



Appeal No. 82-03 POL.

J U D G E M E N T

PERMIT NO. P.R. 5910 - issued to Valleyview Enterprises Ltd. for the discharge of solid waste from a recycling operation to a landfill disposal site, adjacent to and below the Juniper Ridge residential subdivision.

APPEAL

The Appeal was against three of the provisions of the permit, as stated in the "Letter of Transmittal" and the Appendix attached to the permit. The appellant was of the opinion that these three provisions were too stringent for the type of operations involved and therefore, not required. The three conditions of the permit, under appeal, were as follows:

- 1) In the appendix to the permit, there seemed to be some misunderstanding as to the quantity of refuse which could be discharged to the site.

Both Valleyview Enterprises Ltd. and the Director agree that the quantity of refuse should be 150 tons/day and 7,800 tons per year, as far as the weight is concerned.

The area of disagreement was in the conversion of these weights to volumetric measurement.

Valleyview Enterprises Ltd. was of the opinion that these weights should be equivalent to 750 cubic meters per day and 39,000 cubic meters per year (i.e. 5 cubic meters per ton).

The Director's conversion placed the volumetric measurement of these weights at 220 cubic meters per day and 11,500 cubic meters per year, and the permit was written accordingly (i.e. - approximately 1.47 cubic meters per ton).

Valleyview Enterprises Ltd. felt that their conversion was the correct one, since it was an actual measurement of the solid waste involved. They asked that the permit be altered to reflect their figures.

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2. Also, in the appendix to the permit, there appeared to be a conflict in the interpretation of the word "putrescible". The permit stated that putrescible wastes could not be dumped at the disposal site. The appellant was of the opinion that putrescible wastes included paper and wood products, which would constitute a major portion of the waste material he intended to dispose of to the landfill operations. Further, he contended that it was impossible to separate all food-type putrescibles from the material he would bring to the site for his recycling operations, and therefore, it would be necessary to dispose of a negligible amount of this material to the site. Valleyview Enterprises Ltd. wanted an assurance that putrescibles did not include paper and wood products, and that the "no putrescible" clause in the permit would be relaxed to allow for the disposal of minute quantities of food wastes to the site, which would be a necessary part of their operations.
3. Valleyview Enterprises Ltd. also requested that Level "A" operation requirements be reduced to Level "C" operations. This provision of the permit was contained in the "Letter of Transmittal". They said that Level "A" operations were not required because of the dry weather conditions in the Kamloops area and also because of the volume and composition of the proposed discharge.

HEARING INFORMATION

The hearing was held on February 16th, 1982 in the Delta Canadian Inn in Kamloops, B.C.

The Board members in attendance were:

Mr. Frank Hillier, P. Eng.	- Chairman
Mr. Valter Raudsepp, P. Eng.	- Member
Mr. Lloyd Campbell	- Member
Miss Shirley Mitchell	- Official Recorder

REGISTERED APPELLANT

The only registered appellant was Valleyview Enterprises Ltd. represented by the following:

Mr. Russell Cundari, LL.B.	- Legal Counsel
Mr. D. Ambrosi	- President of Valleyview Enterprises Ltd.

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REGISTERED OBJECTORS

There were 114 registered objectors, although only four gave testimony at the hearing. These four were as follows:

Mr. E.G. Kurtz	- Engineering Manager of the City of Kamloops
Mr. T.R. Underwood	- P. Eng. - Civil Engineer
Mr. Hans Wachter	- Engineering Technician
Mrs. R. Foisy	- Housewife

LIST OF EXHIBITS

- A - Submission of Valleyview Enterprises Ltd. consisting of fourteen sections
- B - A pamphlet on the company's proposed baler
- C - A series of calculations by Mr. R. Schurr, Waste Management Branch, Ministry of Environment (3 pages)
- D - Submission of the City of Kamloops

SUMMARY OF THE APPELLANT'S PRESENTATION (IN PART)

Mr. Russell Cundari was legal counsel and spokesman for the appellant. Evidence was given by both Mr. Cundari and Mr. Ambrosi. Mr. Ambrosi, however, was the representative of Valleyview Enterprises Ltd. who answered all questions in cross-examination.

The appellant's testimony on the three areas of appeal was as follows:

I. Quantity

1. The appellant had no dispute with the Director over the quantity of refuse to be discharged to the land-fill operations as far as the weight was concerned. He stated that the Waste Management Branch had used the wrong volumetric conversion factor. His practical experience with the type of waste material he would be receiving was that it actually occupied 5 cubic meters per short ton. He said that he could not achieve a density factor of 1.47 cubic meters per ton without using a baler.

2. He further stated that in his initial operations, when he would be discharging loose material to landfill, it was impossible to achieve a density of compaction equal to the 1.47 cubic meters per ton from the wheel loading of graders and front-end loaders. He pointed out that a ton of water was equal to 0.9 cubic meters and a ton of moist dirt, equal to 0.72 cubic meters.
3. He said his operations could not be compared with those of the City of Kamloops. Kamloops had two landfill operations and permits which allowed them to dump 487 cubic meters of garbage per day, which would result in 127,000 cubic meters per year (5 day week basis). He said he needed a high daily capacity because of the sporadic requirements of his business to take care of house demolitions, etc. His yearly discharge, however, would actually be quite low in relationship to the City's discharge.
4. He said the information in the Stanley Report on volumes and densities could not be relied upon, because:
  - a) They did not use the estimated tonnages to be handled at the site, but based their figures on literature values and an assumption of what portion of the total City of Kamloops solid waste tonnage could be collected by the appellant. Further, the appellant stated that he intends to collect from additional areas surrounding the City of Kamloops.
  - b) They estimated volumes on the basis that 85% of the materials would be recycled. The fact is that there will be very little recycling until the volume of waste economically justifies the manpower, buildings and equipment expenditures necessary to achieve the eventual goal of 95% recycling.
  - c) They assumed a high density baler would be used to compact 60% of the materials to be landfilled, but in fact a high density baler would not be used initially. Such a baler

would cost over \$50,000.00 and would take over a year to be delivered. Once again, economic considerations based on volume would determine when the baler would be obtained.

- d) Their estimates were based on 1981 conditions. They did not take into account the expansion of the area in years to come.
5. The baler that the company now planned to buy, if they won their appeal, would be a combination cardboard and refuse baler, which would cost about \$400,000.00. They would then be able to bale all their waste and thereby resolve not only the density problem but also greatly reduce the blowing litter problem. This baler, however, would take a year to eighteen months to deliver.
6. The appellant also pointed out that because of the request of residents in the area of the site, he had voluntarily given up the right to burn waste, thereby increasing the amount of material to be disposed of to landfill.

## II. Putrescibles

1. The appellant said that the original application for the permit identified the nature of the refuse by weight as 75% construction refuse and 25% decomposables.
2. He pointed out that the permit allows no putrescible waste to be discharged to the site. He then said that his interpretation of the word "putrescible" was a substance which tended to decay and/or produce an odour, including paper, food waste, cardboard, gypsum, wood and plasterboard. If this was what the Director had meant by the word "putrescible", it was obvious that he could not carry on with his proposed business without violating the terms of the permit.
3. However, even if the word "putrescible" only applied to food wastes, it would still be impossible for him to carry out his proposed business without

violating the terms of the permit. He said it was economically impossible to remove every little piece of food remnant, such as coffee grounds, hamburger remnants, etc. from his waste paper collections. He said he needed some recognition of the fact that there could be minute food particles in his waste material.

4. If putrescibles meant food waste only, he suggested that the Director should allow for up to 2 percent putrescibles in his waste material. In this way he could operate effectively, without fear of violating the terms of the permit and being fined or shut down. With such a small allowance for putrescibles, the Director would also be assured that he could not go into the business of municipal garbage type waste and landfilling.
5. He stated that if he could get a permit with a 1 to 2 percent putrescible allowance, he would be content to have daily coverage of the fill area (i.e. Level "A" Operations).
6. He further stated that if the 1 to 2 percent allowance could not be given, or the definition of putrescibles could not be clarified, he wanted the permit amended to allow him to dump 25 percent decomposable material by weight.

### III. Type of Operations

1. The appellant pointed out that his proposed garbage dump has been classified by the Waste Management Branch as a size 5 operation. He further stated Municipal Type Waste, as expressed in Table 3-2, Landfill Operating Levels, states that Inert Municipal Waste, with or without non-hazardous industrial material, calls for Level "D" operations.
2. He said his landfill would not attract scavenging animals, because, as the permit now stands, no putrescibles are allowed. He said there would also be no problem with smell, litter and unsightly uncovered debris. Since the owner's house is on the property, it would also be an added incentive

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to keep the place clean and tidy.

3. He said there are three stages for the proposed operations. The permit restricts the initial operations to the first two stages, which will not be visible to Juniper Ridge or from Highland Drive.
4. He said there would be no odour from the operations because of the arid, semi-desert climate of Kamloops, which prevents rapid decomposition of solid waste. Also, the closest residence to the site is at the Valleyview subdivision which is 1,800 feet away. The closest residence at Juniper Ridge is 3,600 feet away. In his opinion, odour would not carry that far.
5. He said, Stanley Associates, on page 14 of their report, suggest covering the wastefill once a week, or more frequently if necessary to control blowing debris.
6. The appellant points out that the City of Kamloops has a municipal type waste landfill operation at Barnhart Vale, and they only have to meet Level "C" operations. They have large quantities of putrescibles, they are closer to a residential area (1,400 feet) and they are allowed to burn garbage twice a week. He feels that the Director is being discriminatory to order Valleyview Enterprises Ltd. to conform to Level "A" operations.

CROSS- EXAMINATION (Some comments noted by the Board)

The appellant made the following comments while under cross-examination:

1. The best way to control blowing debris and litter is to cover it; however, other good methods are available, such as keeping it wet, screening it to keep the effects of wind to a minimum and by baling the waste material.
2. The appellant already has a recycling operation and a simple baler. He currently collects newsprint and cardboard which he sells to Belkin Paper Box in Burnaby, and to others.
3. He currently hauls his putrescible wastes to the City of Kamloops' dump by truck. This would probably not be economically feasible in his proposed future operations.

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4. He currently picks up waste paper from three MacDonald's hamburger outlets and Woodward's cafeteria, which accounts for his current small amount of putrescible materials.
5. He admits that the information on his proposed operations originally submitted to the Director on his application for the permit is different from that which now exists. He says, after all, that was two years ago.
6. He realizes that the permit is for the landfill operations and not the recycling plant.
7. Once he gets his \$400,000 baler into operation, his volumetric landfill requirements will be sharply reduced.
8. He believes that by recycling a great deal of the garbage that he collects, he is doing more to improve the environment than to harm it.

SUMMARY OF THE WASTE MANAGEMENT PRESENTATION (IN PART)

The following people appeared as representatives for the Waste Management Branch, Ministry of Environment.

Mr. Paul G. Jarman, LL.B	- Legal Counsel
Mr. Ruben C. Schurr, P. Eng.	- Head, Interior Unit
Mr. Vladimir Pomajzl, P. Eng.	- Engineer, Interior Unit

Mr. Paul Jarman, from the Ministry of the Attorney General, was legal counsel and spokesman for the Waste Management Branch. He opened his defence on the provisions of the permit in question by introducing Mr. Schurr, who then gave evidence on how the Waste Management Branch had made its calculations on the volume of waste material which it would allow to be discharged to the site.

Mr. Schurr stated that it was his understanding that 80 percent of the material coming to the site would be recycled. Of the remaining 20 percent which would be discharged to landfill, he understood that 60 percent of it would be baled at a density of 1,200 pounds/cubic yard and 40 percent of it would be demolition and construction debris at 800 pounds/cubic yard. This would then give a combined weight of 1,040 pounds/cubic yard or 1,360 pounds/cubic meter, which would mean 1 ton equalled 1.47 cubic meters. The 150 tons/day and 7,800 tons/year would then convert to 220 cubic meters per day and 11,500 cubic meters per year.

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On the basis of 1 ton equalling 1.47 cubic meters, he then went on to calculate the total number of cubic yards which would be brought to the site, on the average, each day. This figure was between 375 to 392 cubic yards per day. He then compared these numbers to the total dry waste discharged on a daily basis of various cities in the interior of the Province, which were as follows:

Kamloops	-	600 cubic yards
Vernon	-	570 cubic yards
Kelowna	-	500 cubic yards
Salmon Arm	-	480 cubic yards
Penticton	-	250 cubic yards
Nelson	-	235 cubic yards

Using a compaction ratio of 4 to 1 (i.e. loose material to compacted material in a landfill-from Table 3-1 Pollution Control Objectives), he then calculated that the permit would allow the permit holder to bring some 37 to 39 trucks of garbage to the site each day (40 cubic yard box). Mr. Schurr then noted that in the public meeting with the objectors, Mr. Ambrosi said that only 10 to 20 trucks would be coming to the site each day.

Further statements made by Mr. Schurr were as follows:

- 1) The definition of municipal waste was refuse which included putrescibles and other organic waste from municipal operations but excluded industrial waste.
- 2) His definition of putrescibles was household and food waste that rots quickly when exposed to air, smells and attracts vectors.
- 3) He had recommended daily covering of the waste because of the large size of the operations and to conform with section 3.4(a) of the Pollution Control Objectives for Municipal Type Waste Discharges. He was also concerned about the possible large amount of blowing material.

Mr. Pomajzl then gave the following testimony:

- 1) He explained how Table 3-1 in the Pollution Control Objectives for Municipal Type Waste Discharges had been constructed and how it was used. He noted that the average refuse generated per capita was about 3 pounds per day.
2. He said this permit allows for Municipal waste with or without non-hazardous industrial material and, therefore, called for

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Level "A" operations. He was not sure that the waste was inert, because he felt it may contain leachable material.

- 3) Level "A" operations were required, in his opinion, because this site was less than 10 miles road distance from another landfill site (see section 3.4(a) of the Pollution Control Objectives).
- 4) He said it would be impossible to carry out the enforcement of the permit by daily manning of weight scales. The Waste Management Branch didn't have the staff. They would monitor the site once or twice a year and could then get a good indication if the permit was being violated by a measurement of landfill.
- 5) This permit could be used with or without the recycling operations.
- 6) Baling the material to be discharged to landfill could greatly reduce its volume (presumably below the figures of 4 to 1 indicated in Table 3-1 in the Pollution Control Objectives), which would then be one way of increasing the quantity of material to be discharged and still comply with the requirements of the permit.

CROSS-EXAMINATION (Some comments noted by the Board)

- 1) Mr. Schurr admitted that the density of the refuse to be discharged by Valleyview Enterprises Ltd., when compacted by graders and front-end loaders, could be different from that of common municipal waste (i.e. that it may vary to some degree from the 4 to 1 ratio).
- 2) That the Kamloops Municipal Landfill operation at Barnhart Vale is currently under review by the Director and that the conditions of that permit may be made more stringent.
- 3) The Waste Management Branch uses volumetric measurements of the proposed discharge to evaluate the requirements of a site when preparing a permit. Mr. Schurr indicated that if the difference in density measurements of the discharge is not one of Valleyview Enterprises Ltd. measuring loose volumes and the Waste Management Branch measuring compacted volumes, and that Valleyview's Enterprises Ltd. really does want a compacted discharge of 750 cubic meters per day and 39,000 cubic meters

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per year, then the Director would have to do a complete re-evaluation of the technical problems involved (in other words, its a whole new "ball game").

SUMMARY OF THE PRESENTATION OF THE OBJECTORS (IN PART)

The registered objectors made the following comments:

I. City of Kamloops

The City of Kamloops objects to the appeal filed by Valleyview Enterprises Ltd. and requests that the Environmental Appeal Board insist that the appellant:

- 1) Deposit less than 220 cubic metres of refuse per day and 11,500 cubic metres per year.
- 2) Cover the waste material daily.
- 3) Exclude putrescible type materials from the landfill.

The following is the substance of the objection by the City of Kamloops:

- 1) The City takes the position that the appellant should demonstrate his ability to operate the landfill at volumes as prescribed in Permit No. P.R. 5910. If Valleyview Enterprises Ltd. can show that the landfill can be operated in an effective and acceptable manner, authorization to modify the volumetric loading may be considered at a later day by way of an application for a permit amendment. The City's concerns are for the disruption to traffic flows in the area if too large a volume is disposed of.
- 2) The City is of the opinion that this landfill should be covered daily since the landfill is adjacent to a residential area. Frequent cover material should control problems which are normally associated with poorly operated and maintained landfills. Furthermore, if the frequency of covering is found to be unnecessarily high, it is understood that the current permit authorizes the Regional Manager of the Waste Management Branch to lessen the frequency of applying cover material. It is anticipated that the Regional Manager would discuss this situation with the City of Kamloops before taking any action in this regard.

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- 3) The City desires to see "putrescible type materials" excluded from the landfill. Excluding these materials could be achieved by segregating such material at its source of production. Such a procedure would assist immeasurably in making the landfill operation more acceptable. If this amendment is to be considered by the Environmental Appeal Board, then putrescible quantity should be clearly controlled or regulated.

Mr. T.R. Underwood

He was a resident of Juniper Ridge and his principal point of objection was that the site chosen by Valleyview Enterprises Ltd. is just not the right place for a dump. He was particularly concerned about the following points:

- 1) He did not want any putrescibles brought to the site because of the vector problems involved. He was certain that the dump would attract bears. Juniper Ridge already had a problem with bears and, of course, bears were dangerous to him and his family.
- 2) He wanted the quantity of waste held to an absolute minimum, as an incentive for Valleyview Enterprises Ltd. to do the best recycling job possible and to minimize traffic on the access roads to the site. He was also worried about the stability of the land in the area, particularly on the road access.
- 3) He wanted daily coverage of the site to minimize the effects of small amounts of putrescibles, which he felt were sure to get into garbage coming to the site. He also felt that daily covering would also help control blowing debris.
- 4) He felt it would be impossible to provide proper screening because of the soil and lack of water problems involved at the site.

Hans Wacker

He was also a resident of Juniper Ridge and had worked on the development of the subdivision. He said he agreed with the points which Mr. Underwood had brought up. The concerns which he wanted to bring before the Board were as follows:

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- 1) The landfill was going to be concentrated in a natural drainage gully from Juniper Ridge. He felt the landfill would, therefore, inhibit the natural drainage from the subdivision.
- 2) With high winds which were typical of the area, he was very concerned about the possibility of a fire spreading from the dump, dust and blowing paper.
- 3) He was also concerned about bears and other vectors.
- 4) He wondered how Valleyview Enterprises Ltd. could properly screen the area from Highland Drive, since they didn't own the property from which effective screening could take place.

Mrs. R. Foisy

She was also a resident of Juniper Ridge, and the five points of concern that she wished to bring before the Board were as follows:

- 1) She was concerned for the safety of her children, particularly from bears. She felt the number of bears would increase with the coming of the garbage dump.
- 2) She was concerned that the garbage dump would cause a loss in her property values. She said this was unfair because she was there first.
- 3) She was concerned about the increased traffic, particularly of heavy trucks which would constitute a hazard to the safety of her children.
- 4) She was concerned about any new conditions which would effect the soil stability in the area.
- 5) She was concerned about fire. There is evidently only one access to the subdivision and this access could be blocked by a fire from the dump, probably at the same time as the fire would spread up the hill into the subdivision.

ADDITIONAL TESTIMONY:

Subsequent to the hearing, the Board sent out some additional questions to both the appellant and the representatives of the Director of Pollution Control. The questions were answered

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and each party to the appeal (not including objectors) was given the opportunity to present rebuttal evidence. The questions, answers and rebuttal evidence can be seen in Appendix "A" attached to this judgement.

DECISION

The Environmental Appeal Board has considered all of the evidence submitted to it at the appeal hearing, and in the subsequent correspondence on the three points in question on Permit No. P.R. 5910, issued to Valleyview Enterprises Ltd. by the Director of Pollution Control.

The appellant has requested that three provisions of the permit and/or attached documents be amended. The Board's decision in this regard is to deny the appeal in all of the three areas. The appeal is, therefore, dismissed.

The Board has the following comments to make in regard to its decision:

1. The location of this proposed disposal site is evidently in a very sensitive area, particularly in relationship to the possible danger to the people residing in Juniper Ridge from bears, which would be attracted to the site by the garbage. From the testimony of one of the objectors, with knowledge in the field of waste management, it was very strongly suggested that this site is not the right place for a garbage disposal dump. The fact that there are existing garbage disposal sites in Kamloops, close to residential areas, is not a good reason to add another, or for that matter to perpetuate the existing ones.
2. Because of the very sensitive nature of this site, the Board must be very careful not to call for alteration to the permit without the proper technical investigation into the ramification of these alterations.
3. One of the grounds for appeal was that the quantity of refuse which could be discharged to the site under the permit be increased from 220 cubic meters/day and 11,500 cubic meters/year to 750 cubic meters/day and 39,000 cubic meters/year. The evidence submitted by the appellant indicated that information regarding the quantity of refuse, and its composition, submitted to the Director of Pollution Control in connection with the application for the permit, was materially different from the information submitted by the appellant at the appeal hearing.

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The Board finds that in view of the provisions of Section 8 (h) and 8 (i) of the Pollution Control Act, a proposal to substantially amend the permit by such an increase in quantity of refuse more properly calls for an application by the permittee to the Director of Pollution Control to amend the permit.

Further, the basis for evaluating an application for a permit for a landfill site, as far as quantity is concerned, does not seem to be by weight but by volume. The weight appears to be of secondary consideration. The technical assessment as to whether the permit should be issued or not has evidently been based on 220 cubic meters/day and 11,500 cubic meters/year, and not on a quantity larger than that.

For these two reasons, this part of the appeal is refused.

- 4) The definition of putrescible wastes in relationship to this permit shall be household and food waste, or material of that nature, which rots quickly when exposed to air, smells and attracts vectors. Because of the danger to the residents of Juniper Ridge from bears, putrescible wastes, as described above, will not be allowed to be discharged to this site.

For this reason, this part of the appeal is refused.

- 5) In view of the fact that putrescible wastes in small amounts are very difficult to control, even with the best intentions of Valleyview Enterprises Ltd., the provision for daily coverage of the waste is necessary.

For this reason, this part of the appeal is refused.

- 6) One additional point of interest that the Board noted from the evidence submitted by the appellant was that his figure for loose waste in the truck of 30 cubic yards/ton and his compacted figure of 5 cubic meters per ton, compared very favourably with the 4 to 1 compaction ratio as stated in Table 3-1 of the Pollution Control Objectives for Municipal-type Wastes. Another interesting point was that the Waste Management Branch's figure of 1.47 cubic meters per ton was calculated on the basis of a baler which did not exist and would not exist during the first year of the

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proposed operations.

- 7) In conclusion, the Board is not unsympathetic to the appellant. It seems that through some breakdown in communication, the application for the permit has been evaluated and processed on volumetric quantities which at this time do not meet the appellant's requirements. The Board cannot arbitrarily increase these figures by some three times those values without the proper evaluation of the impact on the environment by the Director and his staff. Further, in relationship to putrescibles and the associated problems with vectors, the Board feels that the Director has acted quite properly in connection with his mandate under the terms of the Pollution Control Act. Had he allowed putrescibles to be discharged to the site, the Board believes he would have exceeded the intent of the Act.



F. A. Hillier, P. Eng.,  
Chairman  
Environmental Appeal Board

attd: Appendix "A"

April 15, 1982