Environmental Appeal Board

APPEAL NO. 93/04(b) WASTE

In the matter of appeal under s26 of the *Waste Management Act*, SBC Chap. 41, 1982, against the issuance of Waste Management Permit PE-11144 to Maple Bay Resorts Inc.

BETWEEN	Maple Bay Ratepayers Association	**APPELLANT 1**
AND	Seaworthy Boat Owners Association	**APPELLANT 2**
AND	Deputy Director, Waste Management	**RESPONDENT**
AND	Maple Bay Resorts Inc.	**PERMIT HOLDER**

BEFORE A PANEL OF THE ENVIRONMENTAL APPEAL BOARD
Mrs. L. Michaluk, Chairman
Mr. H. Hunter, Member
Ms. H. Michel, Member

DATES January 11, 12, 13, 14, 1994

PLACE Cowichan Valley Inn, Duncan, British Columbia

APPEARING

For Appellant 1		
Spokesperson	Ms. K. Eirikson, Counsel	
Witnesses	Mr. J. Alesi	
	Mr. A. Allen	
	Mr. P. Carson	
	Ms. J. Gutensohn	
	Mr. G. Hebbert	
	Mr. P. Lucey	
	Mr. W. Murray	
	Mr. K. Napier	
	Mr. P. Pidcock	
	Ms. J. Sankey	
	Dr. J. Stronach, Expert	
	Mr. S. Summers	
	Dr. S. Turk, Expert	
For Appellant 2		
Spokesperson	Mr. P. Hunt, Counsel	
Witness	Mr. J. Samson	

For Respondent	
Spokesperson	Deputy Director Driedger
Witnesses	Mr. J. Finney
	Mr. D. McLaren
	Mr. D. Wetter, Expert
For Permit Holder	
Spokesperson	Mr. W. Neopole
Witness	Mr. B. Humphrey, Expert

EXHIBITS

A1-1 Book of Authorities, Maple Bay Ratepayers Association A1-2 Preliminary motion and supporting materials and addenda, Maple Bay Ratepayers Association

A1-3 Opening Statement of Maple Bay Ratepayers Association Al-4 MBRA Status Report on the Maple Bay Marine Environment A1-5 Constitution of Maple Bay Ratepayers Association

A1-6 Maple Bay Water Samples

A1-7 Handwritten note to file from Joyce Gutensohn re: telephone conversation with Brian Balfe, Canadian Coast Guard

A1-8 Maple Bay Marina Resort Investment Development Opportunity Al-9 Newspaper article: Expensive building decision, The Citizen, July.3, 1991

Al-10 Representation of Napier oyster lease

A1-11 Facsimile transmission of January 5, 1994, from B. Balfe, Canadian Coast Guard, to Christine Erickson, Maple Bay Resorts Pipeline

A1-12 Letter of December 23, 1993, from Maple Bay Ratepayers Association, to Honourable Moe Sihota, Minister of Environment, Lands and Parks

A1-13 Information entitled Composting Toilets

Al-14 Klargester Roto Pack/Biodisk information sheet

A1-15 Information package dated September 15, 1993 from M.C. Welldon, Arbutus Ridge Strata Manager, to Residents A1-16 Letter of April 8, 1993, from George Hebbert to Mr. G.E. Oldham, Regional Waste Manager

Al-17 Letter of February 6, 1992, from Bruce Bevan to Mr. Ted Oldham

A1-18 Newspaper article: Mayor outlines 1994's goals (no source) December, 1993

Al-19 Information sheet, Payne's Marine Supply

Al-20 Two letters from Gary Caine to Mr. Dunc McLaren

A1-21 Oceanographic Aspects of the Sewage Outfall In Maple Bay Proposed by Maple Bay Resorts, Inc. Prepared by J.A. Stronach, Ph.D. P.Eng. December 7, 1993

A1-22 Report on Maple Bay Marine Study, District of North Cowichan, B.C. Prepared by Videospection Engineering Ltd., September 1970.

A1-23 Preliminary Current Study - Maple Bay Sewage Outfall. Prepared by Joseph G. Alesi. November 1993.

A1-24 Review of Technical Aspects Pertaining to Proposed Mechanical Treatment Plant Serving Maple Bay Resorts Inc. Prepared by NovaTec Consultants Inc. December 1993.

A1-25 Picture of moorage facilities in Maple Bay, thought to be 1989 vintage from promotional brochure

Al-26 Persistent Toxins and Other Issues Regarding the Proposed Sewage Outfall for Maple Bay. Prepared by Alan Austin, B.Sc., Ph.D. January 6, 1994

A1-27 Department of Fisheries and oceans information dated August 27, 1993 regarding Crofton area crab and oyster harvesting closures

A1-28 Operational Map 10: Sensitivity to Oiling - Sansum Narrows. Coastal Resources Oil Spill Response Atlas Southern Strait of Georgia. BC Environment

A1-29 Operational Map 10: Resources - Sansum Narrows. Coastal Resources Oil Spill Response Atlas Southern Strait of Georgia. BC Environment

A1-30 Schedule of Maple Bay Resorts Inc. Various Projections Used to Arrive at Maximum Peak Sewage Flows

Al-31 Package of information referred to during cross-examination of Respondent

A2-1 Affidavit of John Samson

A2-2 Appeal Brief of the Appellant, Seaworthy Boat Owners Association

R-1 Respondent Submission

R-2 Resume, Robert Dale Wetter

PH-1 Brief of Maple Bay Resorts Inc.

PH-2 Initial Dilution Modelling prepared by Blair Humphrey and R. Warren Drinnan November 1992

APPEAL

The authority for the Environmental Appeal Board to hear this appeal is found in the *Environment Management Act*, and in Section 26 of the *Waste Management Act*.

This decision addresses two appeals filed with the Environmental Appeal Board against the issuance of Waste Management Permit PE-11144 to Maple Bay Resorts Inc. The Appellants were assigned numbers according to the order in which their appeals were received by the Environmental Appeal Board office.

The grounds presented by the Maple Bay Ratepayers Association (MBRA), Appellant 1, can be summarized as touching on three areas: jurisdictional; environmental; and, development related. Some of the jurisdictional elements of this appeal were addressed in a preliminary hearing (Decision 93/04(a)] and will not be repeated here.

Seaworthy Boat Owners Association (SBOA), Appellant 2, while supporting the arguments of Appellant 1, confined their grounds to Federal versus Provincial jurisdiction, and the effects this permit in general and the pipeline and outfall location specifically would have on boating in the area.

The order sought by Appellant 1 was that the permit be cancelled or in the alternative that the effluent pipeline be routed overland to Sansum Narrows. Appellant 2 sought the permit be cancelled or in the alternative that the facilities be relocated to a part of the municipality where it will not interfere with traditional marine activities.

BACKGROUND

Maple Bay Resorts Inc. (MBRI) consists of a marina (showers and laundromat) and pub which discharge to a ground disposal system. MBRI is proposing to expand its development to include townhouses, retail shopping and liveaboard boats. The existing ground disposal system cannot handle the effluent from the proposed expansion nor is there other suitable land available for ground disposal.

In November, 1991, MBRI applied for authorization to discharge 189 m^3 per day of effluent from a resort/townhouse/marina complex into Maple Bay. The effluent was to receive secondary treatment, attain concentrations of less than 60 mg/1 total suspended solids (TSS) and 45 mg/1 biochemical oxygen demand (BOD), and be disinfected using an ultraviolet disinfection system.

In May, 1992, a Ministry technical report recommended that the permit application be refused because of strong public opposition, the need for the development of an area wide liquid waste management plan (LWMP) and concern that the permit issuance could lead to a proliferation of outfalls thus forestalling LWMP development.

In June, 1992, MBRI presented a revised application for a form of tertiary treatment and a 12 m deep outfall terminating just beyond the marina docks within Birds Eye Cove. Other changes included the addition of property owned by Mr. P. Carson and a reduction of the maximum effluent to 169 m^3 per day meeting a BOD of 20 mg/1, TSS of 20 mg/1 and 100 colonies/100 ml for fecal coliform.

In January, 1993, a new technical report recommending the permit be issued was prepared by the same Ministry person who prepared the earlier report. This recommendation had changed, in part, because discussions with the District of North Cowichan indicated the District supported the application and was not interested in providing or managing a sewage treatment plant in the Maple Bay area.

On June 17, 1993, Deputy Director Driedger issued Waste Management Permit PE-11144 (the permit). The permit authorized the discharge of treated effluent from a marina, resort and residential development at Birds Eye Cove, Maple Bay, British Columbia, to Maple Bay via an outfall with a multi-port diffuser 90 metres below mean low water. The permit provides that the effluent characteristics shall be equal to or better than 20 mg/1 BOD, 30 mg/1 TSS and 100 colonies/100 ml fecal coliform.

The issuance of the permit was appealed to the Environmental Appeal Board by the Maple Bay Ratepayers Association (MBRA) on July 6, 1993 and by the Seaworthy Boat Owners Association (SBOA) on July 12, 1993. The hearing was originally scheduled to take place on October 19 although this hearing was adjourned first to November and later to January, 1994, at MBRA's request.

A preliminary hearing on November 9, 1993, addressed some of the jurisdictional grounds brought by MBRA. The Panel found [Environmental Appeal Board Decision 93/04(a)] that the ministry in general and the Deputy Director specifically had the authority to issue a permit of this nature, and that the Regulations had been met.

When the application for this permit was first made, the development proposal included a hotel and a conference centre. By the time this matter came before the Panel the development proposal and associated daily water consumption had been amended to:

Maple Bay Resorts		
24 townhouses @ 300 gal/unit	7200	gallons
pub: 780 ft' x 3 gal /ft^2	2340	
Retail shopping 3000 ft2 @ .15 gal /ft^2	450	
4 office staff @ 20 gal/staff	80	
30 liveaboard @ 100 gal/boat	3000	
Marina washrooms	6000	
Marina laundromat	1050	
Transient boats 15 @ 25 gal/boat	375	
30 floathomes @ 250 gal/unit	7500	
Pat Carson Property		
30 residential units @ 300 gal/unit	9000	

Total	36,995	gallons

The permit authorizes a discharge of 169 m^3/day (37,180 gal/day).

ISSUES AND EVIDENCE

During the presentation of evidence, several issues were identified and addressed. The major issues follow in no particular order.

Issue 1. Development Related Issues

> Both Appellants were concerned about the impact of the proposed expansion of the MBRI facilities on the Bay, and the land and sea based communities. The Appellants opined that MBRI should have received the various zoning approvals before applying for the waste permit.
>
> The Respondent testified that other agencies that will be involved in zoning and other approval processes were not obliged to issue approvals simply because the Ministry had issued the waste permit.
>
> MBRI testified that they had been advised by some of those other agencies to get the waste permit from the Ministry before pursuing the other necessary approvals.

The Environmental Appeal Board and thus this Panel draws authority to conduct appeals from the *Environment Management Act* and the *Waste Management Act*. Although the Panel is aware that both Appellants are concerned with the nature of the proposed development and how it will affect the community, neither of the aforementioned statutes provide the Panel with the authority to decide zoning, crown land or coast guard matters. As a result, ' the Panel has no jurisdiction over development matters per se.

The Panel does accept, however, that the issuance of this permit by the Ministry does not supplant the authority of other agencies that will be involved ultimately in decisions regarding MBRI's proposal.

Issue 2. Liquid Waste Management Plans

> MBRA produced evidence to show that the area covered by the permit has recently been included in preliminary discussions regarding a liquid waste management plan (LWMP). As such, MBRA feels this permit should be set aside as it could interfere with the overall planning for this area. MBRA accepts that LWMPs take time to conduct and implement and suggests that the Minister of Environment, Lands and Parks exercise his authority under section 16 of the Waste Management Act to order the Municipality of North Cowichan to prepare an LWMP within two to three years.

> The Respondent testified they would have preferred the effluent from this development be handled by way of an LWMP or by the Municipality. Discussions between the Ministry and the Municipality indicated, however, that the Municipality was not interested in assuming responsibility for the sewage treatment facility. The Respondent also testified they do not believe this area warrants a recommendation to the minister to invoke section 16(4) of the *Waste Management Act*.

Section 16 of the *Waste Management Act* provides:

> (1) A municipality … may submit for approval by the minister a waste management plan respecting the management of municipal liquid waste.
>
> (2) every regional district shall, on or before December 31, 1995, submit … a waste management plan for … the management of municipal solid waste…
>
> (4) …the minister may, by notice in writing,
> (a) direct a municipality to prepare … a waste management plan … on or before a date specified by the minister…

The Act, then, compels regional districts to have a solid waste plan while LWMPs are optional or at the minister's discretion. Evidence was presented to show that the planning for an LWMP for this area is underway. Testimony indicated development of these plans can take several years.

The Panel accepts that an LWMP may be a vehicle to provide good planning, and that good planning can prevent poor decisions. The Panel also accepts that where there is no technical reason to compel the participation in or time line of LWMPs it may be prudent to leave such decisions to the local citizens.

The Panel notes that section 13 of the permit provides:

> The discharge authorized by Section 1 in this permit is subject to connection to a municipal sewerage system when such facilities become available.

The existence of this permit, therefore, does not preclude the development of an LWMP and eventual municipal involvement in this area. In addition, the security clause (14) provides an incentive for the permit holder to hook into a municipal system as the permit holder can request the return of the security once the system has been transferred to a Municipal authority. Certainly, at this time there is no reason to believe that the permit holder would refuse to connect to a municipal system when and if it becomes available.

Issue 3. Discretion of the Deputy Director to refuse to issue the permit

> MBRA provided case law to support their contention that the Deputy Director could have exercised his discretion and refused to issue the permit.
>
> The Respondent testified that the Waste Management Act had to be read in conjunction with other statutes when considering the application of discretion. As such, the Deputy Director decided he did not have the authority to refuse this permit within the present situation.

The case law specifically referred to by MBRA was Wimpey Western Ltd. et al. v. Director of Standards and Approvals of the Department of the Environment et al. (1983), 2 D.L.R. (4th), Alta Court of Appeal. Wimpey Western had obtained subdivision approval for their land and had applied for permits to construct a sewage treatment plant. The Director of Standards refused their application because ministry policy stated that such a treatment plant should be deferred until a regional plant was in operation. Wimpey Western took the refusal to court as they felt they were entitled to the permit. The case was dismissed at trial and at the subsequent appeal. Basically, Haradance J. found that as there was a policy in place and that as the decision to adhere to the policy and not to issue the permit was taken after discussing the application with the Minister, the Director of Standards did not fetter his discretion by deciding not to issue the permit because of ministerial policy.

In the matter before the Panel, the opportunity for the Minister to become involved was through section 16(4) of the Waste Management Act. At the time of issuing this permit and at the time of this appeal, the Minister had not taken that action. The Panel accepts that had the Minister exercised his prerogative under the Waste Management Act and required the preparation of the LWMP, the Deputy Director would have been in a position to include this consideration in deciding whether or not to issue or refuse the permit.

Issue 4. Establishment of a private sewage utility

> MBRA testified that as this permit authorizes the collection and treatment of sewage from separate properties with different owners, it has the effect of allowing for the establishment of a private sewage utility. The *Water Act* was presented to show that where private utilities are authorized, they are specifically addressed in the enabling statute. MBRA argued that as the *Waste Management Act* is silent, the establishment of private sewage utilities is not allowed.
>
> The Respondent testified that the authority to issue the permit in its present fashion was found in section 8 of the *Waste Management Act*.

Section 8 of the *Waste Management Act* provides:

> (1) A manager may issue a permit to introduce waste into the environment … subject to requirements for the protection of the environment that he considers advisable…

The Panel notes that when the permit application was first made only the MBRI property was included. When the application was reviewed internally by the Ministry, the recommendation was that it be refused. A revised application, which included the servicing of a separate property with residential development potential (Carson property), was eventually granted.

The Deputy Director testified that he considered one of the ways to protect the Birds Eye Cove environment was to limit the number of outfalls in the vicinity. This was in part accomplished by including the Carson property in the permit. The Deputy Director agreed that the *Waste Management Act* provides little guidance on including separate properties with different owners in single permits. He advised that a legislative review is presently ongoing and this has been identified as an area for study.

The Deputy Director also advised that he considered the permit would further assist in protecting the local environment in that float homes and boats could hook into the facility thus ending the dumping of raw sewage into the bay. MBRI testified it will be a condition of moorage in the marina that such vessels use the treatment facility.

The Panel accepts the *Waste Management Act* neither specifically authorizes nor precludes the collection and treatment of sewage from separate properties with different owners. The Act authorizes the Deputy Director (and Manager) to issue waste discharge permits with conditions that the issuing officer considers advisable for environmental protection.

In the matter at hand the Panel accepts that the Deputy Director has attempted to limit the number of outfalls in the area and has supported the intent to provide sewage treatment for boats and float homes in the marina. There was no evidence presented to show that this was unlawful nor that it constituted an error in the exercise of his discretion.

Issue 5. Permit Safeguards

> Both Appellants were concerned that the present permit may not require adequate environmental safeguards. An MBRA expert witness testified that permit section 1.1.3 (works authorized) did not provide sufficient detail to enable an assessment of equipment safeguards or whether the permit effluent characteristics could be met. SBOA was concerned the permit did not address specific safeguards to protect the proposed pipeline and outfall from the heavy marine traffic the area can experience.
>
> The Respondent produced evidence in the form of the permit to show that environmental safeguards had been considered. While there was

> no argument that clause 1.1.3 did not provide detailed and specific information on works, the Respondent directed attention to: clause 10 which requires plans and specifications of the works authorized in 1.1.3 be approved by the Regional Manager prior to construction; clauses 11 and 12 which require the plant be classified and the operator certified; and, the clauses regarding inspection and monitoring of equipment and waste. The Deputy Director also recommended certain permit amendments that would further improve the environmental safeguards.

The Panel accepts that unnecessary detail in the permit would not allow the permit holder and the Ministry to respond in a timely fashion to technological advances. The Panel notes it is important that the need for flexibility be balanced with the need to ensure that the permit clearly represents to the public and the permit holder the Ministry's expectations regarding operating regimes and constraints.

In the opinion of the Panel, the permit provides information on the general nature of the authorized works and alerts the public and the permit holder to other more specific requirements surrounding those works. The manner in which the permit is structured meets the need for flexibility and disclosure. The individual permit clauses will be discussed elsewhere in this decision.

Issue 6. Initial Dilution Modelling

> An expert witness for MBRA testified he disagreed with MBRI's initial dilution modelling assessment. The witness testified that the modelling of the effluent plume rise and dilution after discharge from the diffuser was inadequate in that seasonal changes to the water column density structure were not considered. The witness opined that these seasonal changes would result in the effluent plume being trapped within 10-15 metres of the seafloor which would result in reduced initial dilution. MBRA was concerned that a nearby oyster lease would be affected.
>
> The expert witness for MBRI agreed that the modelling report was based on one water column density structure and that there may be times when the plume could be trapped within the range suggested by MBRA. The witness testified he believed the water column structure used for the model represented the worst case scenario as it would allow for the highest rise of the effluent plume thus placing it in closest proximity to the oyster lease. The witness testified that in his opinion the oyster lease would not be affected by the effluent plume under either of the water column density structure scenarios.

Evidence was presented to show that the Ministry of Agriculture, Fisheries and Food originally had concerns that the nearby oyster lease could be affected by the discharge. Further review conducted by that Ministry, however, led them to conclude the existing oyster lease would not be affected.

The Panel notes that the witnesses for MBRA and MBRI both agreed that the initial dilution plume would not come to within 30 metres of the surface. In addition the parties agreed that once the density of the effluent matched the receiving environment density, the plume would not rise any further without the addition of energy which would result in mixing and further dilution.

The Panel also notes that the modelling assumed a diffuser with less than three ports, whereas the permit requires a multi-port diffuser. There was no argument that a multi-port diffuser would result in greater initial dilution than a diffuser with one or two ports.

Issue 7. Odour Control

MBRA expressed concern that the sewage treatment facility could have odour problems. A witness testified that his similar although smaller system had occasionally had odour problems.

The Respondent argued that although odour control devices could be considered as part of the works presently authorized in permit clause 1.1.3, the Panel may wish to consider amending clause 1.1.3 to specifically include odour control facilities.

In the opinion of the Panel, when sewage treatment plants are located within or close to residential areas special attention must be paid to odour control. The fact that the inclusion of such equipment could be subject to interpretation indicates to the Panel that where such equipment is contemplated it should be specifically noted.

Issue 8. Bonding

Witnesses for MBRA testified that although there was general discomfort with the $76,000 bond presently stipulated in the permit, there was insufficient information available to enable a more accurate determination of an appropriate amount. This was in part due to the fact that the bond generally reflects a percentage cost of the works and includes considerations of equipment and safety factors.

The Respondent indicated that the manner used to determine bonds is presently under review. The Deputy Director argued that the Panel may wish to consider amending the security clause to enable the Regional Waste Manager to set the bond as a percentage of the authorized works.

MBRI testified that they were not averse to posting an increased bond as long as they were treated in a similar fashion to other permit holders.

The Panel notes a witness for the Respondent indicated that in general terms, bonding for a system such as this could approach $200,000 to $250,000. The Panel

accepts that until the plans for the plant are submitted and approved it would be difficult to set an appropriate figure. The Panel does note, however, that $200,000 to $250,000 is significantly more than the $76,000 bond presently required by the permit.

Issue 9. Source Control and Monitoring

> MBRA produced evidence to show that a residential development with a privately maintained sewage system had experienced difficulty controlling the introduction of certain substances into their treatment system and that this had resulted in system upsets. Given that the permit authorizes sewage collection from many different sources, including transient vessel holding tanks that traditionally contain odour controlling chemicals such as formaldehyde, and considering that this could result in treatment plant problems, an expert witness for MBRA stated that frequent monitoring provisions should be included in the permit to ensure the source control program is effective.
>
> The Respondent testified that effluent from transient vessel holding tanks should not be allowed to enter the treatment plant without prior treatment in a pre-treatment facility.
>
> The Permit Holder indicated that all vessels using the MBRI pump out service would have to sign an undertaking that they did not use chemicals such as formaldehyde in their tanks.

The Panel accepts that one of the best ways to ensure the treatment plant will perform as intended is to ensure that it receives only the types of waste it was designed to treat. All parties agreed that formaldehyde could pose a problem for the treatment plant. It is interesting to note that if waste from a transient vessel did cause a plant problem the vessel could be long gone by the time the problem became apparent leaving the local residents and users to deal with the results. Clearly, the plant and residents should be safeguarded from such events.

The evidence also showed that there are substances in everyday residential use that can cause plant upsets. There are also substances such as heavy metals and synthetic organics that may not be present in sufficient concentration to upset the plant but which could in time affect the environment. While it would be possible to establish a marine monitoring program to determine the presence of such substances, it would be more appropriate to regularly sample the treatment plant sludge.

DECISION

In making this Decision, the Panel of the Environmental Appeal Board has carefully considered all evidence and testimony presented during the Hearing whether or not reiterated here.

A review of the evidence and testimony of experts and others appearing on behalf of MBRA, MBRI and the Respondent showed that effluent discharged in accordance with this permit would not affect swimming beaches or shellfish. In addition, the testimony showed that discharge of raw effluent from a two kilometre long outfall terminating in a 90 metre deep outfall with a multi-port diffuser would be unlikely to affect existing shellfish leases.

The Panel notes that the effluent characteristics authorized by this permit are significantly more stringent than those required by the Pollution Control Objectives. The Panel also notes that the permit requires the effluent not exceed 100 colonies/100 ml fecal coliform while swimming water quality is 200/100 ml fecal coliform.

There was no evidence to show that the issuance of this permit usurps or supplants the authority of other agencies responsible for crown land leases, zoning and coast guard approvals.

The Deputy Director considered that the issuance of this permit would not only potentially reduce the number of outfalls in this area through the inclusion of the Carson property, but would ultimately result in an improvement of the bay environment as there is provision for boats and float homes to be hooked into the system. MBRI testified that hook-up into the system will be a condition of moorage in the marina facility.

The Panel accepts that at present boats and float homes may legally discharge untreated effluent into the Bay. The Panel notes that there is a process in which the residents can become involved concerning the introduction of regulations to make such discharges illegal.

The Panel is of the opinion that although the permit should be upheld, certain amendments are desired to further safeguard the environment. For ease of convenience, the permit amendments follow in the order found on the permit. The underlined portions are the segments of the clause added or changed by the Panel.

Section 1. Authorized Discharges and Related Requirements

As discussed earlier, there was concern that effluent from holding tanks could contain substances such as formaldehyde which could cause plant upsets. Although MBRI testified that no vessels would be allowed to use the pump out services unless they were formaldehyde free, the Deputy Director felt consideration should be given to amending the permit to prohibit transient vessels hooking into the system unless the overall system design included adequate pre-treatment. The Panel notes the evidence showed odour controlling chemicals are not necessarily restricted to transient vessel holding tanks.

There was also concern as to what types of constituents could be expected in discharges from a marina, resort and residential development. It was clear from the testimony provided that what is intended to be collected and treated is normal domestic effluent.

Therefore, it is the unanimous decision of the Panel that clause 1.1 of the permit be amended to read:

> The treatment plant influent shall be restricted to normal domestic effluent from a marina (including floathomes and boats), resort and residential development. Effluent from holding tanks (liveaboards, float homes and transient vessels) that contain odour suppressing chemicals must receive pre-treatment as approved by the Regional Waste Manager.

Section 1.1.3. Works Authorized

The testimony showed that the treatment facility will be located in a marina/residential area. There was concern that there could be odour problems associated with the plant operation. The Deputy Director felt consideration should be given to amending the permit to include odour control facilities.

The Panel accepts that odour control facilities could form part of the secondary treatment plant. The Panel is of the opinion that it would be clearer to all concerned to specify the odour control facility requirement on the permit.

As discussed in the earlier section, the Panel has also decided that holding tank effluent that contains odour suppressants may only enter the treatment plant via a pre-treatment system. For clarity, the pre-treatment system should be included in works authorized.

Therefore, it is the unanimous decision of the Panel that clause 1.1.3 of the permit be amended to read:

> The works authorized are a pre-treatment system for holding tank effluent, flow equalization facilities, a biological secondary treatment plant, an effluent filter, ultraviolet disinfection facilities, auxiliary power, odour control facilities, an outfall with a multi-port diffuser extending to a depth of 90 metres below mean low water, and related appurtenances approximately located as shown on the attached Appendix A-1.

Section 14. Posting of Security

As discussed earlier, there was concern expressed by the Deputy Director and the Appellants that the security requirement was inadequate. Given the testimony provided at the hearing, the Panel agrees that the security should be increased but accepts that as securities are often based on the cost of the works, that at this time there is insufficient information to establish an appropriate figure.

Therefore, it is the unanimous decision of the Panel that section 14 be amended to read:

> The Permittee shall post security with and in a form acceptable to the minister of Finance in an amount to be determined by the Regional Waste Manager after discussion with the parties to this appeal prior to commencing discharge. In the event the parties to this appeal disagree with the amount of the bond, the matter will be returned to the Board.

Section 17. Effluent Sampling and Analysis

Testimony presented at the hearing showed that while effluent sampling can test for compliance with the permit, sludge monitoring is a more efficient method to check the efficacy of source control programs.

Therefore, it is the unanimous decision of the Panel that section 17 be amended as follows:

> Section 17. Sludge and Effluent Sampling and Analysis
>
> 17.1 Effluent Sampling and Analysis (change of title only)
>
> 17.2 remains unchanged
>
> 17.3 Sludge Monitoring
>
> The Permittee shall obtain a sample of the sludge once each quarter during the first year of operation and shall analyze the sample for heavy metals and other parameters as specified by the Regional Waste Manager to test the effectiveness of the source control program. Following the first year of monitoring and evaluation by the Regional Waste Manager, the sludge monitoring program is to be amended according to the discretion of the Regional Waste Manager.

The Panel accepts that although it would have been preferable for the sewerage of this area to be addressed as part of an area wide LWMP, there is nothing to show that this permit, as amended, would result in unreasonable adverse environmental impact.

The Panel notes that although the Maple Bay Ratepayers Association requested they be reimbursed the cost of the appeal, there was no evidence or argument presented to support the request. On review of the *Waste Management Act* and the *Environment Management Act* the Panel is of the opinion the Environment Appeal Board has no jurisdiction to grant the request.

It is, therefore, the unanimous decision of the Panel that the appeal of Appellant 1, Maple Bay Ratepayers Association, be dismissed.

With regard to the appeal of Appellant 2, SBOA, there is nothing in the permit that suggests that the Ministry of Environment, Lands and Parks has exceeded its jurisdiction in issuing this permit, nor that the Ministry intended or assumed to usurp the authority of the Federal Government regarding the necessary Coast Guard approvals for the pipeline and outfall.

It is, therefore, the unanimous decision of the Panel that the appeal of Appellant 2, Seaworthy Boat Owners Association, be dismissed.

COMMENTS

The Panel notes that the Respondent stated odour control devices could be considered as part of a secondary treatment plant. This was not the first time the phrase "secondary treatment plant" was the subject of interpretation. Indeed, just what was meant by "secondary treatment", "biological secondary treatment" and "tertiary treatment" formed a significant portion of the testimony before the Panel.

According to the evidence, tertiary treatment generally means the removal of nutrients from effluent, although it can also mean additional treatment following secondary treatment. In the matter at hand, the treatment plant consists of a biological secondary treatment plant, an effluent filter and ultraviolet disinfection. According to the testimony presented, this configuration could be described as a form of tertiary treatment.

Certain permit clauses have been amended to reflect the need for pre-treatment of holding tank effluent because of the detrimental effect odour suppressing chemicals can have on the biological treatment process. The Panel recommends that the Permit Holder include information on this subject in the Waste Reduction Information Report (Section 15).

Linda Michaluk, R.P. Bio. Chairman
Environmental Appeal Board

February 14, 1994