

### Environmental Appeal Board

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#### APPEAL NO. 2000-HEA-034

In the matter of an appeal under section 8 of the Health Act, R.S.B.C. 1996, c.179.

BETWEEN:	Abdel M. Mousa		APPELLANT
AND:	Manager, Health Prote	ection	RESPONDENT
BEFORE:	A Panel of the Environmental Appeal Board Tracey Cook, Panel Chair		
DATE OF HEARING:	Conducted by way of written submissions concluding on December 7, 2000		
APPEARING:	For the Appellant: For the Respondent:	Abdel M. Mousa Steven Chan	

#### APPEAL

This is an appeal by Abdel M. Mousa of a September 20, 2000 decision by Mr. Steven Chan, Health Protection Manager (the "Manager") for the Simon Fraser Health Region (the "SFHR"). The Manager refused to issue a permit to install two temporary sewage holding tanks at 7872 Willard Street, Burnaby (the "Property").

The Environmental Appeal Board has the authority to hear this appeal under section 11 of the *Environment Management Act* and section 8(4) of the *Health Act*. The Environmental Appeal Board, or a panel of it, after hearing all the evidence, may confirm, vary or rescind the decision under appeal.

Mr. Mousa seeks an order rescinding the Manager's decision and asks the Board to issue a permit for holding tanks for temporary use as set out in his permit application dated September 13, 2000.

This appeal has been conducted by way of written submissions.

#### BACKGROUND

The Appellant and Barbara Aweryn are co-owners of the Property, on which is located a single, two-story house equipped with two rental suites. The Property is in the southern area of the City of Burnaby, in a flat, low-lying area known as "the Big Bend." The Big Bend is one of the few remaining areas in Burnaby that is not serviced by sanitary sewers. Sewage is currently disposed of from the Property by means of a pre-1985, on-site conventional septic tank system.

There is a lengthy history of dealings between the two parties to this appeal. In February 1998, the SFHR advised the Appellant that the existing pre-1985 septic system was leaching septic fluids to the surface of the ground in contravention of the *Sewage Disposal Regulation*, B.C. Reg. 411/85 (the *"Regulation"*). Since that time, the Appellant has made various unsuccessful attempts to obtain a permit to repair the septic system. He also constructed a replacement absorption field without having first obtained a permit to do so.

This is the Appellant's second appeal to the Environmental Appeal Board regarding the denial of a permit to repair the failing system. In the first appeal (*Mousa* v. *Environmental Health Officer* (Appeal No. 99-HEA-04, October 14, 1999) (unreported)), the Board upheld the decision of the Environmental Health Officer to reject the application to repair the septic system. The Board determined that the septic system, repaired as outlined in the application, constituted a health hazard. The Appellant and Ms. Aweryn filed a petition with the B.C. Supreme Court seeking to have the Board's decision overturned, as well as certain relief against the SFHR. In an oral judgment rendered on July 21, 2000 (*Mousa and Aweryn* v. *Simon Fraser Health Region, City of Burnaby and the Environmental Appeal Board*), Josephson, J. dismissed the petition as it related to both the Board and the SFHR.

At the same time, the Court dealt with a counter-petition filed by SFHR seeking to have the Appellant and Ms. Aweryn comply with a November 18, 1999 correction order. The order, issued by SFHR pursuant to section 63 of the *Health Act*, required the Appellant and Ms. Aweryn to shut down the septic system and vacate the dwelling on or before January 31, 1999. Pursuant to section 106 of the *Health Act*, the Court ordered the owners to vacate the dwelling, stop the flow of sewage from the dwelling into the septic system and physically sever the connections between the dwelling and the septic tank, among other things. Following this decision, SFHR notified the Appellant and Ms. Aweryn that they must comply with the Court order by September 30, 2000.<sup>1</sup>

The Court's decision is currently under appeal.

On August 1, 2000, the Appellant submitted two alternative permit applications to repair the septic system. The SFHR returned those applications to the Appellant on August 9, 2000, with a letter explaining the shortcomings of the applications and inviting the Appellant to submit a new application for the repair of the system. The SFHR recommended that any new application include an engineered design that addresses the following issues of sewage disposal on the Property:

- the low weight bearing capacity of the peat soils,
- the high seasonal water table,

<sup>&</sup>lt;sup>1</sup> The owners have since complied with the Order. The dwelling is presently vacant and the septic system closed.

- the appropriate level of pre-treatment before discharge into the absorption field,
- the estimated sewage flow from the duplex,
- tank anti-flotation,
- fill consolidation and effluent loading rate,
- pressurized effluent distribution,
- sufficient vertical separation between the point of discharge in the field and the saturated soils; and
- the protection of public health.

On September 13, 2000, the Appellant submitted a new application. This application forms the subject of this appeal.

The Appellant's new application is to repair the septic system by installing two "temporary holding tanks." The application does not state how long the temporary system is to be in place although in later submissions he suggests that it may be a period of one year or less.

In a cover letter to the application, the Appellant sets out the particulars of the proposed holding tank system as follows:

1. Two 1000 imperial gallon tanks will be installed above ground on the northern side of the Property. This installation mode will make it easy to verify that no leaks exist.

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- 3. The tanks will be connected in series and both will be equipped with alarms.
- 4. Sewage from the second floor [of the dwelling] is now directly fed to the septic tank while sewage from the basement first goes to a sump after which it is pumped to the septic tank. The plumbing will be modified so that all sewage goes to the sump pump.
- 5. The sump pump will then feed into the first holding tank. When this becomes full, the excess would go to the second tank.
- 6. The first tank will be emptied whenever it becomes full. Adequate time to act exists because of the availability of an additional 1000 imperial gallon capacity.
- 7. The second tank will be emptied whenever it reaches 75% of its capacity.

- 8. The tanks will be leased from McRae's Septic Tank Services, which will also provide the tank emptying service. McRae is a reputable licensed company, its operations centre is located only about 10 minutes away from the Property..., and it operates 7 days per week. Hence prompt servicing is guaranteed.
- 9. The tanks are of a standard design that McRae routinely provides for temporary service to construction sites....
- 10. The installation is expected to be complete and ready for inspection within about one week of the issuing of a permit.
- 11. A copy of the service contract with McRae will be provided after approval of this application.

The Appellant also indicated that water conservation methods will be implemented in the dwelling to "minimize frequency and duration of use of plumbing fixtures, ...reduce effective volume of flushing tanks of toilets and install straining devices on faucets". He submitted that the weekly sewage flow from it will be approximately 1000 imperial gallons. In any case, the application states that "the frequency of emptying the tanks will be made as high as necessary to adapt to the size of the tanks."

Further, the application indicates that the dwelling is a "single family dwelling"; the number of bedrooms is not given on the application.

Both the Manager and the Appellant appear to be of the view that the application should be assessed under section 7(2) of the *Regulation*.

By letter dated September 20, 2000, the Manager advised the Appellant that he had rejected the application because "[it] did not provide for a long-term solution to the health hazard at the Property."

The Appellant appeals this decision on the grounds that the Manager's decision is based on irrelevant considerations. Specifically, he states that the authority to reject an application under the *Health Act* and the *Regulation* is limited to cases where the proposed system is not safe. He states "Sewage holding tanks constitute an established safe method and Mr. Chan did not challenge this fact."

The SFHR argues that the Manager properly denied a permit for the proposed temporary holding tanks because the proposed installation and use of the holding tanks is not in accordance with the relevant policies, and the Appellant's application does not demonstrate that the system will protect the public from health hazards.

#### ISSUES

The issues arising from this appeal are as follows:

- 1. Whether a permit may be issued for a "temporary system" a short term solution.
- 2. If so, whether the proposed system should be permitted as a repair or alteration of the pre-1985 system under section 7(2) of the *Regulation*, or at all.

#### RELEVANT LEGISLATION

The *Regulation* includes holding tanks in the definition of sewage disposal system. Section 1 of the *Regulation* defines "sewage disposal system" as "...any device which processes, *contains* or disposes of sewage...." Therefore, in order to install a holding tank, a permit is required. The general permitting section of the *Regulation* is section 3, which provides as follows:

#### Permits to construct systems

- 3 (1) No person shall construct, install, alter or repair a sewage disposal system or cause it to be constructed, installed, altered or repaired unless he holds a permit issued under this section ....
  - (2) Application for a permit under this section must be made in a manner and form satisfactory to the Ministry of Health *with all relevant details* completed by the applicant.
  - (3) No permit shall be issued under this section
    - (a) in the case of construction or installation, until site investigation tests set out in or required by Schedule 1 have been carried out to the satisfaction of the medical health officer or public health inspector, and either of them is satisfied that, having regard to the provisions of that schedule, the construction, installation and ultimate use of the system will not contravene the Act or this regulation, and

...

- (4) It is a condition of every permit issued under this section that
  - (a) all material facts disclosed in the application for it are true and not designed to mislead,
  - (b) it is not transferable,
  - (c) it is valid for not more than one year,
  - (d) no variation shall be made to the plans and specifications which formed the basis of the application for the permit unless approved, and
  - (e) the construction, installation, alteration or repair complies with the standards for the appropriate sewage disposal system set out in this regulation.

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- (5) The grantor of a permit issued under this section may impose conditions additional to those set out in subsection (4).
- (6) A violation of a condition of a permit issued under this section operates to confer a right upon the grantor of it to cancel the permit. [emphasis added]

When dealing with a pre-1985 system that is in need of repair, the *Regulation* allows a health official to relax the standards that would otherwise apply to the Property. Section 7(2) states:

#### Alternate methods

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(2) Where a sewage disposal system, constructed or installed prior to December 20, 1985, is in need of repair or alteration and the appropriate work cannot reasonably be effected in accordance with this regulation, the medical health officer or public health inspector may issue a permit to repair or alter under section 3 if the sewage disposal system, when repaired or altered in accordance with the conditions contained in the permit, will not constitute a health hazard.

For the purposes of the *Regulation*, "health hazard" is defined therein as a "... condition or circumstance that has or may have an adverse effect on the health of a person."

"Health Hazard" is defined in the Act as

...a condition or thing that does or is likely to

(a) endanger the public health, or

(b) prevent or hinder the prevention or suppression of disease

and includes a prescribed condition or thing or a prescribed condition or thing that fails to meet a prescribed standard.

#### **RELEVANT POLICIES**

The parties referenced two policies in their respective submissions: the holding tank policy of the Ministry of Health as contained in its 1992 "On-Site Sewage Disposal Policy" (the "MOH Policy"), and the SFHR policy titled "Requirements for Sewage Holding Tanks" (the "SFHR Policy").

Chapter 6.6 of the MOH Policy states in full:

Holding tanks shall be considered only for existing lots. However, a holding tank may be considered where no other system is workable if:

- (a) a local bylaw grants the municipality access and ensures maintenance. The bylaw shall cover:
  - the frequency of pumping;
  - the charges; and
  - the point of ultimate disposal; or
- (b) sanitary sewers will be installed and operational within 12 months of installation of the pump-out [holding] tank and the applicant submits a letter of commitment from the municipality; or
- (c) the tank accommodates construction sites for less than 12 months; or
- (d) a government guarantees the control, access, maintenance, servicing and ultimate disposal of waste material; or
- (e) the holding tank corrects a malfunctioning system until sanitary sewers are available, and its permit does not provide for further development or increased sewage flows.

The SFHR Policy sets out 11 conditions for the construction and use of sewage holding tanks within its region. The relevant conditions for the construction and use of sewage holding tanks set out in the SFHR Policy are as follows:

- 1. The specifications, design, and installation of the holding tanks(s) and related works shall be done to good engineering practice, inspected and sealed by a BC Professional Engineer.
- 2. Minimum tank capacity is ...150% of estimated weekly sewage flow.
- ...
- 7. The holding tank(s) must be located so that there is easy access from the road for the pumping truck. The tank(s) must be at least 3 feet away from the perimeter building drains and any other drainage pipes. Setback distances for the sewage holding tank(s) are similar to the setback distances required of septic tanks.
- 8. Two high level visual and audible alarms are to be installed to activate at 75% and again at 90% of tank capacity. The alarm panel is to be installed where the occupants can see and hear the alarm. The alarm panel shall have a "power on" indicator light.
- 9. Use of the plumbing fixtures must immediately cease upon the tank reaching 90% capacity.
- 10. The owner must maintain a contract with a reputable sewage pump and hauler for removal of all sewage to an approved disposal facility, both on a

regular scheduled basis and immediately upon the tank reaching 75% capacity. The [SFHR] must be provided with a copy of the contract and notified of any changes in the agreement.

11. The owner shall provide unrestricted access to the property at reasonable times for the purposes of inspecting and monitoring the installation and use of the sewage holding tank(s).

Although both parties placed a great deal of focus and reliance on the policies, the Panel notes at the outset that these policies do not have the force of law and should not be strictly applied. In other words, the strict letter of these policies need not be met if the application is otherwise in compliance with the main consideration under the legislation: whether the ultimate use of the holding tanks will create a health hazard as defined in the *Act* and *Regulation*. However, policies should be considered, where appropriate, as they generally set out the factors that the regulatory body has identified as important and relevant. If the proposed system does not meet the policy conditions or specifications, a decision must be made on whether it is appropriate to deviate from the policy in the circumstances. This latter step must be taken to prevent the rigid application of a policy (i.e., the fettering of discretion).

#### DISCUSSION AND ANALYSIS

## 1. Whether a permit may be issued for a "temporary system" – a short term solution.

The Appellant notes that, in the Manager's September 20, 2000 decision, the only reason given for refusing the application was that "the application did not provide for a long-term solution to the health hazard at the Property." The implication of this finding is that a temporary permit or a permit authorizing a short-term solution cannot be issued.

The Appellant argues that the authority to reject an application under the *Health Act* and *Regulation* is limited to cases where the proposed system is *not safe*. There is no provision prohibiting the issuance of a permit for temporary, safe solutions. The Appellant submits that sewage holding tanks constitute an established safe method of sewage disposal. Further, the Appellant argues that there is a definite need for a short term or "stopgap" solution in this case while the larger issue of permanent sewage disposal from the Property is addressed. He provides three reasons in support of a stopgap solution.

First, the Appellant says that to repair the septic system to the satisfaction of the SFHR (covering the nine issues in SFHR's August 9, 2000 letter), he would have to install a package treatment plant and a raised septic field. He estimates that these works would cost \$20,000. However, as long as the septic system is shut down, the Appellant points out that the rental income from the Property is lost, making financing an issue.

Second, the Appellant says that he needs a temporary solution to the sewage problem on the Property due to "uncertainty regarding what should be built and whether it is to be done by the appellant or a future owner of the Property." The Appellant says that he is currently attempting to sell the Property, and it will be more difficult to find a buyer for the Property if the dwelling cannot be occupied.

Finally, the Appellant submits that, even if the funding was available at present, it would still take about 6 months to repair the septic system to the satisfaction of the SFHR. The Appellant submits that temporary holding tanks should be permitted while the construction of a new system is underway. However, the Panel notes that there is no evidence that the Appellant has applied for or has obtained a permit for an in-ground or long-term system for the Property.

The SFHR did not make submissions directly on the question of whether a permit for a temporary system may be issued under the legislation. Rather, it took issue with the Appellant's assertions that there is a need for a temporary system for the Property. The SFHR argues that "an adequate repair of the existing [septic system] could be accomplished forthwith, with the exact time depending on the nature of the system installed."

The Panel has carefully reviewed the legislation. It is apparent that neither the *Act* nor the *Regulation* expressly provides for the approval of a temporary system. The main permitting section of the *Regulation*, section 3, simply authorizes a permit to be issued for the "construction, installation, repair or alteration" of a system. Another section of the *Regulation*, section 4, sets out the requirements for operation and use of a system once installed or constructed. Neither section deals with the *duration* or length of time that a system may remain on the site.

Although neither party provided the Panel with any authority for the proposition that a temporary system may be permitted under the legislation, it is evident from the Ministry of Health's holding tank policy that the Ministry is of the view that this type of permit is possible. Paragraphs "b", "c" and "e" of chapter 6.6 of the MOH Policy state as follows:

... However, a holding tank may be considered where no other system is workable if:

...

- (b) sanitary sewers will be installed and operational within 12 months of installation of the pump-out [holding] tank and the applicant submits a letter of commitment from the municipality; or
- (c) the tank accommodates construction sites for less than 12 months; or

•••

(e) the holding tank corrects a malfunctioning system until sanitary sewers are available, and its permit does not provide for further development or increased sewage flows.

The Panel finds that a permit for a temporary system can be issued under the existing legislation. There is nothing in the legislation preventing a permit from being issued for a temporary system or suggesting that the requirements for a temporary system would be different from those for more permanent solutions. Further, such an interpretation is consistent with MOH Policy.

Having decided that there is nothing to prevent a temporary permit or a permit for a temporary system from being issued, the question for the Panel is *how* it would be done to ensure that the health officials can compel its removal after a certain period of time. In answer to this question, the Panel finds as follows.

First, the permitting authority must be aware of the time period during which the proposed system is to be installed. This is a relevant detail, which should be included in the application pursuant to section 3(2) of the *Regulation*. As the application then becomes the "permit" if approved by the health official, the terms of the application, including the time period, become part of the permit. Further, under section 3(5) of the *Regulation*, the grantor of a permit issued may impose conditions additional to those set out in section 3(4).

In addition, the Panel notes that a separate authorization is required under section 4 of the *Regulation* to operate the system. Under section 4(2), conditions regarding the operation or use of a sewage disposal system may be ordered. It states:

#### Authorization to operate systems

- 4 (1) No person shall use, operate or cover a sewage disposal system for which a permit has been issued under section 3 until authorized in writing by a medical health officer or public health inspector.
  - (2) An authorization under subsection (1) may contain conditions under which the system shall be operated, used or covered.

Under that section, it is arguable that a health official may impose an additional condition that would limit the operation or use of the system for the period specified on the application.

Although the Appellant has indicated on his application that a permit is sought for "temporary holding tanks", he does not give a specific time frame on the application for their installation and removal. If a permit was issued on the basis of his existing application, and then the Property was sold, it may be very difficult for the health officials to require the removal of the holding tanks and require a "more permanent solution." If it is truly a temporary solution or "stopgap measure" as claimed by the Appellant, the Panel is of the view that the application must be

amended to provide a specific time frame for the system's installation/duration of use.

The final question remains as to whether such a permit *should* be issued. The Panel agrees with the Appellant that, the very fact that an application is for a temporary system is not, in and of itself, a sufficient reason to reject an application.

# 2. Whether the proposed system should be permitted as a repair or alteration of the pre-1985 system under section 7(2) of the *Regulation*, or at all.

#### a. Does section 7(2) of the Regulation apply?

Section 7(2) of the *Regulation* provides a health official with a broad discretion to approve the repair of a failing pre-1985 system, such as the Appellant's system, subject only to the condition that the system not constitute a health hazard. It is a "grandfathering" clause, which makes special provision for sewage disposal systems in existence at the time the legislation was enacted.

Although the Appellant has a pre-1985 system on his Property, the Panel finds that the Appellant does not meet all of the preconditions for application of section 7(2). Specifically, the Panel finds that the proposed installation of two temporary sewage holding tanks, and ultimate disposal of the sewage off-site, does not constitute a "repair or alteration" of the existing septic system which is an in-ground system designed to dispose of and treat the effluent on-site. Further, there is no evidence to suggest that the failing system cannot reasonably be repaired or altered in accordance with the *Regulation*. To the contrary, the Appellant's evidence is that it can be done but he does not want to, or cannot, incur the expense of repairing the system to the extent and/or standards sought by the SFHR, especially when he is attempting to sell the Property.

As the proposed system does not meet the preconditions for application of section 7(2) of the *Regulation*, the next question is whether it should be permitted as a new construction or installation under section 3.

## b. Should a permit be issued for the holding tanks under section 3 of the *Regulation* in this case?

Under the *Regulation*, the general permitting section is section 3. In order to issue a permit under this section, the test is whether the "construction, installation and ultimate use of the system will contravene the act or this regulation" (section 3(3)(a)). That is, whether the system will constitute an unreasonable risk to the public health. In the Panel's view, this same test applies, regardless of whether the application is for a temporary or a long-term solution.

In its written submissions to the Board, the SFHR maintains that the Manager's decision to refuse the permit should be upheld. In addition to its concerns about the temporary nature of the proposed solution, the SFHR is specifically concerned that the application was not endorsed by a professional engineer, the tanks may

not be of sufficient capacity to safely service the dwelling, and the circumstances at issue could encourage the irresponsible use of the tanks. For all of these reasons, the SFHR submits that there is an unacceptable risk that the proposed system will create a health hazard.

The Panel will consider the first two concerns of the SFHR together as they are interrelated.

First, the SFHR points out that the Appellant's application was not endorsed by a professional engineer. It says that, according to its policy, the specifications for the holding tanks, pumps, alarms, and related works should be submitted and sealed by a BC professional engineer. The SFHR also says that stability, serviceability, and security measures must be incorporated into the engineered design of the aboveground holding tanks to assure the integrity of the system. These measures were not provided in the application.

The SFHR says that it wants an engineer to sign and seal the sewage disposal system plans and specifications, in addition to providing a sealed letter of assurance, to verify that the system was installed in accordance with the approved drawings. This assures that the professional engineer retains full responsibility and accountability for the design, installation and integrity of the sewage disposal system.

On the issue of capacity, the SFHR says that "the premise information provided on the application is suspect." It notes that the Appellant indicated on the application that the dwelling is a "single family dwelling", even though in previous dealings with the SFHR, he admitted to having two sets of tenants living there in separate suites. Moreover, the Appellant has estimated the weekly sewage flow from the dwelling will be 1000 imperial gallons, but he has not disclosed the number of bedrooms in the dwelling. The SFHR submits that verification of the number of bedrooms is important because the minimum estimated daily sewage flow from a residential building is calculated from Appendix 1 of Schedule 2 of the *Regulation*, based on how many bedrooms it has. The SFHR says that it has no discretion to lower the estimated flows given in Appendix 1.

The SFHR also points out that its policy specifies that a holding tank should have the capacity to contain 150% of the estimated weekly flow to provide for some security in the event of pumping truck breakdowns, severe winter road conditions, and other unexpected emergencies which could unexpectedly delay the emptying of a tank.

In response to the SFHR's position respecting the questionable safety of the proposed holding tank system, the Appellant submitted an affidavit sworn by Allan Blain Good. Mr. Good is a professional engineer in the Geotechnical Division of B.C. Hydro, with 29 years of professional experience. Mr. Good's *curriculum vitae* outlines a wide range of assessment, design, and construction projects, including some involving sanitary septic field assessment and layout. In formulating his opinion as to the safety of the proposed holding tank system, Mr. Good reviewed

the application and related covering letter, as well as the SFHR Policy. Based on his review of the above documents, Mr. Good makes the following conclusions:

- 1. The proposed 2000 imperial gallon total capacity of the system is adequate based on the intended use, the temporary nature of the installation, and the proximity of the location of the head office of McRae's Septic Tank Services....
- 2. The proposed holding tank system is technically sound, and it will adequately protect public health.
- 3. Taking into consideration that the tanks will be installed above ground, the units are of a standard design, and that the tanks will be connected in series, the proposed system either meets the applicable design requirements of the SFHR or provides an equivalent level of protection to public health.

The SFHR did not put forward any independent expert evidence to contradict Mr. Good's opinion.

With respect to the SFHR's submissions about the capacity of the holding tanks, the Appellant argues that the safety of a holding tank is not governed by its size – capacity only affects the frequency with which the holding tank must be emptied.

The Appellant also submits that the number of bedrooms in the dwelling is not important for the purposes of assessing this application. He says that Appendix 1 of Schedule 2 of the *Regulation* does not apply to holding tank systems, but only to septic tank systems and package treatment plants. Moreover, the Appellant notes that there is no requirement in the MOH Policy regarding the minimum size of holding tank systems. While the SFHR policy states that holding tanks should be 150% of the estimated weekly sewage flow, the Appellant says that such a requirement is not reasonable in this instance where the tanks are installed only for temporary usage, and where strict water conservation measures will be imposed.

Although the Panel accepts that Mr. Good is qualified to offer an expert opinion as to the specifications of the proposed holding tanks, the Panel finds that Mr. Good's opinion cannot be given much weight because it is not based on all information that would be relevant in determining whether the system would provide sufficient safeguards to protect public health. In particular, Mr. Good's opinion is based on the Appellant's estimate (recorded in the application) that 1000 gallons of effluent will be discharged from the dwelling weekly. The Panel does not accept that the Appellant's estimate of 1000 imperial gallons is an accurate estimate of the sewage flow from the house.

Appendix 1 of Schedule 2 of the *Regulation* provides estimated *minimum* daily sewage flows for various facilities including houses and duplexes. The Panel recognizes that the flow rates fixed in the Appendix do not expressly apply to holding tanks. However, the Panel finds it is reasonable to consider this Appendix to estimate the sewage flow rates from the dwelling for the purposes of assessing this application. The Appendix provides:

## ESTIMATED MINIMUM DAILY SEWAGE FLOWS IN LITRES [IMPERIAL GALLONS]

Type of facility	Estimated Minimum Daily Sewage
Houses, duplexes (all other residential	1136 for 1 and 2 bedrooms [250]
units)	1363 for 3 bedrooms [300]
	1704 for 4 bedrooms [375]

The Panel notes that the Appellant's estimated sewage flow of 1000 imperial gallons per week is relatively small when compared to the estimate of 1750 gallons a week as provided in the Appendix for a one or two bedroom house ( $250 \times 7 = 1750$ ). The Appellant has not provided any evidence as to how he arrived at this figure, other than the suggestion that only one suite of the dwelling will be occupied. The Panel recognizes that the Appellant's estimate may be low because of the strict water conservation measures that he proposes will be imposed on the tenants. While the Panel acknowledges these efforts, it also notes that the Appellant has provided no evidence as to the amount the outflow will be reduced by the imposition of the water conservation regime he proposes, or how he intends to monitor the tenant's water use to ensure that water conservation measures are adhered to.

The third note to the Appendix provides that the relevant authority may *increase* these estimated flows if circumstances warrant this, but does not provide for the decrease of the estimates. Although the Panel is not bound by this because the Appendix does not expressly apply to holding tanks, because of the difficulties associated with ensuring that the tenants comply with the water conservation measures, the Panel does not find that it is appropriate to decrease the estimates.

The Panel prefers the SFHR's position that residential holding tanks must be of sufficient capacity, as determined by the estimated flow rates from the residence under normal use, to prevent overflow. In addition, unless there are sophisticated devices that shut off the water supply to the residence when the tanks are close to overflowing (which is not the case here), the tanks must have an adequate reserve capacity to meet the tenants' ongoing needs during the time that it takes for the tanks to be emptied. The Panel accepts that unforeseen conditions may sometimes make it difficult or impossible to empty the tanks in a timely fashion.

As noted above, the flow rate in the Appendix has been fixed according to the number of bedrooms in the residence. Although the Appellant maintains that only one suite of the dwelling will be rented, he has not disclosed the number of bedrooms in the suite. In any event, the Panel finds that the estimated flow should be based upon the number of bedrooms in the *entire* house, not just the part of the house that the applicant intends to tenant, since that may always change. Without knowing the number of bedroom in the house, a credible estimate of sewage

outflow cannot be made. Without that estimate, a credible engineer's report cannot be given; and without that endorsement, the Panel finds that a permit should not be granted.

The Panel finds that the Appellant must disclose the number of bedrooms in the house, and come to a more accurate estimate of sewage flow from the dwelling based on the figures given in Appendix 1. If a professional engineer agrees that, even in light of the new sewage outflow estimate, the proposed design and installation of the holding tanks and related works are done to good engineering practice and seals them, the first condition of the SFHR Policy can be satisfied.

In order to address the SFHR's concerns regarding tank capacity and alarms, the Panel finds that the engineer should specifically address tank capacity and adequacy of the proposed alarm system, and satisfy him or herself that the proposed system either meets the applicable design requirements set out in the SFHR Policy or provides an equivalent level of protection to public health. Condition 7 of the SFHR Policy relates to the placement of tanks to provide access. This should be addressed in the design that accompanies the application and would become a condition of permit.

One of the main concerns of the SFHR regarding holding tanks, and one of the reasons for both the SFHR and the MOH policies, relates to problems experienced with ensuring that holding tanks are properly operated and maintained. The SFHR submits that residential holding tanks are subject to accidental and deliberate overflows of sewage into the environment, and that the Ministry of Health has province-wide experience with private homeowners simply pumping out holding tanks into ditches or back yards to avoid the costs associated with proper disposal of the sewage. The SFHR emphasizes that, as a result, the use of sewage holding tanks needs to be carefully restricted and monitored, particularly in residential settings where there are no government agencies to control, maintain, and service the tanks.

The SFHR also points out that it was as a result of illegal holding tank dumping that MOH Policy states that holding tanks should not be permitted unless there is a local government bylaw covering the safe pumping and disposal of all effluent from the holding tanks. On this point, the Panel notes that MOH Policy does not suggest that a bylaw must be in place when the holding tank is for temporary use only, as is proposed by the Appellant in this case.

The SFHR argues that the present facts illustrate precisely why the use of holding tanks in residential settings must be closely regulated, particularly for rental dwellings. The Appellant has submitted that strict water conservation measures will be implemented in the dwelling if the new system were put in place, that only one of the suites will be rented, and that the new tenants will be made responsible for controlling water consumption. The SFHR points out that the Appellant has provided no assurances for any of these claims. Moreover, the SFHR submits that any water conservation measures would be difficult for the Appellant to require of tenants and to enforce. In fact, it points out that the tenants may have incentive to

find other unacceptable means of wastewater disposal if the significant costs of emptying the holding tanks are passed on to them.

With respect to the temporary nature of his proposed holding tank solution, the Appellant notes that the high operating cost of holding tanks is an incentive to stop using them as soon as possible. The Appellant says that the cost of emptying a 1000 gallon holding tank is about \$200. The first tank would have to be emptied on a weekly basis even if the Appellant's estimate that the sewage flow from the duplex would be 1000 imperial gallons per week was accepted. The Appellant also notes that there would be a \$140 monthly rental fee on each of the two holding tanks, putting the monthly cost of operating the proposed system to at least \$1080 (after initial installation and assuming there is no sewage overflow into the second tank).

The Panel accepts that the threat of irresponsible use of holding tanks is a legitimate cause for concern. This is particularly so in this case where the annual cost of properly operating and maintaining the tanks will be in excess of \$12,000, which is over one half of the estimated cost of an in-ground, long term system. Further, it may be that this cost is low as it is based upon the estimated flow provided by the Appellant. However, if the system is *truly* to be a temporary solution and is properly designed, with appropriate safeguards to protect the public health, the risk of irresponsible use is decreased, as is the risk of a health hazard. In this regard, the Panel finds that if the application complies with provisions 2 and 7 – 11 of the SFHR Policy (to the extent that these have not been met by the current application), or provides an equivalent level of protection as those provisions and is certified by a professional engineer, there should be sufficient protections against irresponsible use. However, as stated above, the Appellant's current application cannot be approved at this time due to the lack of all relevant information.

In summary, although the Appellant repeatedly asserts that the system is only meant to be a "temporary" solution there is no indication that he is currently working on or planning to install another system. Further, there is no evidence that he has made an application for a system that will address the site specific issues on this Property as set out in SFHR's August 9, 2000 letter, nor is there any evidence to suggest that he has undertaken preparatory measures to making such an application (e.g., retaining the services of an engineer to design the system). To the contrary, it appears that the Appellant is hopeful that he can sell the Property before having to make any further capital outlay.

Although the Panel does not believe that the MOH Policy requirement of a local government bylaw is a relevant requirement in this case given the temporary nature of the holding tanks, there is currently insufficient information and too many unknowns to find that the proposed system will not pose an unreasonable risk to public health.

In order to address the concerns of the SFHR and this Panel, the Appellant needs to identify, on a new application, the time frame for which he seeks to have the

holding tanks in use. He also needs to disclose the number of bedrooms in the house, and come to a proper estimate of the daily sewage flows based upon Appendix 1 of Schedule 2 of the *Regulation*. The Panel finds that the Appellant's proposal should also comply with provisions 2 and 7 – 11 of the SFHR Policy, or provide an equivalent level as those provisions and, finally, the application must be endorsed by a professional engineer, having before him or her all information that has been identified as relevant in this decision.

#### DECISION

In making its decision, the Panel of the Environmental Appeal Board has carefully considered all relevant documents and all evidence and arguments made during the hearing, whether or not they have been specifically reiterated here.

The appeal is denied.

Tracey Cook, Panel Chair Environmental Appeal Board

March 12, 2001