Applying for a Class 4 Sewage Treatment System Permit

Please complete the following steps to apply for a sewage treatment system permit. More details on each step can be found in the attached package.

1. Dig the test pits (if required).
2. Design the sewage treatment system.
3. Complete the application form.
4. Submit the following items:

   ☐ Fee

   ☐ Completed Application Form

   ☐ Schedule 1 (Designer) and/or Schedule 2 (licensed installer)

   ☐ Lot Survey

   ☐ Soil Analysis Report for Design Soil (if Different from Native Soil)

   - *Required for imported leaching bed fill or filter sand used to construct the leaching bed or mantle*

   ☐ Soil Analysis Report or Percolation Test Documentation for Native Soil

   - *Required for native soil **unless** the design is assuming a native soil T > 50 **and** the system being designed is a raised absorption trench system*

   ☐ Letter of Authorization

   - *Required when a licensed sewage installer will be constructing the system*

   Note: The application will not be processed until items are received in full.

5. Receive the initial inspection.
6. Receive the permit.
7. Start work on the system.
8. Request the final inspection.
9. Receive the final inspection.
10. Receive certificate of inspection.

Northwestern Health Unit
www.nwhu.on.ca

Revised: 2025-04-15

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Authorization to Delegate Authority to Submit Sewage System Application

I, _____, am a legal owner of the subject property and have the permission of any other owner(s) to delegate authorization to make application for a sewage system permit. Other owners include (if applicable), _____.
I can be contacted by email _____ or phone _____.

The person allowed to submit the application on my/our behalf is _____ and can be contacted by email _____ or phone _____.
The property is described as Property Identification Number (PIN) _____ and/or Parcel_____. Lot _____ of Plan_____. Other_____.

I/we understand the sizing of a sewage system is dependent on accurate dwelling information, including proposed modifications/additions to the structures on the property.

Signed_____ Date_____.

Please send this form in, along with your permit, to permits@nwhu.on.ca or provide hard copy to the Northwestern Health Unit office.

For more information contact:
Chief Building Official
210 First Street North
Kenora, ON P9N 2K4
1-800-830-5978
permits@nwhu.on.ca

Personal information is collected under the authority of the Health Protection and Promotion Act and related legislation and in accordance with the Personal Health Information Protection Act and/or the (Municipal) Freedom of Information and Protection of Privacy Act. We collect only the personal information needed to provide public health programs and to plan and evaluate our services. Your information may be shared with others as required or permitted by law. For more information contact the health unit at 800-830-5978 or see the privacy statement on our web-site at www.nwhu.on.ca.

Application for a Permit to Construct or Demolish

This form is authorized under subsection 8(1.1) of the *Building Code Act, 1992*

For use by Principal Authority only			
Date Received:		Application Number:	
Amount paid:	Receipt #:	☐ Cash ☐ Debit ☐ Money Order	
		☐ Cheque ☐ Visa ☐ MasterCard	

NOTE: ALL STARRED* SECTIONS ARE MANDATORY

A. Property information

*Legal Description (can be found on recent property tax statement):	PIN: (00000-0000)	Township:	
		Municipality:	

*Street/Road Address:	Postal Code:	Plan Number:	Roll number/other description:

Project value estimate $:	Area of work (m^2):

*Directions to Property:

B. Purpose of application

☐ *New construction ☐ Addition to an existing building ☐ *Alteration/repair ☐ Demolition ☐ Conditional Permit

*Proposed use of building: ☐ Residential ☐ Commercial	*Current use of building:

Description of proposed work:

C. Applicant

Applicant is: ☐ Owner ☐ Authorized agent of owner

*Last Name:	*First Name:	Corporation or partnership:

*Street Address:	Unit Number:	Lot/concession:

*Municipality:	*Postal Code:	*Province:	*Email:

*Telephone Number:	Fax Number:	Mobile number:

D. Owner (if different from applicant)

*Last Name:	*First Name:	Corporation or partnership:

*Street Address:	Unit Number:	Lot/concession:

*Municipality:	*Postal Code:	*Province:	*Email:

*Telephone Number:	Fax Number:	Mobile number:

E. Builder (optional)

Last Name:	First Name:		Corporation or partnership:	
Street Address:			Unit Number:	Lot/concession:
Municipality:	Postal Code:	Province:	Email:	
Telephone Number:	Fax Number:		Mobile number:	

F. Tarion Warranty Corporation (Ontario New Home Warranty Program)

i. Is proposed construction for a new home as defined in the *Ontario New Home Warranties Plan Act?* ☐ Yes ☐ No

ii. Is registration required under the *Ontario New Home Warranties Plan Act*? ☐ Yes ☐ No

If yes, provide registration number(s): _____

G. Required Schedules

i. Attach Schedule 1 for each individual who reviews and takes responsibility for design activities.
ii. Attach Schedule 2 where application is to construct on-site, install, or repair a sewage system.

H. *Completeness and compliance with applicable law

i. This application meets all the requirements of clauses 1.3.1.3 (5) (a) to (d) of Division C of the *Building Code Act* (the application is made in the correct form and by the owner or authorized agent, all applicable fields have been completed on the application and all required schedules are submitted).	☐ Yes ☐ No
Payment has been made of all fees that are required, under the applicable by-law, resolution, or regulation made under clause 7(1)(c) of the *Building Code Act, 1992,* to be paid when the application is made.	☐ Yes ☐ No
ii. This application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution, or regulation made under clause 7(1)(b) of the *Building Code Act, 1992*.	☐ Yes ☐ No
iii. This application is accompanied by the information and documents prescribed by the applicable by-law, resolution, or regulation made under clause 7(1)(b) of the *Building Code Act, 1992,* which enables the chief building official to determine whether the proposed building, construction, or demolition will contravene any applicable law.	☐ Yes ☐ No
iv. The proposed building, construction, or demolition will not contravene any applicable law.	☐ Yes ☐ No

I. Declaration of applicant

I _____ declare that:
(print name)

1. The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation is true to the best of my knowledge.
2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.

_____ Date

_____ Signature of Applicant

Personal information contained in this form and schedules is collected under the authority of subsection 8(1.1) of the *Building Code Act, 1992*, and will be used in the administration and enforcement of the *Building Code Act, 1992*. Questions about the collection of personal information may be addressed to: a) the Chief Building Official of the municipality or upper-tier municipality to which this application is being made, or, b) the inspector having the powers and duties of a chief building official in relation to sewage systems or plumbing for an upper-tier municipality, board of health or conservation authority to whom this application is made, or, c) Director, Building and Development Branch, Ministry of Municipal Affairs and Housing 777 Bay St., 2nd Floor. Toronto, M5G 2E5 (416) 585-6666.

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information

Building number, street name:		Unit no.	Lot/concession:
Municipality:	Postal Code:	Plan number/other description:	

B. Individual who reviews and takes responsibility for design activities

Name:		Firm:	
Street Address:		Unit Number:	Lot/concession:
Municipality:	Postal Code:	Province:	Email:
Telephone Number:	Fax Number:	Mobile number:	

C. Design activities undertaken by individual identified in section B. (Building Code Table 3.5.2.1. of Division C)

☐ House	☐ HVAC – House	☐ Building Structural
☐ Small Buildings	☐ Building Services	☐ Plumbing – House
☐ Large Buildings	☐ Detection, Lighting, and Power	☐ Plumbing – All Buildings
☐ Complex Buildings	☐ Fire Protection	☐ On-site Sewage Systems

Description of Designer's Work

D. Declaration of Designer

I _____ declare that (choose one as appropriate):
(print name)

I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C of the *Building Code*. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: _____

Firm BCIN: _____

I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the *Building Code.*

Individual BCIN: _____

Firm BCIN: _____

The design work is exempt from the registration and qualification requirements of the *Building Code*.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

_____ _____

Date Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1)(C) of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a licence, temporary licence, or a certificate of practice, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a licence to practice, a limited licence to practice, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Schedule 2: Sewage System Installer Information

NOTE: COMPLETE ALL SECTIONS WHERE POSSIBLE.

A. Project Information

Building number, street name:		Unit no.:	Lot/concession:
Municipality:	Postal Code:	Plan number/other description:	

B. Sewage system Installer

Is the installer of the sewage system engaged in the business of construction on-site, installing, repairing, servicing, cleaning, or emptying sewage systems, in accordance with *Building Code* Article 3.3.1.1. Division C?

☐ Yes (Continue to Section C) ☐ No (Continue to Section E) ☐ Installer unknown at time of application (Continue to Section E)

C. Registered installer information (where answer to B is "Yes")

Name:		BCIN:	
Street Address:		Unit Number:	Lot/concession:
Municipality:	Postal Code:	Province:	Email:
Telephone Number:	Fax Number:	Mobile number:	

D. Qualified supervisor information (where answer to Section B is "Yes"

Name of qualified supervisor(s):	Building Code Identification Number (BCIN):

E. Declaration of Applicant:

I _____ declare that:
(print name)

I am the applicant for the permit to construct the sewage system. If the installer is unknown at the time of application, I shall submit a new Schedule 2 prior to construction when the installer becomes known;

OR

I am the holder of the permit to construct the sewage system, and am submitting a new Schedule 2, now that the installer is known.

I certify that:
1. The information contained in this schedule is true to the best of my knowledge.
2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.

_____ _____
Date Signature of Applicant

Northwestern Health Unit
www.nwhu.on.ca

Section 1: Sewage System Specifications – Class 4 Sewage System

A. Proposed Sewage System: ☐ Residential ☐ Commercial

☐ New Installation ☐ Replacement ☐ Alteration ☐ Repair

B. Proposed Construction:

☐ Full System (Field and Tank) ☐ Tank Only ☐ Field Only

C. Building Information:

Number of bedrooms: _____ Floor area _____ m^2

Is there a walk-out basement where more than 50% of the wall area is visible above ground level? ☐ Yes ☐ No

Plumbing Fixtures (include roughed-in plumbing)

Description	# Proposed	x	Fixture Unit	=	Count
Bathroom Group – Toilet/Sink/Shower		x	6	=	0
Sinks/Wash Basins		x	1.5	=	0.0
Bathtubs/Showers		x	1.5	=	0.0
Toilets (flush tank)		x	4	=	0
Domestic Dishwasher (not connected to garbage grinder or domestic sink)		x	1	=	0
Laundry Tub/Washing Machine		x	1.5	=	0.0
Other:	0	x	0	=	0.0
				Total Fixture Unit Count =	0

Water Treatment ☐ None ☐ Existing ☐ Proposed

Description of proposed/existing water treatment:

Please Note: Water treatment backwash not permitted in septic systems

Water Supply ☐ Existing ☐ Proposed

☐ Dug well ☐ Drilled well ☐ Surface water ☐ Hauled

All wells within 30 metres of the proposed sewage system, in use or abandoned, must be shown on the site plan.

D. Design Flow Calculations (Q)

	# of Bedrooms	Volume (L)	Flow
Bedroom Flow (A) (Choose one)	1 Bedroom ☐	750	0
	2 Bedrooms ☐	1100	
	3 Bedrooms ☐	1600	=
	4 Bedrooms ☐	2000	
	5 Bedrooms ☐	2500	

	# of Extra Bedrooms	Volume (L)	Flow
Additional Bedrooms Over 5 (B)	0	x 500	= 0

	Floor Space (m^2)	Units	x Volume (L)	= Flow
Living Area (C)	200m^2 or less	1	x 0	= 0
	Each 10m^2 over 200m^2-400m^2		x 100	= 0
	Each 10m^2 over 400m^2-600m^2		x 75	= 0
	Each 10m^2 over 600m^2		x 50	= 0
			Sum of Flow Column	= 0

	# of Fixture Units >20	Volume (L)	Flow
Fixture Unit Count (D)	0	x 50	= 0

	(Q) = Flow Value of (A) + Largest Flow Value of (B) (C) & (D)					
Daily Design Sewage Flow (Q)	**(Q)=**	0	**+**	0	**(Q)=** 0	**L/day**

E. Treatment Unit

CAN/BNQ 3680-600 Certified Level II, III, IV Treatment Unit:

☐ *Design Information and CAN/BNQ Certification Literature Attached*

Septic Tank: ☐ New CSA B66 Standard ☐ Existing

☐ Residential (minimum capacity = 2xQ)
☐ Non-residential (minimum capacity = 3xQ)

Working capacity of tank: _____ L
(Must be at least 3600L)

☐ Gravity ☐ Pump* (with alarm)
Tank Manufacturer: _____
Tank Model: _____
Effluent filter: ☐ Yes ☐ No

**Note: Pump systems require a permit from the Electrical Safety Authority (1-877-372-7233)*

Section 2: Soil Design Criteria and Site Evaluation

A. Percolation Rate and Classification of Native Soil

☐ Laboratory Analysis Report Attached
☐ Percolation Test Documentation Attached

☐ T>50 min/cm (not required to complete "test pit information" section below)

☐ T-time of Native Soil: _____min/cm

Test Pit Information (indicate approximate depth of each soil type encountered)

Test Pit #1 Soil Description	Depth (M)		Test Pit #2 Soil Description
☐	0.00	0.00	☐
☐	0.25	0.25	☐
☐	0.75	0.75	☐
☐	1.00	1.00	☐
☐	1.25	1.25	☐
☐	1.50	1.50	☐
☐	1.80	1.80	☐
☐ Groundwater encountered: _____m ☐ Bedrock encountered: _____m ☐ Evidence of seasonal groundwater _____m			☐ Groundwater encountered: _____m ☐ Bedrock encountered: _____m ☐ Evidence of seasonal groundwater _____m

B. Percolation Rate of Design Soil (if Different from Native Soil)

T-Time of Design Material: _____ ☐ Laboratory Analysis Report Attached*	T-Time of Mantle Material: _____ ☐ Laboratory Analysis Report Attached*

** Reports must be no more than 24 months old.*

Section 3: Sewage System Design

Will the system use innovative materials authorized by the BMEC?

☐ Yes – Attached BMEC Authorization and design plans including cross-sectional drawing *(Continue to Section 5)*
☐ No

System Characteristics (check all that apply)

☐ Raised System* ☐ Partially Raised System* ☐ Type I Leaching Chambers (EQ 24)
☐ In-ground System ☐ Stone and Pipe ☐ Type II Leaching Chambers (EQ 36)

Indicate and complete the section that best describes your system design plan

☐ Section 3.1 Conventional Leaching Bed ☐ Section 3.2 Filter Bed System* ☐ Section 3.4 Shallow Buried Trench
☐ Section 3.5 Type A Area Bed ☐ Section 3.6 Type B Area Bed

You will need to complete section 3.3 in addition to 3.1 or 3.2 for these types of systems.

Section 3.1: Conventional Leaching Bed

Length of Distribution Pipe or Chamber (choose one of the following):

1. Systems using a septic tank paired with conventional pipe or Type I leaching chamber:

L = QT/200

L = Pipe/Chamber Length *(min.40m required)*
Q = Daily Design Sewage Flow *(see S.2)*
T = Percolation Rate (T-Time) of Design Soil

L = _____ **m**

2. Systems using a septic tank paired with a Type II leaching chamber *OR* a Level II, III or IV Treatment Unit paired with conventional pipe or a Type I or II leaching chamber:

L = QT/300

L = Pipe/Chamber Length *(min.40m required)*
Q = Daily Design Sewage Flow *(see S.2)*
T = Percolation Rate (T-Time) of Design Soil

L = _____ **m**

Section 3.2: Filter Bed

Size of Effective Area (choose one of the following):

1. Systems with a Daily Design Sewage Flow (Q) ≤3000L (paired with septic tank)

A = Q/75

A = Area in m^2 *(min 10m^2 required)*
Q = Daily Design Sewage Flow *(see S.2)*
(maximum of 5000L permitted)

A = _____ **m^2**

2. Systems with a Daily Design Sewage Flow (Q) >3000L (paired with septic tank)

A = Q/50

A = Area in m^2 *(min 10m^2 required)*
Q = Daily Design Sewage Flow *(see S.2)*
(maximum of 5000L permitted)

A = _____ **m^2**

3. Systems Paired with a Level II, III or IV Treatment Unit *(Max Q = 10,000L)*

A = Q/100

A = Area in m^2 *(min 10m^2 required)*
Q = Daily Design Sewage Flow *(see S.2)*
(maximum of 10,000 L permitted)

A = _____ **m^2**

Size of Extended Contact Area:

A = QT/850

Q = Daily Design Sewage Flow (see S.2)
T = Percolation Rate (T Time) of Native Soil

A = _____ **m^2**

Section 3.3: Size of Loading Area (Mantle) (if applicable)

A = Q/LR

A= Area (m^2)
Q = Daily Design Sewage Flow (see S.2)
LR = corresponding value from chart below:

T-Time of Native Soil	Loading Rate
1<T ≤ 20	10
20<T ≤ 35	8
35<T ≤ 50	6
T>50	4

A = _____ **m^2**

Section 3.4: Shallow Buried Trench

Length of Distribution Pipe (choose one of the following):

1. Percolation time of soil in minutes is 1 < T ≤ 20:

L = Q/75

L = Pipe/Chamber Length *(min.30m required)*
Q = Daily Design Sewage Flow *(see S.2)*

L = **m**

2. Percolation time of soil in minutes is 20 < T ≤ 50:

L = Q/50

L = Pipe/Chamber Length *(min.30m required)*
Q = Daily Design Sewage Flow *(see S.2)*

L = **m**

3. Percolation time of soil in minutes is 50 < T ≤ 125:

L = Q/30

L = Pipe/Chamber Length *(min.30m required)*
Q = Daily Design Sewage Flow *(see S.2)*

L = **m**

Section 3.5: Type A Dispersal Bed

Sand Layer (choose one of the following):

1. Percolation time of underlying soil in minutes is 1 < T ≤ 15:

A = QT/850

A = the area of contact in m2 between the base of the sand and the underlying soil
Q = Daily design sewage flow *(see S.2)*
T = Percolation Rate (T-Time) of Native Soil

A = **m^2**

2. Percolation time of underlying soil in minutes is T>15

L = QT/400

A = the area of contact in m2 between the base of the sand and the underlying soil, or leaching bed fill if utilized
Q = Daily design sewage flow *(see S.2)*
T = Percolation Rate (T-Time) of Native Soil

A = **m^2**

Stone Layer or Leaching Chambers Spacing Area (choose one of the following):

1. Systems with a Daily Design Sewage Flow (Q) ≤3000L

A = Q/75

A = **m^2**

2. Systems with a Daily Design Sewage Flow (Q) >3000L

A = Q/50

A = **m^2**

Description of effluent distribution design:

include configuration and total length of distribution pipe or leaching chambers over stone layer

Section 3.6: Type B Dispersal Bed

Total Stone Area:

A = QT/400	A = the area of contact in m2 between the stone layer and the underlying soil Q = Daily design sewage flow *(see S.2)* T = Percolation Rate (T-Time) of Native Soil	**A =** **m^2**

Length of Stone Area *(Reminder: maximum width is 4m)*:

Length = Q/LLR	Q = Daily design sewage flow *(see S.2)* LLR = Linear Loading Rate: □ *T<24 mins/cm, use 50 l/min* □ *T≥ 24 mins/cm, use 40 l/min* T = Percolation Rate (T-Time) of Native Soil	**A =** **m^2**

Description of effluent distribution design:
Include configuration and total length of pressurized distribution pipe and number and size of beds

Section 4: Effluent Pump Dosing & Cross-Sectional Drawings

Effluent Pump Dosing *(where pump is required)*

Minimum Dose Volume Calculation (L) By Pipe Diameter	
3" Diameter Distribution Pipe	**4" Diameter Distribution Pipe**
V = 3.3 x length of distribution pipe (m) **V = 3.3 x**	**V = 5.9 x length of distribution pipe (m)** **V = 5.9 x**
V = **L**	**V =** **L**

Section 5: Cross-Sectional Drawings *(fill-based systems only)*

In the area provided below, draw a cross-section of the leaching bed indicating:

- Leaching bed foundation depth in relation to all components of the leaching bed
- Location references to the groundwater table, bedrock or soil with a T time >50 min/cm
- Depth of excavation and the height of the top of the bed above existing grade on uphill & downhill sides

Section 6: Lot Diagram

Drawings must be close to scale, accurately show the entire property with lot size & dimensions and include:

- □ Existing or proposed buildings
- □ Wells on the property and type (ie: dug/drilled)
- □ Neighbouring wells and type, if known
- □ Travelled roadways
- □ Location of any test pits
- □ Any existing sewage systems on the property
- □ Important topographical information such as watercourses, lakes, steep embankments, and bedrock outcroppings.
- □ Location of the proposed sewage system components on the property
- □ Clearance distances between the system and relevant site features

For Office Use Only:

Permit Issuance Constitutes Permission to Construct up to a Substantial Completion.

Additional Requirements:

Permit Issued: _____ _____

Signature of Chief Building Official Part 8 | Date