



Environmental Appeal Board

Fourth Floor 747 Fort Street
Victoria British Columbia
Telephone: (250) 387-3464
Facsimile: (250) 356-9923

Mailing Address:
PO Box 9425 Stn Prov Govt
Victoria BC V8W 9V1

APPEAL NO. 2002-HEA-010

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

BETWEEN: John Berger **APPELLANT**

AND: Environmental Health Officer **RESPONDENT**

BEFORE: A Panel of the Environmental Appeal Board
Alan Andison, Panel Chair

DATE OF HEARING: July 9, 2002

PLACE OF HEARING: Courtenay, B.C.

APPEARING: For the Appellant: John Berger
For the Respondent: Dwayne Stroh

APPEAL

This is an appeal against the March 4, 2002, decision of David Cherry, Environmental Health Officer (the "EHO") for Vancouver Island Health Authority (the "Health Authority"), rejecting an application for a repair to a sewage disposal system for a property in Courtenay, B.C., owned by John Berger (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 Board, or a panel of the Board, may vary, rescind, or confirm the decision of the EHO.

Mr. Berger is seeking an order for the issuance of a permit to repair the sewage disposal system on the Property.

BACKGROUND

The Property is located at 4678 Gail Crescent, Courtenay, B.C. It is rectangular in shape, approximately 130 ft. by 75 ft. (9,750 square feet), and has homes on either side of it and immediately behind it. A ditch runs along the north end (the front) of the Property bordering on Gail Crescent. A perimeter drain runs along the south (the back), the west and the east sides of the Property.

Mr. Berger purchased the Property on February 1, 1991, as a rental property. At the time of purchase there was a three-bedroom house and a sewage disposal system on the Property. The permit for the sewage disposal system was issued to

the previous owner on October 5, 1989. The permit allowed for the construction of a conventional septic tank system. The permit contained a condition that the system must have 24 in. (2 ft.) of suitable fill area to ensure that it is 48 in. above the high water mark. The septic tank system was constructed to include a septic tank, distribution box and absorption field with 4 separate trenches containing 192 ft. of disposal pipe. The system, as approved in 1990, did not conform with the drawings on the Permit to Construct. The sewage disposal system was inspected and authorized for backfilling and use on April 12, 1990.

On September 21, 2001, the EHO received a complaint that sewage was surfacing at the septic tank on the Property. A site inspection was carried out by the EHO who noted that the septic tank was full and overflowing. Mr. Berger's mother, Trudine Berger, attended the Property, the following day, with Tobin Laughlin of Mr. Rooter Plumbing. Mr. Laughlin dug holes in the field to view the system. They noted no evidence of effluent overflow and that the site appeared to be dry. They also noted that the septic tank lid was broken and was pushed into the septic tank.

On October 10, 2001, the EHO and Dwayne Stroh (another Environmental Health Officer) met on site with Ms. Berger to discuss possible repairs to the system. They dug 2 test holes in the front yard and 2 in the back yard. On the same day, the EHO issued an Order to Mr. Berger citing contravention of section 2(2) of the *Sewage Disposal Regulation* (the "*Regulation*"), which provides that it is the duty of the owner or occupier of a building to ensure that domestic sewage emanating from the building does not reach the surface of the land. Mr. Berger was ordered to complete the following items on or before October 23, 2001, pursuant to section 63(1) of the *Health Act*.

1. Complete an application to construct a sewage disposal system.
2. The existing septic tank is to be pumped on a regular basis to ensure sewage does not reach the surface of the ground.
3. Receipts of pump outs are to be submitted to the Upper Island/Central Coast Community Health Services Society at 2660 Dunsmuir Ave., Cumberland, B.C., on the first Monday of each month starting November 5, 2001, until the sewage disposal system is repaired.
4. The repair work is to be completed in compliance with the conditions of the sewage disposal permit.

Subsequent to the issuance of the Order, the septic tank on the Property was pumped, the tenants moved out, and more test holes were dug in the septic field at the request of the EHO. The house has subsequently remained unoccupied. A contractor retained by Mr. Berger dug the additional holes. In the process, the contractor broke and severed a pipe on disposal line 4.

Mr. Berger made a number of applications to obtain a permit to repair the sewage disposal system on the Property, prior to the one at issue in this appeal.

- On September 27, 2001, Mr. Laughlin submitted an application to repair the sewage disposal system, on behalf of Mr. Berger. (On November 27, Mr.

Laughlin terminated his services in relation to the Property). This application was not pursued.

- On November 21, 2001, Eagle Engineering submitted an application to repair the sewage disposal system on the Property. Eagle Engineering proposed to keep the existing septic tank and to install a low rate sand filter treatment plant and a pump tank and to use a slightly raised mound field. This application was submitted without Mr. Berger's consent. This application was not pursued.
- On December 4, 2001, Mr. Berger submitted an application to repair the sewage disposal system. This application was not pursued.
- On December 10, 2001, Mr. Berger submitted another application for a repair to the system. The EHO visited the Property to review the application. By letter dated December 14, 2001, the EHO informed Mr. Berger that he observed the following conditions:
 - All holes showed evidence of fill layering and cementing of soils.
 - The ground was spongy.
 - There are potential breakout points of neighbours' house drains, Berger house drains and any ditches around the perimeter of the yard.
 - There is insufficient setback to the property lines due to addition of fill.
 - There appears to be a high probability of ground water mounding if fill is added to the site.

The EHO concluded the letter by stating that, in his opinion, the proposed system would not protect the public health.

Mr. Berger met with the EHO on site to discuss the problems with the system on January 8, 2002.

Subsequent to this meeting, Mr. Berger hired Jeff Crisp of Crisp Plumbing Ltd. to inspect the condition of the sewage disposal system. Mr. Crisp inspected the system and concluded that of the 4 disposal runs, only 2 runs were operational. This, he explained, was as a result of the distribution box being lower than the septic tank. Mr. Crisp prepared a sewage disposal field report for the Property.

On February 15, 2002, Mr. Berger submitted another application for repair of the sewage disposal system on the Property. He included Mr. Crisp's field report as part of the application. The report indicated the following:

- The distribution box was pushed into the ground causing the distribution piping to back grade towards the distribution box. (This was a result of careless backfill techniques when the field was installed).

- Only the two runs closest to the distribution box appeared to have effluent being discharged into them. This condition has left the remaining 2 un-used, clean and dry.
- A curtain drain had been installed around the property perimeter to prevent water from adjacent properties to sheet on the subject disposal field. Curtain drain elevation as observed is a minimum 10 in. above sewage disposal field runs and outlet shows no signs of effluent discharge in approximately four years since installation.
- Ground water was not infiltrating any test holes as of February 13, 2002, when last observed.

Mr. Crisp recommended (and the application proposed) replacing the distribution box, installing speed levels and limiting flow to the disposal runs closest to the distribution box, installing piezometers on each disposal run for observation purposes, and backfilling open holes with granular material. The EHO subsequently met with Ms. Berger on site to review the application.

By letter dated March 4, 2002, the EHO rejected Mr. Berger's application for a repair to the sewage disposal system on the Property because "the system proposed will not protect the public health." The EHO provided the following reasons for rejecting the application:

1. Line one of the disposal field closest to the home is less than 10 ft. from the garage building in contravention of section 18(a) of the *Regulation*.
2. The interceptor drain around the back yard is less than 10 ft. from the disposal field in contravention of section 18(c) of the *Regulation*.
3. The fourth sewage disposal run from the home held water from October 25, 2001 to December 10, 2001 indicating that additional wastewater couldn't be accommodated by the field.
4. The first and second sewage disposal runs are completely clogged.
5. The perimeter drain installed four years ago indicates that the field has had problems before.

The EHO also indicated that he would welcome a new application and recommended that Mr. Berger employ the services of a professional engineer to address the limitations of the Property.

The EHO further submits that the water table on the site is too close to the surface.

Mr. Berger appealed the EHO's decision to reject the application to the Board on March 22, 2002. Mr. Berger believes that with a repair, the system would protect public health. He does not believe that the system is in need of replacement. He appealed on the grounds that:

- There are no people living in the garage so the distance should not be issue.

- The interceptor drain is thirteen (13) feet or greater from the disposal field and the drain elevation is higher than the septic tank field pipe.
- The fourth run has been compromised by the following:
 - a. disposal run was severed and broken during the excavation (a 4 x 4 hole) by the Health Officer, thus no flow entering the pipe;
 - b. uncooperative tenant did not follow flow restrictions given by Health Officer, thus compounding the problem;
- Distribution box was pushed into the ground causing the distribution box piping to backgrade towards the tile field and allowing sediment to settle in the pipes. This was the result of poor backfill techniques when the field was initially installed.
- A perimeter drain had been installed around the property to intercept surface water from adjacent properties. It has no relevance to the septic field system.

Mr. Berger requests that the Board reverse the decision of the EHO and issue the permit to repair the sewage disposal system on the Property.

In his statement of points of June 18, 2002, Mr. Berger proposed several changes to the permit application. He now proposes that the repair would involve the following:

- Add effluent screen in septic tank discharge;
- Construct new distribution box with flow control valve;
- Install new solid pipe from distribution box to start of each run of tile field;
- Shorten run No.1 to comply with 10 ft. setback from garage;
- Add new Run No.5; and
- Cap interceptor drain on N-E (low side) or property.

The EHO requests that the appeal be dismissed.

ISSUE

Whether the proposed repair to the sewage disposal system would adequately protect the public health.

RELEVANT LEGISLATION

The *Regulation* sets out the requirements for a permit for construction and repair of sewage disposal systems. It provides as follows:

Interpretation and application

1 (1) In this regulation

“**health hazard**” means a condition or circumstance that has or may have an adverse effect on the health of a person;

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

...

Standards for systems

6 Subject to section 7, no sewage disposal system constructed after the date of this regulation which involves the use of a septic tank or a package treatment plant is permitted unless the system conforms with the standards of construction, capacity, design, installation, location, absorption, operation and use set out

(a) For conventional septic tank systems, in Schedule 2,

...

Alternate methods

7 (1) Where a medical health officer or public health inspector is satisfied that it is impossible for a person to comply with

(a) in the case of a conventional septic tank system, sections 1, 16, or 22 of Schedule 2, or

...

but that the person can comply with all other provisions of the appropriate schedule, he may issue a permit to construct under section 3, containing conditions that he considers appropriate to meet the omitted standards having regard to safeguarding public health.

SCHEDULE 2

CONVENTIONAL SEPTIC TANK SYSTEMS

- 1 Septic tank systems are limited to lots where an impervious layer of soil or bedrock, or the ground water table, is greater than 1.2 m. [4 ft.] below the ground before it has been artificially disturbed by placement of fill, excavation or otherwise.
- 17 The length of a drainage pipe in an absorption field shall be determined as set out in Appendix II, in accordance with the percolation rate and the estimated daily sewage flow. The minimum length of a drainage pipe for any installation shall not be less than 45 m. [150 ft.] and the pipe shall be designated to ensure that distribution is proportionate to the length of each trench.
- 18 An absorption field shall be located not less than
 - (a) 3 m [10 ft.] from a building ...
 - (c) 3 m [10 ft.] from an interceptor drain...

DISCUSSION AND ANALYSIS

Whether the proposed repair to the sewage disposal system would adequately protect the public health.

Mr. Berger submits that the sewage disposal system on the Property was installed incorrectly. He submits that, in spite of the system being incorrectly installed, the health inspector approved it for use. Mr. Berger submits that the existing problems with the system are the result of it not being properly installed. Mr. Berger would like to proceed with a repair to the system to correct the problems. He submits that the problems are a result of uneven distribution between the distribution box and the disposal lines, because the distribution box was pushed into the ground when it was installed. Mr. Berger believes that if the slope (between the distribution box and the lines) was corrected, the system would function normally. Mr. Berger submits that he is open to suggestions as far as a repair goes, but that he is not prepared to replace the entire system. He would like to repair the sewage disposal system on his Property as soon as possible so that he can resume renting the house, which has been empty since October 2001.

The specific issues identified by the EHO are addressed below.

1. Whether the garage is too close to the absorption field.

Mr. Berger testified that he constructed a garage on the Property in 1999. Prior to the construction of the garage he contacted the Health Authority to obtain information on the location of the sewage disposal system on the Property. He was given a copy of the original permit application to construct the sewage disposal system, which included a diagram of the sewage disposal system.

Mr. Berger submits that using the information that he obtained from the Health Authority he proceeded to build the garage. He was aware of the regulatory requirement for a 10 ft. minimum setback from the sewage disposal system and accordingly, he built the garage with a 15.6 ft. setback, allowing an extra 5 ft. between the garage and the disposal lines. However, subsequent inspection of the sewage disposal system revealed that line 1 on the disposal field was only 7 ft. away from the garage.

Mr. Berger maintains that the sewage disposal system that was approved by the Health Authority was installed incorrectly because it does not correspond with the approved diagram on the permit application. He maintains that the disposal runs, the distribution box and the disposal field do not correspond with the approved diagram.

Mr. Berger also submits that, because there are no people living in the garage, the distance between the garage and the sewage disposal system should not be an issue.

The EHO submits that the garage is in contravention of section 18(a) of Schedule 2 of the *Regulation*, which requires that a building be at least 10 ft. from a sewage disposal system. The EHO explained that because the 10 ft. setback is a regulatory requirement, it is a binding requirement which is not flexible and which he cannot "relax."

The EHO explained that the process of obtaining a building permit requires that an applicant complete a health referral form that results in a site visit to determine proper setbacks. The EHO's position is that if Mr. Berger had applied for a building permit, as required, the garage would not have been located within the 10 ft. setback required by the *Regulation*.

Subsequent to submitting the permit application that is the subject of this appeal, Mr. Berger proposed to shorten disposal line 1 to comply with the minimum 10 ft. setback requirements. In the alternative, Mr. Berger suggested that if shortening disposal line 1 would make the line too short, he may be able to add an additional line closer to the house.

The EHO submits that shortening disposal line 1 is not a solution that he is allowed to approve or permit. He explained that all disposal lines are required to be equal in length so that there is equal distribution to all the lines. A shortened line will be prone to overloading and, as a result, the effluent will not get proper treatment from the soil. The EHO referred to Schedule 2, section 17 of the *Regulation* which provides that "(t)he length of a drainage pipe in an absorption field shall be

determined as set out in Appendix II, in accordance with the percolation rate and the estimated daily sewage flow. The minimum length of a drainage pipe for any installation shall not be less than 45 m (150 ft.) and the pipe shall be designed to ensure that distribution is proportionate to the length of each trench.”

The EHO explained that, past practice was that applications for sewage disposal systems contained diagrams of the proposed system that are approved when a permit is issued. He explained that the diagrams only showed the minimum requirements for the system. Often, the system actually constructed was quite different from the diagram that was approved. The EHO explained that, in Mr. Berger’s case, the diagram on the permit application was more accurate than most diagrams are. The EHO further advised that the system as constructed complied with the *Regulation* even though it did not conform with the diagram on the permit application.

The Panel finds that the 10 ft. setback requirement in section 18(a) of Schedule 2 of the *Regulation* is a regulatory requirement that can not be varied by the Panel, or the EHO. Section 6(a) of the *Regulation* expressly requires that this system must comply with Schedule 2, subject to section 7 of the *Regulation*. Section 7(1)(a) does not allow relaxation of the setback requirements in section 18 of Schedule 2. In addition, the fact that the garage is not occupied is irrelevant. Therefore, a sewage disposal system that is located within 10 ft. of a building cannot be approved.

Further, Mr. Berger has proposed 2 options, which would result in compliance with the 10 ft. setback requirements. With respect to the option of shortening line 1, the Panel accepts the evidence of the EHO that shortening the line would cause uneven distribution to the shortened line and would result in the line being prone to overloading. The Panel finds that shortening the line would contravene section 17 of Schedule 2 of the *Regulation*, by causing the distribution of effluent that is not “proportionate to the length of each trench.” The Panel also finds that there is insufficient room to install an additional line closer to the house. The distance between the house and line 1 is 14.7 ft. If an additional line was installed at a 6 ft. distance from line 1 (the distance between all the lines), it would only leave a setback of 8.7 ft. from the house, contrary to section 18(a) of Schedule 2 of the *Regulation*.

Accordingly, the Panel finds that the sewage disposal system as proposed cannot be approved as it does not comply with the mandatory requirements of section 17 or 18(a) of Schedule 2 of the *Regulation*.

2. Whether the perimeter drain is too close to the absorption field and is a potential breakout point.

Mr. Berger testified that in January 1999, a perimeter drain was installed around the Property to intercept surface water from adjacent properties. He noted that surface water runs onto the Property from the south west because properties adjacent to the south west corner of the Property are higher in elevation. He explained that water running onto the Property made it difficult to cut the grass. Mr. Berger maintains that the perimeter drain was not installed on the Property

because of problems with the sewage disposal system or the water table. Mr. Berger does not believe that the perimeter drain is a potential breakout point. He indicated that the perimeter drain is 10½ ft. or greater from the disposal field and is 10 in. higher than the disposal field.

However, as part of the repair, Mr. Berger proposed to cap the perimeter drain on the north east side of the Property.

The EHO does not agree that Mr. Berger installed the perimeter drain to intercept water from adjacent properties. By letter dated April 10, 2002, the EHO made the following observations respecting the perimeter drain:

- Mr. Berger's property is higher than his neighbours' along 50% of the length of the perimeter drain. Therefore we question what surface water he is intercepting from the downslope neighbours.
- We have documented elevated water levels in the field area above the level of the perimeter drain pipe and drain rock. It is our opinion that this ditch provides an outlet for the wastewater from the field.
- The drain is within 10 feet of the field in contravention of Schedule 2, section 18(c) of B.C. Sewage Disposal Regulation. The drain in our opinion is a potential breakout point and as per the Policy On Site Sewage Disposal B.C. Ministry of Health Section 4.4 Breakout point setback. As a potential breakout point the usual setback to the drain would be 50 ft. The drain at the three excavation points is six feet, eleven feet and 13 ft.

The EHO initially argued that the perimeter drain around the back yard is less than 10 ft. from the disposal field in contravention of section 18(c) of Schedule 2 of the *Regulation*. However, at the hearing, the EHO conceded that the interceptor drain would, in fact, meet the 10 ft. setback requirements.

It is the opinion of the EHO that a 10 to 15 ft. setback from the perimeter drain is not a safe distance from the disposal field because it is a potential breakout point for effluent. He explained that the winter water table has been observed at elevations above the base of the perimeter drain. Because of the high water table, the effluent can potentially discharge into the interceptor drain, therefore providing an outlet for the wastewater from the field. The EHO submits that on December 10, 2001, water levels in the field were observed above the lowest level of the perimeter drain.

The Ministry of Health policy for breakout point setbacks contained in section 4.4 of the *Policy On Site Sewage Disposal* requires that the setback to a potential breakout point should be 50 ft. It is the EHO's position that a distance of 10 to 15 ft. will not protect public health.

The Panel notes that it has conflicting evidence before it on the reason for the installation of the perimeter drain. Regardless of why the perimeter drain was installed, the issue before the Panel is whether the drain is a potential breakout point and poses a risk to public health.

The Panel accepts the evidence of the EHO that water levels in the field have been observed at levels that are above the depth of the perimeter drain. High water levels could cause untreated effluent to enter the drain through the water table and be discharged onto the surface of the land at the end of the drain, in contravention of section 2(2) of the *Regulation*. Section 2(2) provides that it is the duty of the owner of a building to ensure that domestic sewage does not reach surface of the land. The Panel finds that the perimeter drain is a potential breakout point and poses a risk to public health because it is located within 10 to 15 ft. of the disposal field. The Panel has also reviewed Mr. Berger's proposal that he cap the northeast end of the drain. However, the Panel is not satisfied that the proposal will protect public health as effluent could still enter the pipe along its length, and exit through the other end of the drain and reach the surface of the land.

3. Whether the water table is too close to the surface of the land.

The EHO submits that the proposed repair of the sewage disposal system will result in untreated effluent being directly discharged into the winter water table and, therefore, will not safeguard public health. He explains that the winter water table is elevated within the field area resulting in untreated effluent entering directly from the trench to the water table. The discharge of effluent directly to the water table is a potential health hazard.

Specifically, he refers to recorded water levels from December 10, 2001, from the test holes and percolation holes in the field area. There were a total of 4 test holes and 3 percolation holes. The EHO noted the following distances to water in the holes:

- Test hole #1: 9 in. to water
- Test hole #2: 9 in. to water
- Test hole #3: 24 in. to water
- Test hole #4: 8 in. to water

- Percolation hole #1: 12 in. to water
- Percolation hole #2: 6 in. to water
- Percolation hole #3: 8 in. to water

After observing the holes, the EHO determined that during heavy rainfall months, the water table rises above the disposal line pipes and the perimeter drain. The EHO noted that when he observed the holes on December 10, it had been over 24 hours since the last rainfall, yet the water was still elevated. He concluded that the disposal field was saturated and could not tolerate rainwater.

In addition, the EHO notes that the test hole that exposed disposal line 4 had an elevated water level for an extended period of time after the system was no longer in use. He explains that test holes should drain unless an elevated water table or continuing source of water influences them. The EHO submits that the water did not drain as it should have, because the ground was already saturated. It is the position of the EHO that the elevated water level at a time of no inflow of wastewater is an indication that the system will not function adequately and will not, therefore, protect the public health.

The EHO submits that the proposed repairs would not protect the public health because the winter water table is elevated within the absorption field area resulting in untreated effluent entering directly into the water table. He submits that the discharge of untreated or not fully treated effluent directly into the water table is a potential health hazard.

The EHO also submits that the disposal field is not suitable for use because the existing soil depth does not comply with section 6.1 of the *Policy On-Site Sewage Disposal*, B.C. Ministry of Health for soil depth. The policy provides:

Historically the soil depth requirement in British Columbia has been established as 18 inches. Recent technical information indicates that this requirement may not be sufficient.

(A.) Consideration should be given to increasing this depth when one or more of the following conditions are encountered:

- heavy rainfall (coastal conditions) or rapid snow melt,
- percolation rate faster than 15 minutes per inch,
- rapidly porous soil over an unconfined aquifer,
- potential breakout points,
- small lots (less than 2 acres),
- sloped properties,
- high hydraulic loading,
- history of failures in the area under similar conditions,
- experience with soil mounding in existing raised beds,
- good, suitable fill material is unavailable.

The EHO submits that in Mr. Berger's case, there is not 18 in. of soil above the water table and effluent is being disposed directly into the water table, compromising public health.

Mr. Berger submits that the notice of rejection did not say anything about an elevated water table. He submits that the elevated water levels observed by the EHO were the result of heavy precipitation that occurred from October 25 to December 10, when the test holes were left open to the elements. Mr. Berger offered the following figures, which he submits, show that from October through to December there was unusually high levels of rainfall.

- October: 130 mm
- November: 187 mm
- December: 171 mm

Mr. Berger testified that the 2001 winter saw unusually high levels of rainfall, which, he submits, account for the high water table. Mr. Berger also submits that the elevated water level in the holes was a result of the holes being left open to the elements.

The EHO testified that in order to protect public health, a sewage disposal system must be able to function even when there are heavy winter rains.

The Panel finds that Mr. Berger's Property has difficult conditions for conventional sewage disposal including a high water table. The Panel finds that there is clear evidence that the Property suffers from a high seasonal water table. The Panel finds that a high water table can interfere with the soil's capacity to absorb effluent. Section 1 of Schedule 2 of the *Regulation* states that septic tank systems are limited to lots where there is greater than 4 ft. of soil above the water table. While section 7(1)(a) provides the EHO with discretion to reduce the 4 ft. minimum soil depth, the Panel finds that this would not be appropriate in this case. The Panel finds that in this case, the high water table may result in untreated effluent being directly discharged into the water table. The Panel finds that this poses an unacceptable risk to public health.

4. Whether the disposal lines and distribution box can be repaired and protect the public health.

Mr. Berger submits that the first and second disposal lines were clogged because the distribution box was pushed into the ground. He submits that the distribution box must have been pushed into the ground during installation. With it pushed into the ground, effluent has to run uphill and this causes the piping to back grade towards the disposal field allowing the sediment to settle in the distribution lines.

Mr. Berger submits that when the ends of line 1 and line 2 were dug up on February 7, 2001, it appeared that lines 1 and 2 were handling the whole system and that effluent was not entering lines 3 and 4. He adds that there were no signs of failure in either lines 3 or 4. Ms. Berger testified that after the ends of the lines were dug up, she saw no evidence of any sludge. Mr. Cherry told her that the rain must have washed the sludge away.

Mr. Berger further submitted that, at the direction of the EHO, he brought in a subcontractor to dig two more holes in the septic field. The subcontractor severed and broke the start of the run on disposal line 4, during the excavation. Mr. Berger submits that the excavation required by the EHO did not meet the guidelines for percolation test holes. Mr. Berger submits that disposal line 4 was compromised when it was broken during the excavation, therefore preventing any flow from entering the pipe.

Mr. Berger concluded that lines 1 and 2 were clogged and handling the whole system because the original construction of the system was faulty and line 4 was compromised during the excavation by the subcontractor.

Mr. Berger proposed to level the distribution box with the distribution lines to allow for even distribution into the lines. He also proposed to replace the areas of the

sewage disposal field that are clogged. Mr. Berger has already repaired the break in line 4. He submits that with these repairs the absorption field will protect the public health.

The EHO submits that the disposal lines are no longer suitable for sewage disposal. Specifically, lines 1 and 2 are completely clogged and line 4 is compromised and will not accept water in the winter months.

The EHO submits that, because the distribution box was pushed into the ground, wastewater was only flowing into lines 1 and 2 because they were the lowest runs. On January 22, 2002, the middle and ends of each disposal line were excavated and exposed. The EHO returned to the Property on January 23, 2002, to observe the holes. He observed black sludge at the middle and ends of lines 1 and 2. He concluded that lines 1 and 2 were completely clogged and that the beginning of line 3 was also clogged. He reasoned that the septic tank had overflowed as a result of water not being able to exit the tank because the lines were saturated and full and could not accept water. He noted that there was nothing blocking the pipes from the distribution box. He noted also that the septic tank lid was non-existent and the distribution box was unearthed and open. Finally, he noted that the fill around the disposal lines was clogged to a depth of 9 in. below the line, 4 in. on each side and 2 in. at the end.

The EHO did not present evidence as to whether the uneven and backward slope between the distribution box and the distribution lines would result in uneven distribution and would cause the system to malfunction. Rather, the EHO argued that, because of the high water table, effluent will be discharged directly into the water table, which is an unacceptable risk to public health.

The Panel has reviewed the evidence and is satisfied that the failure of the distribution box to evenly distribute effluent to the 4 disposal lines has shortened the life of the absorption field. However, the Panel is not satisfied that the proposed repair to the distribution box and the clogged lines would be a permanent solution. The Panel is concerned that even with these repairs the field would be subject to failure in the future because, as discussed above, the winter water table is elevated within the absorption field area which will result in untreated effluent entering directly into the water table. Accordingly, the Panel finds that the proposed repairs to the distribution box and the disposal lines will not protect the public health.

Therefore, the Panel upholds the decision of the EHO.

The Panel is sympathetic to Mr. Berger's situation. The Panel notes that Mr. Berger has worked diligently to find a solution to the problem with the sewage disposal system on the Property. The Panel agrees with the EHO that Mr. Berger retain the services of an engineer and work with the EHO to find a lasting and suitable solution, so that he can resume renting the Property.

DECISION

In making this decision, the Panel of the Environmental Appeal Board has carefully considered all of the evidence before it, whether or not specifically reiterated here.

The Panel concludes that, for all the reasons set out above, the existing sewage disposal system when repaired according to the Application may constitute a health hazard.

The appeal is dismissed.

Alan Andison, Chair
Environmental Appeal Board

July 31, 2002