



Functional Statements and Objectives

Meeting the intent of the Building Code.

Functional Statements

- F71** To provide facilities for personal hygiene
- Public washroom, serviced within the same service contracts as seen at other public facilities concerning washroom maintenance and cleaning.
 - Sanitizing Hand spray which does not require wipes or alcohol packages, (note that the alcohol packages that exist in other facilities have been used in attempts to vandalize by way of lighting on fire).
- F72** To facilities for the sanitary disposal of human and domestic wastes
- Composting toilet - resource capture system
- F81** To minimize the risk of malfunction, interference, damage, tampering, lack of use or misuse.
- No plumbing fixtures exist, no porcelain toilets exist, no drains exist, therefore there is extreme minimized risk of malfunction from all standpoints
- F82** To minimize the risk of inadequate performance due to improper maintenance or lack of maintenance
- Minimized through regular service contract to maintain and clean.
 - Minimized through time lock on doors to make the facility secure during periods of likely nuisance activity
 - At such a point in time where a service contract can not be provided the building can be secured (either due to season or financial barriers).

Objectives

- OH2.1** Limit unacceptable risk of illness due to unsanitary conditions caused by exposure to human or domestic waste.
- Unlike a conventional flush toilet- there is no possibility for overflows, therefore decrease risk of unsanitary overflows
 - Unlike a portable bathroom, there is no possibility for the building to end up in the lake as has been experienced in the past
 - A service contract for maintaining and cleaning will exist, allowing for 3 visits per week.



- A second disposal contract will exist for the processing of compost bins, and maintenance of shavings within those bins. At the start up of the project, the service will be on a daily basis to develop a baseline on the level of servicing that will be required in the future.
- A sanitizing hand spray will be available in replacement of either a sink and soap, or alcohol packets.
- Compost bins are secured in a substantially strong cabinet, wherein access is through a locked metal door under the building.
- Bins are a sealable and lockable unit that allows for safety from tipping and spillage in transportation.
- Cabinet and seating will be designed in a manner to ensure that all deposits end up where they are supposed to.

OH2.2 Limit unacceptable risk of illness due to unsanitary conditions caused by consumption of contaminated water.

- No water services this facility, as in its nature, it requires no water entering, and has no requirement for drainage for water leaving.

OH2.3 Limit unacceptable risk of illness due to unsanitary conditions caused by inadequate facilities for personal hygiene.

- See OH2.1 - sanitary hygiene ensured through servicing contracts and Sanitizing hand spray. In off seasons or in times of no service contract, the facility will be secured.

OH2.4 Limit unacceptable risk of illness due to unsanitary conditions caused by contact with contaminated surfaces.

- Bins are not accessible to public as noted
- Surfaces will be maintained as per standard service contract (cleaning and replenishing supplies)

OH2.5 Limit unacceptable risk of illness due to unsanitary conditions caused by contact with vermin and insects.

- Collection containers are capped off daily or as required in off season with additional shaving to create a bio-filter
- Ventilation fan ensures no odour during periods between shavings being added.
- Cabinet is sealed from the outside via a sealed and locked door.
- The compost site is a private thermophilic composting site, thermophilic composting does not attract vermin, and in its nature of generating high temperatures, self pasteurizes

OP5 Limit the probability that, as a result of the design or installation of the plumbing system, the building or facility will be exposed to an unacceptable risk of damage due to the leakage of service water or sewage.

- No plumbing system is required



- Testing performed at the private composting area, of the surrounding forest floor, has demonstrated no leaching of pathogens or fecal coliforms.
- Data collection of the compost and forest floor control samples will occur on a yearly basis and be submitted to the District of Highlands.
- In event that the composting area is moved to a public area, the compost area will be secured in a locked fenced compound suitable to meet the desires of the District of Highlands.

SUMMARY

In summary we are proposing construction of a small cob building housing a public composting toilet at Eagles Lake. We in conjunction with the Highlands Park and Recreation Association are seeking approval from Council to proceed with the construction of this public washroom. This facility would be a pilot project providing opportunity for education and data collection on:

- the feasibility of such a system in a public setting,
- chemical and bacterial levels of thermophilic compost attained from a public source,
- the feasibility for use in food gardens (as has been demonstrated by the research by the Bairds),
- for use to advance the BC Building Code to allow for composting toilets as a replacement alternative to flush toilets.

This pilot project would also demonstrate initiatives towards ground water protection and water preservation, and demonstrate simple methods of low impact development in sensitive ecosystems.

This public facility will be built and managed to meet the functions and objectives as set out in the building code, with a goal to demonstrate that this system surpasses those requirements that govern safety and hygiene.

Material cost are to be covered as well as sublet labour performed outside of the Baird's expertise, with the hope that some if not all the Baird's volunteer labour could be reimbursed through donations to HPRA.

Respectfully,
Gord Baird
Eco-Sense Living