Guide for Liquid Domestic Waste Collection and Disposal in Saskatchewan

*Note:

Liquid Domestic
Waste does <u>not</u>
include wastewater
containing hazardous
substances (oil, fuel,
solvents, etc.)

Hazardous substances require disposal at authorized facilities only.

Overview

Liquid domestic waste has the potential to adversely impact human health and the environment. As such, the collection and disposal of liquid domestic waste is subject to *The Environmental Management and Protection Act, 2010* and *The Environmental Management and Protection (General) Regulations*. This fact sheet provides information on the requirements for persons collecting, transporting, and disposing of liquid domestic waste, hereafter termed "hauling", in the province of Saskatchewan.

Terms respecting liquid domestic waste hauling include:

- Hazardous Substances means a substance that causes harm to human health or the environment as described in section four of *The Hazardous Substances and* Waste Dangerous Goods Regulations
- Liquid Domestic Waste means any wastewater, including sewage, created at a household as part of everyday domestic activities (e.g. used dishwater, bathing/shower water, toilet, etc.)
- Liquid Domestic Waste Hauler means any vehicle or trailer, including any vehicle or trailer customized or modified, to be used primarily for the purpose of transporting and disposing of liquid domestic waste
- site means a parcel of land as defined in The Land Surveys Act, 2000 or contiguous parcels of land owned by the same person

Permits for Liquid Domestic Waste Collection and Disposal

All person(s) hauling liquid domestic waste are required to obtain a **Permit to Transport** and **Dispose of Liquid Domestic Waste**. Permits are issued by the **Water Security Agency**, and include the following:

- Company to which the permit is issued
- Municipalities/locations where permittee is authorized to operate and dispose
- Dates of permit taking effect and expiry
- Terms and conditions

Written notice to the Water Security Agency is required for using a disposal location not listed in the permit, and a permit is not required when liquid domestic waste generated by a household is disposed of on a site owned by the same person as the household.



*Note:

Records related to liquid domestic waste shall be kept in vehicle(s) used for hauling for the calendar year in which hauling activities take place, and be made available to Ministry of Environment or Water Security Agency personnel on request

Required Record Keeping

Persons permitted to conduct liquid domestic waste hauling are required to keep records for **seven (7) years** from the date of the collection and disposal including:

- Date of collection and disposal
- Type and volume of collected (e.g. 1000L of septic water)
- Address or land location collection took place
- Location of collection and disposal (sewage facility or private land)
- Written permission documents to dispose of domestic waste for **all** sewage facilities or private landowners where disposal takes place

When a hauling business is transferred to a new owner, all records related to hauling activities for the past seven years are to be provided to the new owner.

Applying for a Permit

Permit **application (WSA505)** and **permission (WSA506)** forms for hauling liquid domestic waste can be downloaded from the agency website at www.wsask.ca.

Instructions for completing the application are provided in the application form. Application must include permission form(s) from either an agency approved lagoon or from the landowner where land spreading is to occur. Landowners receiving liquid domestic waste for land spreading must have a waste management plan, which is required to be submitted with the application.

Completed applications can be emailed to the agency at liquiddomesticwaste@wsask.ca, or submitted by mail

*Note:

Longer processing times can be expected if application is incomplete.

Water Security Agency 300 2365 Albert St. Regina, SK, S4P 4K1

Fees for permits are \$200 for non-commercial operators, and \$500 for commercial operators. Timeframe for processing a permit application is about 45 calendar days.

Disposal at a Sewage Facility

All hauled liquid domestic waste shall be disposed of at an agency approved sewage facility where collection takes place within 50 km of an approved facility. Permission to dispose of domestic waste at a given approved facility is required prior to disposal, which expires after a period determined by the lagoon operator. Haulers must obtain a new approval from the lagoon operator to continue to dispose of liquid domestic waste at a given lagoon.



Disposal to Land

Liquid domestic waste can be disposed of on land (i.e. land spreading) should access to an approved sewage facility within **50 km** of collection location not be available, or approved facilities do not grant permission to dispose of domestic waste. Written permission of site owner shall be obtained **prior** to disposal. Disposal of liquid domestic waste shall not be on sites with the following:

- Native prairie and land covered in tress or brush
- Where vegetable, fruit, or root crops for human consumption are present
- Cereal, oilseed, pulse, or corn from time of planting to harvest
- Pasture of forage crops (within two (2) months of harvest)
- Over 70% sand, with exposed bedrock, or bog(s)
- Within one (1) km of an occupied building, and 150 m of any water body, domestic well, public road, or cemetery
- Into a permanent or intermittent waterbody, stream/channel, or drainage channel (slough, stream/river, etc.), or on land subject to water erosion
- Wet or frozen soil, unless according to an approved waste management plan

Agricultural Land

Disposal of liquid domestic waste to agricultural sites is permissible as a means of providing nitrogen to crops or vegetation under the following conditions:

- Written agreement shall be in place between hauler and disposal site owner with the following conditions:
 - Individuals (other than site owner) and pets are kept off land for 30 days, with signage posted on the site stating access is restricted
 - Livestock are kept off site for two (2) months
 - O Swine, sheep, and wildlife are kept off site for six (6) months
- Disposal to site(s) shall be by subsurface injection, surface application followed by cultivation or covering within four (4) days of application, or surface application where substantial vegetation cover is present
- Clear and conspicuous signage be posted on agricultural land used for disposal that ensures no public access for a minimum of one (1) month.

Application of liquid domestic waste to agricultural sites for the purpose of supplying nutrients to soil shall be based on nutrient requirements for the crop or vegetation planned or present at the site. Information respecting crop nutrient requirements are provided by the following formula and Table 1.

Annual Application Rate = (Gallons/Acre/Year)

Pounds of Nitrogen Required for Crop Yield 0.0026



Table 1: Guidelines for Liquid Domestic Waste Application Rates Based on Typical Crop Nitrogen Requirements

	Expected Yield (bu/acre/yr.)	Nitrogen Requirement (lb./acre/yr.)	Annual Application Rate (gal/acre/yr.)	Application Time
Alfalfa	5*	290	111,500	At least 30 days prior to harvest
Barley	80	111	42,700	Prior to seeding
Canola	35	111	42,700	Prior to seeding
Clover	4*	215	82,700	At least 30 days prior to harvest
Flax	24	71	27,300	Prior to seeding
Grass	3*	102	39,200	At least 30 days prior to harvest
Lentils	30	92	35,400	Prior to seeding
Oats	100	106	40,800	Prior to seeding
Field Peas	50	153	58,800	Prior to seeding
Rye	55	92	35,400	Prior to seeding
Silage (Barley/Corn)	5*	155	60,000	At least 30 days prior to harvest
Spring Wheat	40	85	32,700	Prior to seeding
Sunflower	50	75	28,800	Prior to seeding
Winter Wheat	50	68	26,200	Prior to seeding

^{*}measured in ton/acre/year

Disposal of Hazardous Substances

Haulers used to transport hazardous substances shall **not** be used to haul liquid domestic waste unless the hauler used has been purged of the hazardous substance according to the following criteria:

- Less than 0.1 % of the original volume of hazardous substance remains in tank(s)
- Flammable vapours, if present, are reduced to 10% of lower explosive limit

Hazardous substances shall be disposed of at an approved facility. More information on hazardous substances management and disposal can be found at:

https://www.saskatchewan.ca/business/environmental-protection-andsustainability/hazardous-materials-and-safe-waste-management

More info?

Online at https://www.wsask.ca/, or contact the Water Security Agency at:

Tel: 1 (866) 727-5420, or Email: comm@wsask.ca

*Note:

Information on explosive limits can be found on the Safety Data Sheet (SDS) provided by the manufacturer.

