestos;
- Soil and soil-like material impacted with petroleum hydrocarbons or other impacts;
- Sewage, slurry or sludge;
- Waste containing radioactive materials;
- Waste that may spontaneously combust; or
- Biomedical waste not rendered inert.

Tips for managing prohibited wastes at a TS

- Establish operator and employee training on identifying and managing suspect materials as part of a pre-screening program.
- Offer special waste days such as household hazardous waste (HHW) drop-off days, and spring-cleaning disposal days at the TS. See the salvaging section of this guidance for support provided through the stewardship and recycling programs.
- To limit illegal dumping, prepare and provide fact sheets to rate payers on best ways to handle and manage prohibited waste, the harms of improper disposal and where to dispose of it responsibly (Table: Suggested content for a fact sheet on prohibited waste).

Table: Suggested content for a fact sheet on prohibited waste

Consider developing simple fact sheets to inform rate payers of the reasons certain wastes are not accepted at the transfer station and where they can dispose of the unacceptable wastes. A typical fact sheet could include:

- A picture or graphic of prohibited wastes.
- A definition of what prohibited wastes are, and a brief description of why they are not accepted at the transfer station.
- The dangers, drawbacks, or non-compliance consequences for improper disposal of prohibited waste.
- Where the waste can be appropriately disposed or handled, including driving directions, hours of facility operation and contact information.
- Telephone numbers and websites of appropriate Ministry information regarding the hazardous waste management.
- Information on *waste stewardship programs.

*Waste stewardship programs are responsible for management of prescribed products. While most are not prohibited from landfills, they are some of the easiest products to divert. Refer to Appendix A on resource recovery and Appendix B on stewardship programs of this guidance and contact waste stewardship programs for associated public education materials.

Acceptance of Waste Requiring Special Handling or Approval at a TS

Prohibited waste may be accepted at a TS with approval. This may include special waste or hazardous substances and waste dangerous goods (HSWDG).

Generally, special waste means animal or animal carcass waste that may contain one or more reportable diseases listed in the *Reportable Diseases Regulations* (Canada), emergency livestock mortalities as identified by the Ministry of Agriculture, waste asbestos, and any other material or substance that may require special handling due to the potential adverse effects from disposal, as identified by the Ministry.

Special handling protocols and procedures will consider the health and safety of the employees, public and the environment, avoidance of undesirable attraction of vectors, and unpleasant odor.
Not all TSs will be suited for acceptance of special waste or HSWDG. A TS intending to accept these types of wastes should contact the Client Service Office at 1-800-567-4224 (toll free in Canada) or Centre.inquiry@gov.sk.ca.

Tips for Managing Special Waste

- Specific bins with closures that can deter predators of any kind.
- Installation of specific gates that can deter smaller animals from getting into the TS.
- Odour/nuisance management protocols such as frequent emptying of the bins, cleaning the bins and the tipping areas.

Hazardous Substances and Waste Dangerous Goods (HSWDG) at a TS
Hazardous waste is prohibited from entering landfills through *The Municipal Refuse Management Regulations*. TS operators are required to ensure hazardous waste is not included in mixed waste bins.

Care should be taken for storage of hazardous waste or waste dangerous goods at a TS. In Saskatchewan, hazardous waste (or waste dangerous goods) are the substances with the characteristics described in subsection 4(4) of *The Hazardous Substances and Waste Dangerous Goods Regulations* (HSWDG regulations). These substances include wastes that are flammable, corrosive, physically hazardous and toxic to both humans and the environment.

Some products that can have these hazardous properties include used oil, used batteries, mercury-containing products (e.g. some lightbulbs or light switches), pharmaceuticals and sharps, cleaners, paints, pesticides/herbicides, and propane tanks etc.

A permit is required under the HSWDG regulations for the storage of these materials, depending on the amount being stored. This approval process requires an owner or operator to complete the Application for Approval to Operate a HSWDG Storage Facility form available at Hazardous Materials Storage | Hazardous Materials and Safe Waste Management | Government of Saskatchewan. Once the form is submitted and approved by the ministry, an Approval to Store Hazardous Substances and/or Waste Dangerous Goods at A Storage Facility will be issued.

For more information on common hazardous substances or waste dangerous goods and handling at a TS, refer to Appendix E.

Burning of Clean Wood at a TS
Clean wood waste is defined as, “trees, brush and limbs, and includes lumber and wood which has not been painted, stained, treated or preserved in any manner or fashion and has any associated hardware removed”. Such clean wood waste may be burned at a TS. Section 1-11 of the Chapter outlines the necessary conditions to be met prior and after burning. *A TS should prevent and immediately suppress and extinguish a fire of any waste other than clean wood to ensure no air contaminant or adverse effect*

may occur. For more information on the health and environmental effects of burning waste, see the Health and Environmental Effects of Open Burning of Refuse and Other Solid Wastes fact sheet.

It is especially important to notify property owners or residents located close to the TS of the plan to burn if there are large piles. For a TS located in a provincial forest, park land, or any quarter section wholly or partly within 4.5 km of a provincial forest and plans to burn the clean wood pile from April 1 to October 31, the TS must get a Burn Notification Number from the Saskatchewan Public Safety Agency.

Note, any unintentional fire at a TS should be considered a reportable substance release event, and it must be reported to the ministry as per the Discharge and Discovery Reporting (DDR) Chapter.

Tips on managing unintended fires at TS

- Ensure staff are trained on the emergency response plan and understand the dangers of fires in bins and stockpiles.
- When there is an incident ensure that procedures are followed as set out in the emergency response plan.
- A public education program is helpful to inform the public on waste that should not be placed at the transfer station, such as hot waste, batteries, and chemicals. These wastes can contribute to unintended fires in the waste.
- A Fire-Hazard - No Smoking sign should be posted at the entrance and scale house.
- All attendants should know the location of fire extinguishers, spill kits, first aid kits and muster points.

Closing a TS

The owner or operators of the TS must notify the ministry that it will be closing 90 days prior to closure. If a TS is not operational for a period of 12 consecutive months, it must close and notify the ministry.

Section 1-12 of the Chapter outlines the requirements that must be met for a closing TS.

1. **If the transfer station established under an alternative solution** (Part 2) a closure report in accordance with the accepted environmental protection plan (EPP) must be provided to the ministry.
2. **If the transfer station established under an acceptable solution** (Part 3) a closure report in accordance with section 3-10 must be provided to the ministry.

APPLICATION OF PART 3 - ACCEPTABLE SOLUTION OF THE TS CODE

An acceptable solution represents the minimum level of performance required for owners/operators of a transfer station. An acceptable solution provides a defined process that any owner/operator can follow. **The acceptable solution may not be applicable to all sites.** Under such conditions, owners have the option of proposing an alternative solution to the ministry for consideration.

Siting Considerations and Requirements for a TS

When considering siting a TS at either a closed landfill or at a new location, varying considerations under this Chapter apply.

According to section 3-1, at a closed landfill the siting requirements are generally not applicable if the TS is within the boundary of the former landfill site. Siting requirements only apply if the former landfill intends to expand its physical property boundary for operational purpose of the incoming TS. That is, if there is a need for ground space for the addition storage areas for the waste. Siting requirements also apply if siting a TS at the former landfill may cause adverse environmental effects. A QP may be required if unsure of the potential for adverse environmental effects.

Section 3-2 identifies that a TS to be established at a new site must comply with the siting requirements noted in section 3-3 of the Chapter. These requirements direct the need to find an appropriate hydrological, geological and topographical location; and to ensure setbacks as explained in the section are adhered to, for the site to be compliant.

Other acts and regulations may have a bearing on siting considerations for any developmental activities, including for establishment of a TS. It is a requirement to refer to the following acts and bylaws when considering a new location:

- *The Ecological Reserves Act;*
- *The Wildlife Habitat Protection Act;*
- *The Heritage Property Act; and*
- Local bylaws.

It is the responsibility of the TS owner or operator to ensure all applicable regulations are followed.

Some technical considerations for site selection may be necessary prior to deciding to establish a TS. Tables 3 and 4 provide some of these considerations.

Table 1 Technical considerations for site selection for a new TS establishment

- Access to major transportation routes along hauling routes to avoid traffic congestion.
- Consideration of safe entrances and/or exits onto public roads based on peak times and site use frequencies.
- Site size requirements including space for the transfer buildings such as scale house, recycling sorting location, composting area, and/or space for other planned stockpiles.
- Allowance for site buffers and landscaping including fencing, berms, open spaces, and trees.
- Sufficient space for on-site access roads to allow for efficient vehicle routing, queuing of collection vehicles, and parking for trailers and site staff.
- Access to existing utilities such power, water, and sewer utilities where such utilities are necessary for operation of the TS.
- Ability to expand the facility in the future either because of population and waste volume growth or because of an expanded service area.
- Gently sloping topography that is compatible for building necessary ramps. *
- Consideration of on-site and off-site drainage controls and surface water management.
- Geotechnical considerations for supporting building and retaining wall structures may include geotechnical investigations to confirm. **

*If construction for ramps is required, a construction verification report will need to be submitted.
**This work requires a QP to complete the geotechnical investigations and to verify the construction of the retaining walls etc.

Table 2 Special consideration for the hydrology, hydrogeology, and topography of a site for TS location

Poor Site: Areas that are considered higher risk	Good Site: Areas that are considered lower risk
Groundwater recharge areas and/or high-water tables that could cause groundwater contamination risks.	Low permeability soils will slow the rate of any discharge to reach the groundwater sources.
Gullies and depressions that may collect water after rainfall or snowmelts.	Existing gradient that allows water to run off naturally without pooling at the site (A slope of 2 per cent to 10 per cent is recommended for waste facilities for stability and drainage).
Areas close to watercourses especially those with significance for community users.	
Areas close to wetlands where waterfowl and other animals may become attracted (habituated) to the TS.	
Away from other sensitive habitats.	

Establishment of a new TS may result in consideration of not only the regulatory requirements of the Chapter, but other concerns that may originate from the community where it will be located (Table: Concerns often raised by the communities when siting a TS). Zoning and bylaws for different planning and siting needs should be referred to prior to TS site selection in addition to setback described in section 3-3 of the Chapter.

An appropriate level of engagement should be considered for each TS and their unique situation. Whenever possible, follow the municipal guidelines required in meeting zoning by laws and other rules for development of facilities and infrastructure.

Table: Concerns often raised by the communities when siting a TS

Owners and Operators should inform communities regarding:	
• Safety and health impacts; • Traffic volume and noise; • Waste delivery and haul routes; • Litter; • Odour and dust; • Insects, birds, and other predator animals; • Operating hours;	• Level of service (convenience, access); • Visibility and aesthetics; • Siting and planning process; • Costs to taxpayer; • Zoning; • Property values; and • Proximity to public areas.

Design Considerations and Requirements for a TS

Section 3-5(1) of the Chapter requires that before constructing a TS at a new location, at a closed landfill or expanding an existing TS, every owner shall:

- Ensure that a transfer station design plan is prepared that satisfies the requirements set out in subsection (2) of section 3-5;
- Provide a copy of the design plan to the ministry; and
- Provide a certificate from a QP stating that, in his or her opinion, the requirements set out in this section 3-5 (2) are met in the design plan.

When designing a TS there are a number of considerations to evaluate. Local environmental conditions such as hydrological, geological, and topographical conditions, are important in determining the location of TS as part of the site suitability report to ensure environmental protection of the surrounding

landscape and of the groundwater.

Other important design considerations are the volumes and rate of waste to be received and maximum amounts anticipated. These considerations will help decide the size of the TS to be established. The volume of waste to be received should be based on estimates for the area to be serviced and frequency of transportation to the final destination. Waste volume projections for the current and future use of the TS will inform the selection of the location for siting a TS since these factors impact the delivery and hauling routes and traffic congestion.

Consideration of maximum amounts and types of waste anticipated (e.g. bulky items, furniture) will ensure the TS is designed to accommodate the storage needs of the community and hauling frequencies are feasible. Maximum amounts anticipated can vary widely based on community size (e.g. rural, urban, remote or seasonal). Factors that may impact storage time (e.g. holidays, hauling company availability) also need to be reflected in the design. A QP can assist owners and operators in determining the appropriate design of a TS for their specific use.

Once the site and service conditions are considered, another important factor is the type of containers or bins and various types of equipment and vehicles to be used at the TS. Section 3-5(2) of the TS Chapter outlines the regulatory requirements of a design plan to ensure the Chapter is implemented as expected. The table below (Checklist of possible questions to consider in preparation of a design plan) provides a checklist of possible questions to consider in preparation of a design plan.

Ensure all applicable regulations are followed (e.g. health and safety, building code).

Table: Checklist of possible questions to consider in preparation of a design plan

Checklist Questions for a Design Plan	**Yes**	**No**
If located on a former landfills site, has the design considered potential impacts of landfill gas and site stability?		
Has a geotechnical investigation for design of foundations and structures been completed, if required?		
Is the site topography used to the best advantage?		
Are there safe and efficient traffic routes to the TS?		
Are unloading areas provided with sufficient space for vehicles?		
Is the parking area for staff, equipment and transfer vehicles sufficient for the site use?		
Are the turning radii designed for the largest vehicles?		
Is there sufficient room for transfer vehicles to maneuver?		
Are gates, scale houses, or attendant shelters needed?		
Are approaches to scale and loading bays sufficient in length?		
Are there adequate utilities to suit the facility's needs?		
Are access road grades designed appropriately for loaded and empty vehicles?		
Are fences and gates appropriate to secure the property?		
Are landscaping and site aesthetics considered?		
Are litter controls and segregation retainers considered?		
Are there any specific measures needed to mitigate and control odors and dust?		

Are signs located in an area visible from the main road?		
Are engineered retaining walls needed?		
Are roads and ramps designed to support loaded vehicles including during winter conditions?		
Are safety features incorporated into the design (e.g. adequate room for emergency vehicles, fire protection)?		
Are the buildings designed according to appropriate codes?		
Are the building foundations designed to support expected loads?		
Has adequate ventilation been provided for enclosed buildings?		
Have equipment installations and foundations been designed to manufacturers specifications?		
Is the waste area designed for anticipated volume of waste to be received?		
Are recycling containers and stockpiling areas located with customer safety in mind?		
Recycling operations separated from household waste operations		
Do recycling and storage areas conform to noted requirements in this TS Chapter and other appropriate guidelines?		

Construction Considerations and Requirements of the TS

Most TSs do not require construction to accommodate the waste bins and other supporting materials such as pallets and storage buildings. However, when a newly selected site or an expanding site requires construction, section 3-6 of the Chapter requires that the construction is in accordance with the acceptable plan and accompanied by a verification report and certificated provided by the QP.

Operations Considerations and Requirements of the TS

The TS should be operated in a manner that protects the environment, human health and safety. The ministry strongly recommends the continuing education of staff operating a TS. All TSs should be supervised and operated by trained personnel.

Section 3-7(1) of the Chapter lists requirements that need to be met before operating a TS. A guidance document for the drafting of an operation plan and examples of an operations plan and emergency response plan can be found at Transfer Stations | Solid Waste Management Facilities | Government of Saskatchewan.

Requirements for staff, owners, operators

Whereas each TS is operated differently depending on its site-specific waste acceptance, the Chapter requires that owners and operators follow the operating duties described in a comprehensive list in section 3-8 of the Chapter. The transfer station must be supervised during operational hours.

Why is it required that a transfer station be supervised during operational hours?

- Allows for salvaging and diversion activities.
- Ensures waste is being put in the appropriate locations/bins.
- Keeps the TS tidy and orderly.
- Allows for charging of tipping fees.
- Allows use of a weigh scale or volume estimation techniques.

- Deters illegal dumping and vandalism.
- Increases opportunities to identify prohibited wastes.

Ensuring staff are well trained is important to the successful and appropriate operation of the TS.

Operators can find more in-depth information about skills and competencies through the Solid Waste Association North America (SWANA) – Northern Lights Chapter: SWANA Northern Lights Chapter

Storage amounts
Considerations should be given to the allowable maximum volume of waste stored over time before the bins are hauled off site. These considerations depend on the type of waste received, facility size, security against wildlife presence and type of wildlife, potential for harboring disease vectors and seasonality.

Compliance inspections
Compliance inspections and audits are still part of the regulatory requirements for TS as required under section 78 of the EMPA, 2010. Therefore, the Ministry will continue to inspect these sites periodically to ensure all operations meet the Chapter requirements.

Closure Considerations and Requirements of the TS
Requirements to be met at closure of a TS are identified under section 1-12 and 3-9 of the Chapter. These consist of the activities, assessments, planning, notification to the public and reporting needs.

APPLICATION OF PART 2 - ALTERNATIVE SOLUTION OF THE TS CODE

A TS that cannot or chooses not to meet the conditions of the acceptable solution must propose an **alternative solution** to limit impacts of constructing and operating a TS.

To follow an alternative solution, the Chapter requires a QP to prepare an environmental protection plan (EPP) for ministry review and approval. The proposed alternative solution will be required to meet the same level of environmental protection as the acceptable solution, and all methods employed should be scientifically justified.

Environmental Protection Plans for the TS
An EPP is a plan developed for the owner of a TS that is designed to meet the Chapter requirements. It may consist of multiple plans and reports.

Under an alternative solution, an EPP will have to be completed before establishing the TS. The EPP should set out the siting, design, construction, operation and closure methods, and any other aspect of transfer station establishment and operation to ensure the TS will comply with all the requirements set out in section 2-1(2), which are:

(a) SITING:
To site the TS in an acceptable location with respect to:
- Environmental and human receptors and places of concern, including, but not limited to:
    - Cemeteries, heritage sites and other sensitive areas such as First Nations

burial grounds/cemeteries (*The Heritage Property Act*); and

- The physical environmental aspects such as topography, surface water hydrology, subsurface geologic and hydrogeological conditions.

(b) PREVENTION:

- Prevent litter, dust and nuisance to adjacent land;
- Prevent disease vector attraction;
- Prevent attraction of wildlife; and
- Prevent direct or indirect exposure of persons to transfer station operations for the safety of staff and public using the transfer station.

(c) Employ environmental control systems to minimize the release of any substance that may cause or is causing an adverse effect;

(d) Divert or control surface water run-on and run-off discharge from the transfer station site;

(e) Conduct environmental monitoring, as necessary, to provide timely detection of any substance that may cause or is causing an adverse effect; and

(f) Conduct post-closure care until completion of the contaminating lifespan.

While the EPP may be developed by numerous people with various competencies, an EPP must be **certified** by a qualified person (QP) stating that in their opinion the plan conforms to the requirements in the Chapter. The QP should append a QP certificate as the individual who has full oversight and accountability for the entire EPP. It is a requirement of the Chapter under section 2-2(b) to provide the QP certificate, which states:

In the professional opinion of this QP, the methods and components in the EPP, if carried out in accordance with that plan, will satisfy the results-based objective described in section 2-1(1) and meet the requirements under section 2-2(2) of the Chapter.

> **The EPP will not be approved by the Ministry until the QP has provided the certificate. This may cause delays in response time and in establishing a TS. Following all Chapter requirements under the alternative solution for the EPP preparation will facilitate a quick review by the ministry.**

Submission, Review and Acceptance of an EPP

The EPP must be submitted to the ministry for review and approval prior to any physical activities taking place on the ground for the purpose of establishing and operating a TS.

Submission must be completed via the ENV portal whereby the EPP will be uploaded as a notification for a TS (See the section on notification about the notification process).

The EPP may then be accepted, accepted with terms and conditions or refused. A written response will be issued to the operator or owner of the prospective TS within 45 days.

If the EPP is accepted, an approval letter titled the Environmental Protection Plan Acceptance of Notification will be issued by the ministry. The letter contains the TS notification number, a facility name or other business identification (if applicable), date the EPP was submitted, date the EPP is in effect and the land location of the TS.

Tips on developing a successful EPP

The EPP needs to be scientifically defensible. The rigor of the EPP will be proportional to the risk presented by the prospective TS facility. The ministry used a risk-based process that considers various risk factors including sources of contaminants, available receptors within the setbacks and vicinity of the facility, and exposure pathways to these receptors, for ranking the relative risk of environmental activities it regulates.

A similar approach is recommended for QPs considering the TS location to ensure minimal adverse effects at sensitive landscapes or possible locations where community social impacts may be of concern.

An accepted EPP:

- Speaks to the science-based solutions, compliance with the requirements of the Chapter under the alternative solution and mitigation measures intended to manage possible environmental disturbances from the siting to the closure stages of the TS.
- Outlines post-closure care for the TS site.
- Acts as a verification tool that the TS is compliant with an alternative solution under the Chapter.

Overall, an accepted EPP is a commitment for ensuring both the best management practices and regulatory compliance are met.

Amendments to the EPP require re-submission and a QP certificate. Amended EPPs due to facility requested changes or to meet ministry terms and conditions will be uploaded to the ENV portal.

Ministry correspondence will be provided along the review and approval process for TS owners to understand the next steps.

CONTACT

If you have any questions, contact the Ministry of Environment.
Government of Saskatchewan
Tell: 1-800-567-4224 (toll free in Canada)
Tell: 306-787-2584 in Regina
Email: Centre.inquiry@gov.sk.ca

APPENDIX A – RESOURCE RECOVERY AND WASTE DIVERSION

The following questions may assist owners and operators on how to plan activities that help identify resource recovery and TSs operating costs:

- How often will the TS be open?
- How many customers will use the TS and from what sectors?
- What amount and type of material is being accepted?
- Which materials can easily be collected and diverted through the TS?
- What quality of materials are required by material recovery facilities (MRFs), brokers, stewardship programs or processors (e.g. cleanliness, compaction, bagging)?
- What quantity of materials are required by processors and how should the material be packaged or managed?
- What is the cost for collection and salvaging?
- What are the alternative distances to processors or markets?
- What incentives exist from stewardship programs?
- Are there programs that will cover costs for transportation and processing?
- Does the product have salvage value for marketable amounts of materials?

The Saskatchewan Waste Reduction Council (SWRC) offers a comprehensive database of options to reduce, reuse, recycle and safely dispose of waste or manage resources in your community. They also offer numerous tips on reducing waste which may be of value.

APPENDIX B - MATERIALS AND PRODUCTS WITH SALVAGE VALUE POTENTIAL

Resource	Product Detail and Potential Use	Best Management Practices
Cell phones	The RecycleMyCell program operates across Canada to recover and recycle mobile devices and accessories through a return to retailer and collection network across Canada. Devices are refurbished or recycled into new devices. The program reduces harm from devices in landfills and decreases the need for raw materials needed in manufacturing.	The program offers postage paid collection boxes to reduce the amount of e-waste going to landfill. Learn more at https://www.recyclemycell.ca/host-a-drop-off-location/.
Clean wood	Clean wood can be reused, repurposed, remanufactured and processed into many products with a multitude of markets. Products include wood chips, new lumber, reclaimed wood or products, activated charcoal, etc. Burning is an option outlined in the code that can save money from reduced disposal fees.	Canadian Wood Waste Recycling supports business development, industry awareness and advocacy. If clean wood is the only stockpiled material on the ground, the TS Chapter does not apply. If the wood pile is within 4.5 km of a Provincial Forest, a burn notification number must be obtained from the local forest protection office.
Compost	Compostable material including food and yard waste can comprise 40-60 per cent of mixed waste. Composting may offer great potential savings in disposal costs while producing a valuable soil amendment.	For more information on operating a compost facility, contact the Ministry Client Service Office at 1-800-567-4224 (toll free in Canada), 306-787-2584 in Regina or Centre.Inquiry@gov.sk.ca.

Resource	Product Detail and Potential Use	Best Management Practices
Concrete/Aggregate	Concrete pavements, concrete pipes and concrete from CRD are main sources.	Stockpile until the material can be economically crushed for use as aggregate. It may be useful to separate aggregate stockpiles for periodic use by the community or for large projects. Stockpiles of concrete or aggregate alone will not trigger the TS Chapter.
Construction Renovation and Demolition (CRD)	Concrete, bricks, tiles, roofing and metal/vinyl siding, cabinets, counters, metal, wood, glass and other materials.	Further guidance on recyclable CRD materials can be found here: Publications Centre (saskatchewan.ca) and https://www.saskatchewan.ca/residents/environment-public-health-and-safety/solid-waste-management-facilities.
Furniture/Mattresses	Some retailers return-to-retail options exist. Online circulation of office and other furniture is an expanding market and some private companies offer service by renting, reusing, repairing and reselling.	The Saskatchewan Waste Reduction Council has more information. Unsalvageable mattresses and furniture may present a physical hazard due to accumulating stagnant water which can be a source of odor and disease vectors and should be disposed of in bins.
Miscellaneous items for reuse	High quality used or new items may be received at a TS. Premium products for management in a TS reuse center include quality windows, doors, hardware, lumber, tools, lighting fixtures, furniture, and appliances.	Designated areas should be identified and arrangements made for users to salvage items safely under supervision. Traffic flow, sorting, safe storage and user access to the salvage area should be controlled. Often, salvageable items will need to be stored in a covered area or building to retain value. Uncontrolled scavenging in bins of mixed waste is prohibited at a TS.
White goods and large Appliances	White goods containing refrigerant include refrigerators, freezers, air conditioners, water coolers and dehumidifiers. Metal from large appliances may be of value. Reuse potential exists for parts.	Refrigerating appliances should be stored above ground in a separate area in an upright position. Refrigeration and air conditioning equipment must be retained until a certified technician has recovered ozone depleting substances (ODS), at which time appliances will be marked to indicate the ODS removal service in accordance with the Halocarbon Control Chapter.

APPENDIX C - SAMPLE FORM FOR RECORDING WASTE DIVERSION THROUGH RESOURCE RECOVERY AND SALVAGING

Date:	**Staff name/Identification:**
Load number *[or other identifiers]:*	***Action taken:*** *Example: [Can note what was done and where the material was taken to in this section.]*
Type of waste	Amount (use preferred units if there is no weighing scale).
White Metal Goods	
Scrap Metal	
Electronics e-waste	

A TS with an EMP must submit a report to the ministry by February 28 of the following year. *S*ection 1-8*(d)* outlines the contents of an EMP that are required to be documented in the plan. These are:

- Records of any environmental sampling, analysis or monitoring that has been conducted;
- The results of any environmental analysis showing trend analyses, assessment and interpretation;
- The date, location and time of environmental sampling or monitoring;
- The name of the person collecting the environmental sample;
- An identification of the environmental sample type;
- The date of analysis of the environmental sample;
- The sampling method used;
- The name of the laboratory that performed the analysis of the environmental sample;
- The chain of custody form;
- The name of the person responsible for performing the analysis of the environmental sample; and
- The quality assurance and quality control records of any environmental samples.

Test results obtained from environmental monitoring are to be interpreted and compared against the applicable substance concentrations in the Saskatchewan Environmental Quality Standard.

Any amendments to an existing EMP must also be approved by the ministry prior to implementation of changes. These include changes to any aspects of an approved EMP and to an existing groundwater monitoring wells network. If a site has made changes such as installing new wells or decommissioning wells that are a part of an existing EMP, a report must be submitted to the ministry within 60 days of completion of work. The submission must be completed in the ministry's business portal under the EMP reporting requirement. Section 1-9 of the Chapter outlines the information required to request a change to the EMP.

Environmental Samples and Laboratory Analysis

Section 1-7 of the Chapter outlines the requirements for environmental monitoring and the qualities to be met for the environmental samples collection, handling (e.g. preservation, transportation, storage) and analysis. Generally, most TSs will not require environmental monitoring to be conducted at a TS due to the temporary waste storage activities. An environmental monitoring plan can be part of an EPP under the alternative solution (part 2) of the Chapter. A QP will be tasked with determining if the TS requires environmental monitoring for any of the media (e.g. groundwater, surface water, soil) and identify the parameters to be sampled and analyzed to reflect the site-specific conditions of a TS.

It is critical for operators and owners to ensure the collection and handling of samples follow a method approved by a standard setting organization such as the Canadian Association for Laboratory Accreditation (CALA) or Standards Council of Canada Accreditation (SCC). A standard setting organization oversees developing, coordinating, disseminating, revising, amending, interpreting or otherwise producing technical methods to ensure scientifically defensible data is obtained. This includes the periodic review and updates to methods incorporating new knowledge and experience. Samples

must be analyzed in laboratories that are accredited by the CALA or SCC. An accredited laboratory means that it is following a formal, third-party recognized method and that the laboratory has professionals who are competent to perform specific tasks - the work for which they are accredited.

In cases where there is no parameter-specific environmental sampling method or an analytical method accreditation process does not exist, a QP should provide a certificate stating that, in their opinion, the quality assurance and quality control for sampling and analytical procedures produce accurate, precise, and reliable results.

The reports from environmental monitoring activities, laboratory analysis, significance of the results through data interpretation and trend analysis, and recommendations for future monitoring, are to be submitted to the ministry when requested.

APPENDIX E – STORAGE OF HAZARDOUS SUBSTANCES AND WASTE DANGEROUS GOODS (HSWDG) AT A TS

If a TS is approved to store such materials, the operations plan and the emergency response plan mentioned in section 3-7 (1) and 3-7 (2) of the Chapter must include protocols and procedures for managing these materials. For instance, Safety Data Sheets (SDSs) need to be maintained for all HSWDG stored at the TS. An inventory of all the hazardous waste and waste dangerous goods received at a TS are to be maintained, with records kept for the lifetime of the TS.

Transportation of hazardous waste or hazardous recyclable material may be subject to the *Transportation of Dangerous Goods Regulations* (Canada).

In practice operators should expect that TS users will bring hazardous waste to the facility despite whether it is formally accepted or not and have plans to address the materials. Household hazardous waste may be managed in a community depot or through collection events through the provincially regulated program. For more information, contact Product Care Recycling. Hazardous waste of commercial volumes or those not accepted by the program should be disposed of through a private hazardous waste management company.

Common hazardous substances or waste dangerous goods are identified in Table 10. Some items in this table may not require a hazardous waste storage permit but all will require special handling.

Common hazardous waste received at transfer stations

Substance, Material or Product	Hazard	Management Information
Asbestos	Dust is carcinogenic.	Asbestos is prohibited from management at transfer stations in the TS Chapter. However, a permit can be obtained. **Refer to the section on Acceptance of waste requiring special handling or approval.** When managed, asbestos must be segregated from other waste and triple bagged.
Automotive lead acid batteries	Lead is toxic and sulfuric acid is corrosive.	The Canadian Battery Association has more information on management. These batteries usually have a deposit applied, offering an incentive for return to retail or wholesale locations. Batteries should be placed on wooden pallets, no more than two layers thick, separated with a think sheet of plywood or a few sheets of study cardboard. If a TS stores more than six automotive batteries at a time, a separate hazardous waste storage permit will be required. The transportation of new, used and waste batteries are subject to *The Transportation of Waste Dangerous Goods Regulations* (Canada).

Substance, Material or Product	Hazard	Management Information
Medical sharps	Medical sharps can contain pathogens and are a physical hazard.	Most Saskatchewan pharmacies offer secure sharps collection boxes and accept sharps in these containers for proper disposal. Users can be advised of the take-back-program.
Mercury containing lightbulbs and ballasts (fluorescent)	Common light bulbs such as compact fluorescents, linear fluorescent lights and ballasts or high intensity discharge (HID) bulbs contain mercury which is toxic.	Several retailers accept used mercury containing lamps which are listed on the SWRC website. The National Strategy for Lamps Containing Mercury aims to eliminate this source of mercury pollution in Canada.
Mercury switches and thermostats	Mercury is toxic.	Industry led recycling programs exists for these products. Mercury switches and thermostats should be stored in separate closed, unbreakable containers and then in a secondary container to reduce the risk of releases. Contact SGI for mercury switch drop-off locations. Contact the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) for take back locations.
Pharmaceuticals	Some pharmaceuticals can pose a toxicity risk when managed improperly.	Most Saskatchewan pharmacies collect prescription drugs and over-the-counter medications and natural health products through the medication take-back program. Users can be advised of the take-back-program.
Propane cylinders	Propane cylinders are explosive and even apparently empty cylinders often contain residual gas and require special storage and handling.	Refillable propane tanks can be returned to retailers or recycled. Non-refillable containers are accepted by the provincially regulated household hazardous waste program. Propane tanks must be purged by a properly trained person to be managed as scrap metal. Store cylinders outdoors, away from heat or sources of ignition. Keep in a secure, well-ventilated area, off the ground, on a non-combustible base. The Canadian Propane Association has more information on recycling. The Saskatchewan Waste Reduction Council maintains information on local recyclers.

Substance, Material or Product	Hazard	Management Information
Used oil (quantities greater than 500 kg)	A small amount of used oil can contaminate a large amount of water or soil. Used oil is also flammable and may contain heavy metals and other health hazards such as Polychlorinated Biphenols (PCBs).	*The Hazardous Substances and Waste Dangerous Goods Regulations* identify in section 8(4) if the amounts of used oil or antifreeze aggregate storage capacity is greater than 500 kg the products are governed by these regulations. A permit will be required to store amounts of used oil or antifreeze in excess of 500 kg. For more information contact the Client Service Office at 1-800-567-4224 (toll free in Canada) 306-787-2584 in Regina or Centre.Inquiry@gov.sk.ca.

APPENDIX F - REPORTS TO BE INCLUDED AS PART OF AN EPP

Report	Purpose
Site Suitability	The site suitability report describes the site-specific siting requirements for the prospective TS. It is part of the notification for new or expanding sites both with and without construction needs.
Design Plan	Description of the design intent, which includes construction specifications (if applicable), site plans, site maps with appropriate contours, and a summary of the components included in the design to achieve the intent of the design plan to meet site-specific information to meet the result-based objective as described in section 2-1(2) of the Chapter. Ensure all applicable regulations are followed not limited to this Chapter or the following examples (e.g. health and safety, building code). Approval of the Site Suitability and Design Plan will be required prior to construction.
Construction Verification (if applicable)	Description of the construction of infrastructure at the site as submitted in the design plan. Once construction is completed as per the design plan, the ministry must be notified via submission of the construction verification report that contains quality assurance documentation and construction completion report, before starting TS operation. Ministry approval is required prior to operations.
Operations Plan*	Description of TS procedures and protocols for the day-to-day operational activities including their documentation such as checklists and other forms for record keeping. Specific contents for this will depend on the operations of the TS and the design plan to be implemented to minimize impact to the environment and surrounding communities.
Environmental Monitoring Plan (EMP) (if required)	A plan that outlines the requirements as per section 1-8(d) of the Chapter. The purpose is to ensure monitoring and minimization of releases of any substances that are causing or may be causing environmental effects; installation of monitoring systems (e.g. groundwater monitoring wells) or other environmental controls (e.g. for surface water run-ons, run-offs, discharge or ponding, storm water controls); environmental sampling to be conducted (e.g. the parameters, frequency, interpretation of results) and reporting to the ministry. Most TS will not require an EMP.
Emergency Response Plan (ERP)*	Description of the emergencies and incidents that may occur at the TS for any activities that may potentially cause harm to human or cause environmental deterioration, and the course of action to mitigate the impacts from those activities. An ERP can also be included as part of an operations plan rather than as a separate plan.
Closure Plan	Summarizes the TS activities during the operational phase as well as the work completed to decommission the site including removal of infrastructure; removal of temporary piles and bins; general site clean-up; final contours of the site and returning site to the intended end use; and any post-closure work expected. Under the alternation solution, the closure report needs to part of the EPP.

* Operations plans and ERPs are not required to be prepared by a QP and may be submitted by the owner. The documents are required as part of the alternative solution and approval.

APPENDIX G - LIST OF REPORTS REQUIRED FOR NOTIFICATION

Reports	**Purpose of the Report**	**Transitioning an existing TS**	**Establishing a new TS at a closed landfill**	**Establishing a new TS at a new location**
Site suitability	The site suitability report presents the siting location and describes the site-specific design requirement required for protecting the environment. See section 3-4(2) for specific content.	Not required	Not required (unless expanding)	Required
Design Plan	Description of the design intent, site plans, and a summary of the component included in the design to achieve the intent of the design. See section 3-5(2) for specific content.	Not required	Not required (unless expanding)	Required
Operations Plan*	Description of TS procedures and protocols for the day-to-day operational activities including their documentation such as checklists and other forms for record keeping. See section 3-7(2) for specific content.	Required	Required	Required
Emergency Response Plan (ERP)*	Outline the emergencies and incidents that may occur at the TS for any activities that may potentially cause harm to human or cause environmental deterioration, and the course of action to mitigate the impacts from those activities. An ERP can also be included as part of an operations plan rather than as a separate plan. See section 3-7(3) for specific content.	Required	Required	Required

* Operations plans and ERPs are not required to be prepared by a QP and may be submitted by the owner. The documents are required as part of the alternative solution and approval.

APPENDIX H - REPORT REQUIREMENTS FOR CONSTRUCTION OR EXPANSION

Reports	**Purpose of the Report**	**Transitioning an existing TS**	**Establishing a TS at a closed landfill**	**Establishing a TS at a new location**
Construction Verification	Description of the construction of infrastructure at the site as submitted in the design plan. Once construction is completed as per the design plan, the ministry must be notified via submission of the construction verification report before starting TS operation.	Not required unless expanding.	Not required unless expanding.	Required for any new construction activities.

APPENDIX I - REPORTS REQUIREMENT FOR CLOSURE OF A TS

Reports	**Purpose of the Report**	**Transitioning an existing TS**	**Establishing a TS at a closed landfill**	**Establishing a TS at a new location**
Notice of Closure	A written report to the ministry and the notice to the public must both contain the expected closure date. The public notice sets out the date of the closure and must be posted at the entrance of the TS. This notice must also contain information regarding alternative disposal sites available to the former rate payer. The closure report, submitted to the ministry through the ENV portal, must also state how the site intends to clean the site of litter, unused containers, unused tanks or waste in temporary storage areas. The notice must be submitted to the ministry as part of the closure reporting.	Required	Required	Required
Closure Report	A closure report summarizes the reports and accounts of the TS during the operational phase as well as the work completed to decommission the site, including removal of infrastructure; removal of temporary piles and bins; general site clean-up; final contours of the site and returning site to the intended end use; and any post-closure work expected. The closure report must be submitted to the ministry within a year of the TS closure under both the acceptable and alternative solutions.	Required	Required	Required