

**Ministry of
Municipal Affairs**

Building and Development Branch
777 Bay Street, 16th Floor
Toronto ON M5G 2E5
Telephone: (416) 585-6666
Fax: (416) 585-7531
www.obc.mah.gov.on.ca

**Ministre des
Affaires municipales**

Direction du bâtiment et de l'aménagement
777, rue Bay, 16 étage
Toronto ON M5G 2E5
Téléphone : (416) 585-6666
Télécopieur : (416) 585-7531
www.obc.mah.gov.on.ca



**Record of Meeting
Building Code Technical Committee, Part 8, Division B**

10:00 am to 5:00 pm, May 1, 2017
St. Paul's Bloor Street
The Great Hall Room
227 Bloor Street East, Toronto

Chair: Ray Hachigian

Members:

Mark Brosowski Ontario Association of Sewage Industry Services (OASIS)
Anne Egan Ontario Onsite Wastewater Association (OOWA)
Fritz Enzlin Ontario Building Officials Association (OBOA)
Rick Esselment Ontario Onsite Wastewater Association (OOWA)
Eric Kohlsmith Ontario Rural Wastewater Centre
Vince Pileggi Ministry of the Environment and Climate Change (MOECC)
David Turner Concrete Precasters Association of Ontario (CPAO)

Observers: Coralie Lamaire-Chad – BIONEST
Marie-Christine Belanger – Premier Tech Aqua
Lesley Herstein – Water Tap Ontario

Secretary: Ralph Di Gaetano

Ministry Staff: James Ross
Cengiz Kaharamangolu
Nancy P. Smith
Zorika Aleksovka
Mike Mihajovic
Dheerish Rambaruth
Glenn Middlebrook

The following is a record of committee advice and is not indicative of the final technical change.

Record of Meeting

Meeting commenced at 10:00 AM

1.0 Ministry Remarks – James Ross

The Ministry thanked the committee members for their time, commitment and valuable contribution to Ontario's Building Code development process.

The Part 8 TAC Report from the February 13, 2017 meeting has been submitted to the Ministry by the Chair, but has not yet been sent out to TAC members. TAC Reports are not made public but can be shared by TAC members with their organizations. Interim Code amendments related to proposed Code changes discussed at the first round of TAC meetings are expected to be filed in about 2 weeks.

Proposed Code changes for TAC discussion today are also from the Phase 1 Public Consultation last October 2016. A Phase 2 Public Consultation on proposed changes related to the Climate Change Action Plan is expected to be released later this month for a 60-day comment period. The TACs will reconvene in Fall 2017 to review the proposed changes and public comments. The new Code regulation is expected to be filed early 2018 with an effective date of January 1, 2019.

2.0 Opening Remarks from the Chair

Committee will deal with technical changes first.

Observers don't participate.

OOWA submission provided at last meeting and OASIS handout today to be discussed following the review of proposed Code changes.

3.0 Introductions

4.0 Review of Proposed Changes

The following text is the code content as advised by the technical committee.

B-08-02-01 Div. B / 8.2.1.4.(3)

Committee Decision: Do not support. Modify existing Table 8.2.1.5.

Maintain existing wording of provision with reference to Table 8.2.1.5. and modify Table 8.2.1.5. to introduce a new Column 6 for 1.5 m setbacks from structures for Class 1, 2 and 3 systems. Justification for change is that there should also be setbacks for Class 1, 2 and 3 systems just as there are for Class 4 septic tanks as these systems may also leak with liquids/odors seeping into buildings.

Table 8.2.1.5.
Clearance Distances for Class 1, 2 and 3 Sewage Systems
Forming Part of Sentence 8.2.1.5.(1)

<i>Sewage System</i>	Minimum horizontal distance in metres from a well with watertight casing to a depth of at least 6 m	Minimum horizontal distance in metres from a spring used as a source of <i>potable</i> water or well other than a well with a watertight casing to a depth of at least 6 m	Minimum horizontal distance in metres from a lake, river, pond, stream, reservoir, or a spring not used as a source of <i>potable</i> water	Minimum horizontal distance in metres from a property line	<u>Minimum horizontal distance in metres from a structure</u>
<i>Earth Pit Privy</i>	15	30	15	3	<u>1.5</u>
<i>Privy Vault</i> <i>Pail Privy</i>	10	15	10	3	<u>1.5</u>
<i>Greywater System</i>	10	15	15	3	<u>1.5</u>
Cesspool	30	60	15	3	<u>1.5</u>
Column 1	2	3	4	5	<u>6</u>

B-08-04-01 Div. B / 8.4.1.1.(2)

Committee Decision: Do not support. (See reasons provided under Code Change B-08-04-02)

Consensus for acceptance of trenches for Class 2 greywater system subject to review of subsequent proposed code changes for trench construction in proposed Code Changes B-08-04-02 and B-08-04-03.

B-08-04-02 Div. B / 8.4.2.1.

Committee Decision: Do not support for the following reasons:

No objection to concept of trenches for Class 2 sewage systems; however, the proposed change is inadequate and the Ministry needs to address the following concerns before resubmitting proposed trench changes for public consultation:

1. No details provided for trench construction.
2. Consider the need for a tank to collect solids as well as an outlet filter.
3. Address tank capacity and CSA certification of tank materials.

4. Consider necessity of access riser.
5. Consider maintenance and necessity of cleaning tank at the same time the septic tank is cleaned.
6. Clarify whether the trench is intended to be cleaned out (if no tank is required to contain sludge) when the bottom becomes clogged with scum and grease or whether another trench can be constructed.
7. Minimum height of trench need not be specified as sidewall loading calculations will make that determination.
8. Address the scenario of multiple trenches and whether spacing of trenches needs to conform to absorption trench spacing.
9. Address setback distances for trenches.
10. Consider septic stone under distribution pipe.

B-08-04-03 Div. B / 8.4.2.3.

Committee Decision: Do not support for the following reasons:

Maintain existing provision that only sidewall of a Class 2 sewage system can be used in calculating loading rate for sizing. Pit bottoms quickly fill up with sludge and scum and do not contribute to loading rate unless there is a tank to collect solids.

B-08-07-01 Div. B / 8.7.2.1.(2)

Committee Decision: Support.

B-08-07-05 Div. B / 8.7.4.2.

Committee Decision: Do not support for the following reasons:

This will prevent development if there is bald rock without tree growth and soil. It is impossible to find 10 inches of soil cover in Northern Ontario. Imported fill should be permitted as long as it can remain in place. Question is how much fill can be imported periodically and whether it can remain in situ over time or wash away. Another issue is dealing with situations where there are patches of soil and bare rock. Code would need to provide definition of bald rock (ie. doesn't support vegetation, soil or any cover).

Intent is good, but will have unintended consequences

Heavier impermeable soil with $T > 50$ should be permitted where leaching bed fill is brought in.

Some jurisdictions permit clay layers to be used to seal over bedrock and help support fill from washing away.

The Committee advised that the Ministry should provide an appendix note for guidance on constructing over bald rock.

B-08-08-01 Div. B / 8.8.1.2.

Committee Decision: Do not support for the following reasons:

There are adequate provisions in Code to deal with limiting and restricting the use of holding tanks. Proposal is punitive for people who own buildings served by holding tanks as it will prohibit any future expansion even though some holding tanks may have capacity to accommodate additional flow.

B-08-09-01 Div. B / 8.9.2.3.

Committee Decision: Support with modification.

1. Revise Sentence 8.9.2.3.(1) as follows:

(1) Every Class 4 *sewage system* shall be operated in accordance with the literature required by Sentence 8.6.2.2.(6) and the maintenance provisions of Subsection 8.9.3.

2. Move proposed Sentence 8.9.2.3.(1.1) to Article 8.9.3.2. and revise as follows:

(1.1) The person operating a Class 4 *sewage system* upon request from the *chief building official* shall submit records of maintenance. ~~as required by Subsection 8.9.3.~~ (See Appendix A.)

The Ministry should provide Appendix note information containing guidance on maintenance for septic systems operators. As with other standardized Ministry forms, the Ministry should also develop a standardized maintenance septic systems form for province-wide use so that recorded contents are comparable and meaningful.

The Appendix note on maintenance records should address the following:

- a) keeping records of the last time
 - the sewage system was inspected and any remarks,
 - the septic tank was measured for sludge and the recorded level,
 - the sewage system was pumped out,
 - the outlet filter on the septic tank was inspected and cleaned (note: these filters became mandatory for new septic systems as of 2003),
- b) why these records should be maintained,
- c) what is the purpose of these records,
- d) transferring of these records to subsequent operators,
- e) transferring literature of septic system operation to subsequent operators,
- f) providing framework for re-inspection in sensitive source water protection areas,
- g) other items deemed worthy of inclusion.

3. Revise proposed Sentence 8.9.2.3.(2.1) as follows:

(2.1) The agreement referenced in Sentence (2) shall include provisions for sampling of the effluent from the treatment unit if sampling is required under Article ~~8.2.1.4.~~ 8.9.2.4.

B-08-09-02 Div. B / 8.9.2.4.(1)

Committee Decision: Support with modification.

1. Revise Sentence 8.9.2.4.(1)(c) as follows:

(c) promptly submit the results of the sampling required by Clause (a) to the *chief building official* upon request.

2. Revise Sentence 8.9.2.4.(4) as follows:

(4) If the results of the sampling required by Sentence (1) do not comply with Sentence (3), the person authorized by the manufacturer to service and maintain the *treatment unit* shall,

(a) promptly submit the results of the sampling to the *chief building official*.

(a) ~~(b)~~ resample the effluent in accordance with Clauses (1)(a) and (b) within ~~3~~ 6 months after the previous sampling has been completed, and

~~(b)~~ (c) promptly submit the results of the resampling required by Clause (a) to the *chief building official*.

Sentence (4) revised to reinstate existing 6 month retesting period which is reasonable. Depending on the time of year, the proposed 3 month period for retesting would be problematic during the winter months. The chief building official has discretion to set resampling date. Add new Clause (a) to require non-compliant sampling results to be promptly submitted to chief building official.

B-08-09-03 Div. B / 8.9.3.4.

Committee Decision: Support with modification.

The Ministry reported to the Committee that it had received significant opposition on this proposed Code change following the cut-off date for public comments and production of the Part 8 TAC review package.

There was consensus that pump out of septic systems based on a 5 year frequency was an irrational and arbitrary number. Some septic systems require more frequent cleaning and others can go longer without cleaning depending on usage. The trigger for cleaning should be dependent on a measured 1/3 sludge and scum depth with tank inspection for sludge depth occurring once every 60 months. It was noted that a standardized record form for measuring and cleaning is unnecessary.

Revise Sentence 8.9.3.4.(1) and (2) as follows:

(1) *Septic tanks* and other treatment units shall ~~be cleaned whenever~~ have sludge and scum measured once every 60 months and cleaned when it occupy occupies one-third of the working capacity of the tank. ~~or every within five years of the last pump out, whichever occurs first.~~

(2) The records of *septic tanks* and *treatment units* measuring and cleaning as required by Sentence (1) shall be kept by the operator of the *sewage system* for submission to the *chief building official* upon request.

5.0 Other Business

OOWA's submission and OASIS handout discussed in response to Fall 2016 Consultation Discussion Item re: Potential Future Building Code Amendments Protection of Ground and Surface Water Quality.

Highlights of advice and comments include:

Code lacks direction and clarity for supporting ongoing maintenance, inspection and record keeping activities to ensure proper functioning of septic systems.

Existing and newly constructed septic systems do not undergo routine verification of function and performance to protect groundwater and surface water quality.

Re-inspection programs vary widely across province making it difficult to interpret results. The lack of clear benchmarks and requirements has led to confusion in the onsite industry and the general public.

Mandate reporting of maintenance activities at particular intervals. CBOs would have ability to ask for verification. The onus would be on owners to perform required inspection / maintenance without the need for additional enforcement activities. The records could be audited at any time by the principal authority to demonstrate it was performed (eg. request when septic tank was last measured for sludge and when it was last pumped.)

Mandate that CBOs request verification of maintenance at regular intervals in sensitive/risk areas.

Province create regulatory structure and establish central database requiring CBO's to upload all new permits issued as well as inspection and maintenance verification records. A database of all septic systems should be included and made accessible to all building inspectors and health departments. Every licensed hauler would record every pump-out in provincial database.

Mandating pump-out at specific frequencies is problematic given potential volumes and current capacity of municipal wastewater treatment facilities to properly treat and dispose of it.

Mandate septic systems inspections for every real-estate transaction.

Provide education and training for organizations specializing in septic systems and water source protection.

Provide education and training for homeowners by making septic system literature available to the public.

Require septic system installer provide manufacturer's maintenance and operation instructions to owner. Ensure this information is transferred to subsequent owner(s).

6.0 Closing Remarks

The Chair and Ministry thanked the Committee for their participation.

The Ministry indicated that the Phase 2 Public Consultation materials for the next edition of the Building Code will be posted in late May and it is expected that the Technical Advisory Committees will reconvene to review those materials and related public comments in Fall 2017.

Chair advised the Ministry to make septic system literature available to the public as it did in the past regarding septic system operation and maintenance.

7.0 Adjournment

Meeting adjourned at 2:15 PM.