

Mr. Miller indicated that this is what the Waverley Ratepayers' Association had been advised by Mr. Christianson of the Department of Municipal Affairs. This decision, he advised, had been made on the basis of the fact that there will be permanent structures erected at this site as opposed to a portable crushing operation and the fact that it will be of a long-term nature as opposed to short term.

Councillor Mont questioned whether the Municipality's Staff had had any contact with Municipal Affairs and have formed any opinion concerning the development permit.

Mrs. Cartledge advised that they did receive a letter from Mr. Paul Christianson which advised that the property is eligible for a Regional Development Permit, which means that the Municipality would have to assume or understand that the criteria Mr. Miller had previously listed has been met, as far as the Department of Municipal Affairs is concerned. However, she advised, that Staff had discussions with the Department of Municipal Affairs this afternoon, over the telephone, and there is some dispute over whether or not a Regional Development Permit will be required. It may be exempt from this requirement.

Mr. Miller advised that this differs from what the Department indicated to the Ratepayers this afternoon.

Councillor Mont then questioned Mrs. Cartledge as to who she had been speaking with this afternoon from the Department of Municipal Affairs, who had indicated to her that the proposal may be exempt from a Regional Development Permit.

Mrs. Cartledge advised that she had been speaking with Mr. Jack Leedham who did not provide her with specific reasons although there was some consideration being given to the fact that it may not be permanent as the operation will not be in existence for ever.

Mr. Birch advised that, in terms of the Regional Development Permit, it is a technical requirement, that the equipment can be taken down and removed to another site. The question is whether, on this basis it constitutes a permanent building or not; this, he advised, is the criteria on which the determination is made.

Mr. Miller advised then that, technically, if Metro Aggregates constructs an Office Building with a septic system and it is exempted from requiring a Regional Development Permit, then all other Office Buildings with septic systems, should also be exempted from requiring a Regional Development Permit.

Councillor Eisenhauer referred Mr. Miller to his previous statements regarding the difference in siltation expected from the Metro Aggregate rock as opposed to the rock from the Fredericton Quarry; he requested clarification from Mr. Miller, relative to the difference.

Mr. Miller advised that there were two large rocks, one from the Metro Aggregate land and one from the Fredericton Site when the trip was made to Fredericton. He advised that both rocks were sent into Warnock Hersey and were crushed to a one-half inch size and the amount of silt

or fine material was measured as going through a sieve, to determine how fine it was. He advised that at the 200 level, which is very very thin silt or dust, twice as much of it went through the sieve from the Metro Aggregates location than from the Fredericton location. This, he advised, would suggest that more dust could be expected from the Metro Aggregates location than is presently experienced at the Fredericton Quarry. This would also suggest that more of it would get into the lake.

Warden MacKenzie referred Mr. Miller to his previous statement relative to the PUD that Municipal Government is responsible for transportation and that it so stated. He questioned where this was stated.

Mr. Miller indicated that he was not suggesting that the Municipality is responsible for maintaining the roads but that they are responsible in their planning capacity and in their approval of planning, to consider the adequacy of roads. He advised that this is set out in the PUD By-Law in Section 6 (B), where it states "Council shall consider the adequacy of the roads" in determining whether to approve or to reject a Development proposal.

Councillor Wiseman referred to Mr. Miller's previous comment that the Waverley Ratepayers' Association had attempted to have rezoning done to the subject parcel of land but that Planning Staff advised against proceeding with rezoning because of the pending MDP Process. She questioned why it wasn't pursued even against the advice of Staff. Mr. Miller indicated his understanding that the Planning Committee of the Waverley Ratepayers' Association, at least one year before Metro Aggregates was even heard of, presented to Staff land-use maps, leading up to zoning the Village of Waverley. It was on the basis of on-going consultations with Planning Staff that it was suggested that the MDP Process was coming into effect, and the community could be pre-judging the situation. This, he advised, was his understanding of what took place. He advised that in the meantime, Metro Aggregates formulated their proposal; however, the Ratepayers' Association did not foresee it. He indicated that he did not know whether Planning Staff foresaw the Development.

Mr. Birch indicated his concern that Mr. Miller by inference may be suggesting that the Planning and Development Department was holding up the rezoning of the Waverley area in order to accommodate the Development Proposal before Council. He advised that the dealings with the rezoning of the Waverley area have been dealt with, with Mr. Lockhart; he advised they were presented with a map of suggested zonings which the Planning Department returned to Mr. Lockhart saying that in certain areas, particularly in the amount of commercial zoning within the Waverley area, was too much compared to the size of Waverley, 25% or more. He advised that this map went back to the Ratepayers' Association through Mr. Lockhart and it was some considerable time before it returned to the Planning Department. The delay, if any, was therefore, not entirely within the purview of the Department of Planning and Development.

There were no further questions for Mr. Miller at this time.

Mr. Bill Lockhart, President of the Waverley Ratepayers' Association: Before beginning his prepared presentation to Council, Mr. Lockhart wished to respond to several remarks made by previous speakers. First, in response to Mr. Pugsley who indicated that Mr. Lockhart was unwilling to get involved with the Proponent due to his work with Goldrush Days. He advised that this was not entirely true, it was just unfortunate that Goldrush Days were happening at that time. As well, the Ratepayers' Executive had held meetings with the Proponent prior to that time; three meetings in three months. He advised that there seemed to be no further use for these meetings as nothing was being accomplished. In fact, at that time it was suggested that a Public Awareness meeting be called by Metro Aggregates; this suggestion was repeated several times to no avail. He advised that on February 8, 1983, Metro Aggregates advised that they would hold such a meeting when all the relevant information was compiled; however, such a meeting was never realized. Mr. Lockhart conceded that the information trailer had been set up on a one to one basis; however, he advised that the Association was more interested in the holding of a general meeting so that the Village could actually see and speak to the Proponents.

Mr. Lockhart then advised that he would like to address the comments made by Mr. Bernie MacDonald, as these comments were directed toward the Waverley Ratepayers' Association and the Executive in particular. He advised that no-one was forced to participate in the opposition to this Quarry; he advised that the opposition was strictly spontaneous. The Ratepayers' Association has given to Waverley Residents the information provided to them but they had never lobbied them. He requested that Council do allow people to express their emotions.

Mr. Lockhart then addressed the traffic issue advising that the Village has complained about their traffic problem for ten to fifteen years, both by letter and vocally to the Municipality and the Province to no avail. This correspondence and vocal complaints have been documented in the files of the Association.

Mr. Lockhart indicated his concern that when this matter was first brought to County Council a Public Hearing was expedited in order to avoid delays to the Proponent. Unfortunately, he advised, that if the development is approved, the Proponent would re-coup any losses through the profits of his operation, while, the residents of Waverley would be paying the cost of the development in the future.

With regard to the rezoning, Mr. Lockhart advised that the Ratepayers had attempted to rezone the subject property in the latter part of 1981 when a zoning map was submitted to the Municipality after consultation with Mrs. Cartledge and with Mr. Birch. The map was submitted with a large commercial area, as the commercial tax base in Waverley is not very strong at the present time. He felt that commercial development would be more suitable for the Waverley area than would be industrial development and that there would be more tax revenue per dollar for commercial investment than there would be for industrial investment.

Mr. Lockhart reminded Council, that as the residents of the Village of Waverley, they should certainly have a voice into the future and the planning of the Village and if commercial development is their preference over industrial development, then their opinion should be considered. He advised that they have many times, reiterated their preference to the Planning Department and have submitted their proposed planning map accordingly. He advised, that at the present time, the Planning Policy Division is agreeable to the present form of the zoning map and it is scheduled to go to Council in the near future.

Mr. Lockhart advised that he had many more points to make; however, many of these had been addressed by Mr. Miller and as well, that many people in the Council Chambers will be addressing the environmental, social, traffic and other potential negative impacts to the Village should this Metro Aggregates Proposal be accepted by Council. He, therefore, concluded his presentation at this point.

Questions From Council

Councillor MacKay wished to address a further question to Mr. Miller relative to Appendix "D", of Mr. Miller's submission to Council. He advised that this appendix referred to Quarries in the Metropolitan area and he questioned what year this submission was based on.

Mr. Miller advised that the figures were the most recent ones given to the Association by the Department of Mines. He did not know exactly what year, but he knew that they were since 1980 and were the most recent figures that Department has compiled.

Councillor MacKay advised that Atlantic Sand and Gravel were included in the Appendix and he indicated his understanding that this company was now out of business.

Mr. Miller indicated that this may be so, but that the figures in his submission were the most recent supplied by the Department of Mines and Forests.

There were no further questions for Mr. Miller and no questions for Mr. Lockhart.

Council then debated a Curfew hour for tonight's Hearing as it became evident, due to the number of persons still wishing to speak on the proposed PUD Agreement, that the Hearing would not be completed this evening. Subsequent to brief discussion, Council agreed that a Curfew be set at approximately 11:00 P.M.

Mr. John McIntyre, resident of Waverley: Mr. MacIntyre, advised he was speaking at the Hearing tonight on behalf of the Waverley Ratepayers' Association and on behalf of all the residents of Waverley.

Mr. MacIntyre first responded to a remark made by a previous speaker with regard to the recent Ratepayers' meeting, at which this speaker indicated that the competency of Council to hear this technical issue was questioned. Mr. MacIntyre wished to assure Council, that he had

been present at that meeting and that he heard no such inference that Council was unable to deal with this issue. He indicated that he had great faith in Council's competency to deal with the issue and he also assured Council that the entire Waverley Ratepayers' Association is of the same opinion.

Mr. MacIntyre then indicated that he had been a resident of Waverley for 35 years. He advised that he had lived in the City of Halifax prior to that and in Cape Breton before that. When he had decided to move from the City, he had investigated the entire surrounding Communities to find a place he liked better than any other residential area in Nova Scotia; he believed that he had found it in Waverley.

Mr. MacIntyre briefly referred to the traffic situation; however, he did not dwell on it as so much had already been said in this regard and he was sure it would be repeated throughout the Hearing. However, he reminded Council that the road from Waverley to Dartmouth had been built in the 1930's and certainly was not adequate to handle heavy truck traffic.

Mr. MacIntyre also referred Council's attention to the approximately 200 - 250 people in the Council Chambers who were strongly opposed to an additional Rock Crusher in Waverley; he advised that Waverley already had two crushers.

Mr. MacIntyre also referred Council to the serious water problems in Waverley due to arsenic poisoning which had resulted in sickness and in many instances of cancer to the residents of Waverley. He indicated his appreciation that Council had seen fit to put central water services in Waverley in order to solve the problem of unfit drinking water. However, he advised that the Metro Aggregate proposal, if approved by Council, would result in pollution of the air through air born dust particles which could also have serious health affects. He also advised that the nuisance caused by this dust will have detrimental affects on property values as well, as no-one will want to purchase a home or build a home in an area where the air is full of dust and the lakes are polluted with dust.

Mr. MacIntyre advised that one of the biggest problems in Canada was pollution of water bodies; he advised that Council's decision will be broadcast in the newsmedia and fellow Canadians will be astonished if Council approves the Metro Aggregates Proposal and thus advocates the polluting of the lakes in Nova Scotia.

In closing, Mr. MacIntyre thanked Council for their kind reception and encouraged them to make the best possible decision for the residents of Waverley and set a good example for the rest of Canada.

Questions From Council

None

Dr. Wade Juneke, Resident of Waverley: Mr. Juneke advised that he was present this evening as a physician, both from a background of General Practice and presently as a Physicatrhist. He advised that as a physician he has had to deal with the effects of decisions relative to social matters.

In order to determine the effects of this decision, an epidermiological study would be carried out.

He advised that the obnoxious effects of this proposal have already been referred to such as noise and dust; however, he added to this list, exhaust fumes which he felt the residents should also be concerned about. He then proceeded to outline the effects of these concerns as follows:

1. Noise

He advised that the noise will affect hearing and particularly the hearing of high-frequency sound, which in turn affects speech and creates communication difficulties. The noise, he advised would also negatively affect energy levels, affect the cardiovascular system with increased blood pressure, increased chances of heart attack and stroke.

It would also affect the gastrointestinal system, leading to increased stomach acid and consequently increased ulcers.

As well, he indicated that the noise would have increased mental and emotional affects which are not insignificant. Irritability and lack of concentration. He advised that there is a school very close to the proposal and the lack of concentration can then affect Waverley's school children. He advised that it usually affects the brighter children the most because they have a greater ability to concentrate.

He then advised that noise affects the immune system.

2. Dust

Dr. Juneke advised that it has been known for centuries that there are many diseases and sicknesses which can result from dust. He indicated that very fine dust gets into the lungs, creates nodules as a tissue reaction and increases vascular pressure in the lungs, which in turn, affects the heart size and predisposes the person to emphasima, athsma, bronchitis and various infections. He advised that these are incurable but manageable diseases.

3. Exhaust Fumes

These fumes, he advised, create eye irritation, head ache, fatigue, contribute to atherosclerosis and is believed to create children with lower birth rate. He also reminded Council that Canadians are already concerned about lead in gasoline because it is creating mental retardation in children.

The above, he advised, were direct effects from the obnoxious items mentioned. He advised that there were indirect affects, tied-in through the direct ones. The tie-in is through the endocrine system which is a part of the body that mediates ones perception of the world around them and will affect bodily function. This, he advised, is called stress.

Dr. Junek advised that there were a number of stressors here. The three above-mentioned are stressors on the body; illness resulting from any of the above, become another kind of stressor on the body.

He advised that traffic is a stressor in a number of ways; accidents, concentration and loss of sleep. Economic affects is also a stressor. There is also a long-term stress on the community. He indicated that a previous speaker mentioned social affects.

Dr. Junek advised that all of the above-mentioned stressors interact with each other and are compounded and have an effect on bodily function as far as increased heart rate, increased blood pressure and numbness and tingling in the central nervous system. Illnesses, as already outlined, changing of behaviour, implusiveness, accident prone and alcoholism. It can affect large organizational activity in that there can be poor productivity, antaganism, absenteeism, foregetfulness, indecisiveness and lack of concentration. It can affect people emotionally, creating a great deal of anxiety, aggression and irritability.

Dr. Junek advised Council that these problems should not be taken lightly. In fact, he advised that one study pointed out that these same stressors, relative to noise, within a five-mile radius of a major international airport, left the residents with an increased incidence of phycosimatic illness, increased incidence of violence and assaultive behaviour within the community, attesting mainly to the irritability.

Dr. Junek felt this was relevant because in this instance, Council is dealing with a residential area. If it was not a residential area, there would be less concern with health effects.

Questions From Council

Councillor Snow questioned the Doctor relative to silicon, asking if it were possible for this substance to get into the lungs from the Quarry to which Dr. Junek advised this had been reported for a few centuries.

Dr. Ray Cranston, Resident of Waverley: Dr. Cranston advised that he resided in the Silversides Subdivision, across the lake from the proposed site of the Crusher Operation. Dr. Cranston advised that he had spent fourteen years studying the geochemistry of the world; natural particles, how they react with water and what happens to the biological systems and the chemistry of the system when you stir up muddy bottoms. He advised that he had received a Doctorate Degree studying this in the United States a few years ago and further that he had lived in the Waverley area for fourteen years and has worked in this field during that time.

He advised that in reviewing the Proponent's Report, he found that there was some information that had been ignored. He advised that if it is ignored, then he had spent fourteen years on something, which is not considered an issue; however, he indicated that it was an issue and something which Council should consider in its decision relative to this proposal. He advised that there has been an incredible amount of study done in the world studying the effect of putting suspended matter into natural water systems. Further, he advised that the people in Waverley live there because the lakes are beautiful, clean and unpolluted.

Dr. Crantson then proceeded to point out some of the problems which can occur by adding the fine particles to the water which are chemically and biologically very active. He advised that they are sites for bacteria growth, they exchange chemistry with the water, pick up things from the water and add things to the water. The clouds they create in the water, limit the amount of life in the water. In fact, he advised that the existence on earth is dependant on the balance between light and lack of light getting into the oceans and lake systems. He advised that the development is proposing to dump material into the lakes, to chemically react and biologically change the lifestyle of those lakes and because of the Waverley residents enjoyment of the lakes, in their present condition, it will also affect their life.

He indicated a concern which has not yet been brought out - a large portion of the particles added to that lake will never settle. He advised that in the Proponent's report, it is stated that as the particles get finer and finer, they settle; he felt that the report shows incorrect calculations in the settling velocity. He advised that the lakes will accumulate these particles which will never settle. He indicated that the concentration of suspended load in the lakes will constantly increase year and after year and will not settle. He advised that in five to ten years, the lakes will be dead; he referred to the lakes surrounding the other quarries advising that Waverley did not want the same thing happening to their lakes.

Dr. Cranston read from the Proponent's Report, page 23, the following: "There does not appear to be any information on the amount of fine material that will be generated from the quarrying operation itself." He advised that the report says there will be some produced and in other places in the report it states: "probably won't increase suspended loads ... probably won't have any affect"...This, indicated to Dr. Cranston that the Developer was not very confident about what will be put into the lakes.

He advised that the Developer was going to dump, probably a chemically active material, in an unknown quantity, into an area, that has a present concentration so low, it cannot even be measured.

He advised that he has pages and pages of documentation of environmental chemistry data, for Lake William, which indicate there is insufficient suspended matter there at the present time, to even measure it. He advised, that the lake is so clean and is such a pristene system that the material cannot even be measured. Yet, the Developer is asking the citizens of Waverley to advocate a Development that will have a potentially deleterious effect on the lakes.

Dr. Cranston advised that this was a critical point, substantiated by an enormous amount of study and documentation, and he requested respectfully, that it be considered by Council.

Questions From Council

Councillor Wiseman advised that the Proponent's Report, mentions two settling ponds that will be used as overflows from the property; it was her understanding that Dr. Cranston was concerned that overflow from these ponds will find its way into the lake. She questioned whether he felt there was some manner in which to keep the siltation from entering the water system, rather than simply quashing the project.

Dr. Cranston advised that, yes, the siltation would eventually make its way into the lake, and he felt that the nature of the lake flow, would keep it from ever settling to the bottom. He was not concerned with the siltation that would go to the bottom but he was concerned about that which would never get the opportunity to settle.

He advised that, regardless of attempts to keep the dust from getting into the lake, whether it be by the use of settling ponds, or by enclosing the crusher itself, there was no way to prevent the eventuality of the dust and the siltation getting into the lake, where he felt a large portion of it would never settle to the bottom.

Councillor DeRoche advised that Dr. Cranston had, in his presentation, made reference to the pristine conditions of Lake William; this he had found interesting considering the system of lakes known as the Shubenacadie - Stewiak Canal and the serious pollution problems which Mr. Paul Miller had referred to as well as the enormous amount of aggregate which Mr. Miller had indicated was being hauled from the Municipal Spraying and the Rocky Lake Quarry Operations near that lake. Yet, Dr. Cranston had indicated that Lake William had remained in a pristine condition; he questioned Dr. Cranston's professional opinion as to why Lake William had escaped the pollution.

Dr. Cranston advised that he was not aware of any Quarry which is supplying material, such as the proposed Quarry would, beyond the shore of Lake William, with direct run off from the lake. He advised that in the Proponent's data they found an undetectable amount of suspended matter in the lake. It was his contention that if the Quarry is established in that location, once it is determined how much suspended material will be produced, that at least some calculations or guesses can be made as to whether the lake will remain in its present clean state.

There were no further questions for Dr. Cranston.

ADJOURNMENT

It was moved by Councillor DeRoche, seconded by Councillor Eisenhauer:

"THAT the Public Hearing be adjourned until August 17, 1983 at 2:00 P.M."

(See Amendment to Motion)

It was amended by Councillor MacKay, seconded by Councillor Reid:

"THAT the Public Hearing be adjourned until August 23, 1983 at 7:00 P.M."
Amendment Carried.

Therefore, the question was called on the motion as amended.

It was moved by Councillor DeRoche, seconded by Councillor Eisenhauer:

"THAT the Public Hearing be adjourned until August 23, 1983 at 7:00 P.M."
Motion Carried.

Therefore, the Public Hearing adjourned at 11:15 P.M. until Tuesday, August 23, 1983 at 7:00 P.M.

AUGUST 23, 1983

PRESENT WERE: Warden MacKenzie, Chairman
 Deputy Warden Margeson
 Councillor Walker
 Councillor Poirier
 Councillor Larsen
 Councillor Gaudet
 Councillor Baker
 Councillor Deveaux
 Councillor DeRoche
 Councillor Adams
 Councillor Gaetz
 Councillor Bayers
 Councillor Reid
 Councillor Lichter
 Councillor Snow
 Councillor MacKay
 Councillor McInroy
 Councillor Eisenhauer
 Councillor MacDonald
 Councillor Wiseman
 Councillor Mont

ALSO PRESENT: Mr. K. R. Meech, Chief Administrative Officer
 Mr. G. J. Kelly, Municipal Clerk
 Mr. Robert Cragg, Municipal Solicitor
 Mr. Keith Birch, Chief of Planning & Development

SECRETARY: Christine E. Simmons

OPENING OF PUBLIC HEARING

Warden MacKenzie brought the Public Hearing to order at 7:05 P.M. with The Lord's Prayer.

ROLL CALL

Mr. Kelly then called the Roll.

APPOINTMENT OF RECORDING SECRETARY

It was moved by Councillor Walker, seconded by Councillor Larsen:

"THAT Christine E. Simmons be appointed Recording Secretary."
 Motion Carried.

PUBLIC HEARING - METRO AGGREGATES - DAY II

Warden MacKenzie, reiterated the procedure to be followed for the Public Hearing advising that prior to adjournment, August 15, Speakers in Opposition were being heard by Council.

SPEAKERS IN OPPOSITION - (Continued)

Mr. Tim Edmunds, Resident of Waverley: Mr. Edmunds proceeded to give a presentation to Council relative to rock dust collection and utilization. He referred to a Study done on this issue, through Municipal Spraying, from 1969 to 1974. This study had begun with a two-year Government Grant but research had been continued after the utilization of the Grant.

Prior to speaking on this issue, he gave Council a summary of his qualifications which indicated that he was knowledgeable on this subject and qualified to speak on it.

During this study, Mr. Edmunds, Director of Research for Municipal, had worked with various bodies such as Nova Scotia Technical College, Cemeticious Material Labouratory, National Research Institute, Warnock Hersey of Vancouver, Portland Cement Association of Illinois, the Carson Company in Philadelphia, Canada Cement LaFarge, Frankon of Montreal, Ottawa Sand of Ottawa-Illinois, Ontario Research Foundation of Hamilton, Ontario and an Operation in Vancouver, which has rock similar to that on the Metro Aggregate Site. The report which resulted from this Study was entitled, "Cemeticious Material Labouratory Report No. CML317441, E. C. Brown, May 6, 1974, Rock Dust Collection and Utilization for Municipal Spraying and Contracting".

Mr. Edmunds then reviewed some the findings from this Study, advising that most of the material which was in the minus 3-8 size is about 40% between 44 microns and 20 microns and 60% less than 20 microns. A micron, he explained was one one-thousandth of a millimeter and one one-millionth of a meter. He advised that this fine material tends to pelletize making the size analysis only approximate and microscopic examination placed the average size at about five microns. He advised Council, that everything below five microns is liable to cause people to develop silicosis.

Mr. Edmunds indicated that on a 300,000 ton production rate per year, 40% of that will be the minus 3-8 size crusher dust; that is 120,000 tons of crusher dust that would be manufactured per year. 20% of this would be less than one millimeter; 24,000 tons, of which is non-collectable in a settling pond and would go into the lakes. He advised that this amount would be difficult to visualize but that it would be enough to cover a football field 100' X 55' and five feet deep.

Mr. Edmunds continued, advising that 60% of the 120,000 tons of rock dust or 7,200 tons would be less than 20 microns and this would go into the air; he advised that 7,200 tons of dust is a great deal of air pollution.

Mr. Edmunds indicated that the average size of rock dust is five microns which is one 200ths of a millimeter. Some of the fines collected at the Municipal Spraying Site were down to one two thousandths of a millimeter, yet the Proponent advised that there will be very little below .01 millimeters at Metro Aggregates. He indicated his opinion that this could be true in Fredericton because Fredericton has a different type of material on that site than what is on the Metro Aggregate Site.

Mr. Edmunds indicated that from the tests he has conducted he has found that at much as 14% of the minus 325 size adheres to the larger particles in a settling pond; this is a problem.

Mr. Edmunds had samples with him of the material which was the regular 01 millimeters which is between 100 and and 200 screens. He also brought samples of a 325 and a 200 size screens; the 200 size screen, he advised, is the finest screen available. He brought with him a jar of water and samples of 200 dust. Mr. Edmunds then advised that the Proponent claims that this 200 dust is supposed to be collectable in a settling pond. However, Mr. Edmunds mixed this dust with the water in the jar, advising that some of it should settle to the bottom, a little dust will remain on the top of the water with a slightly cloudy area in the middle. (At the end of the Public Hearing, this was so).

Mr. Edmunds advised that the dust remains suspended which will happen to approximately one half of the minus 3-8 dust. He advised that the Proponent is claiming that he will collect this dust in the settling pond; however, he advised that there is no way of collecting this dust in any settling pond.

Prior to concluding his presentation, Mr. Edmunds wanted to indicate to Council that there was a difference in the material in Fredericton and the material at Metro Aggregates. He advised that in the Fredericton Quarry, the slate fractures, even when being blasted so there is less work for the primary crusher and in Municipal it is the primary crusher that gives off all the dust; in fact, you can not stand near that crusher when it is in operation.

This concluded Mr. Edmunds' presentation.

Questions From Council

Councillor Eisenhauer advised that Mr. Edmunds had compared the Fredericton and the Municipal Operation; he questioned whether there were any differences between the Crushers themselves relative to noise, etc.

Mr. Edmunds advised that the primary crusher is the noisiest one; however, in Fredericton the rock already goes into smaller particles when it is blasted. At Municipal this does not happen so the Primary Crusher does a lot more work and it is noisier.

Councillor Eisenhauer then indicated his understanding that the Metro Aggregates Crusher which would be crushing the same type of rock as Municipal would make a great deal more noise than the crusher in Fredericton, to which Mr. Edmunds advised this was so. In fact, he stated that the Municipal Crusher can be heard at times all over Waverley.

Councillor Eisenhauer also requested clarification as to Mr. Edmunds' statement relative to incorrect information in the Proponent's report with regard to the collective abilities of the settling ponds.

Mr. Edmunds advised that settling ponds do not collect anything smaller than a 200 screen size. He advised that when the pond became too thick, they would have to pump out the settling pond and bring in fresh water.

Councillor Deveaux indicated that Mr. Edmunds had compared the Fredericton Quarry with the Municipal Quarry; however, he questioned how this would compare with the proposed Metro Aggregates Operation under consideration by Council tonight.

Mr. Edmunds advised that it would be the same operation as Municipal and the similarity in the dust levels at Municipal and Metro Aggregates would be due to the type of rock, which is different than the rock in Fredericton.

Councillor Gaetz questioned whether the rock could be flushed with water in order to curtail the dust to a certain extent.

Mr. Edmunds advised that they could do that and that this is, in fact, done; however, he advised that there is only one way to adequately collect dust, (which is what the research project was to determine, as well as uses for the dust) which is using a cyclone to pre-collect dust and then an electrostatic precipitator. He explained to Council the manner of using these dust collectors.

Councillor MacDonald questioned where the dust from Municipal was going right now and he was advised by Mr. Edmunds that it was going to Rocky Lake first then Powder Mill Lake and eventually into Lake William.

There were no further questions for Mr. Edmunds.

Mr. Jim Meagher, 1660 Portobello Road: Mr. Meagher advised that he had lived in Waverley for 27 summers and 13 years as a permanent resident. Mr. Meagher was speaking to Council as a concerned parent with two children who use the road on a daily basis, as well as using the lakes in the area. He advised that on his property there are many springs which run across the road into the Lake.

He was concerned with chemical run off getting into these springs, which are throughout the Waverley area, and getting into the lakes causing pollution; however, his main concern was the traffic danger.

He advised that sitting on his front step, one day he had counted an average of two and one-half large trucks per hour, travelling through the Portobello road already; this he advised was a disgraceful average for a highway which is closed to trucks over one-half ton.

Mr. Meagher was also concerned about the dust pollution which will have an effect on all the citizens of Waverley but, in particular, the Senior Citizens of the area, who will be locating in the newly-approved Senior Citizen's Home, which will be constructed in Waverley shortly.

In closing, he encouraged Council to put a stop to this Operation now before it causes both water and air pollution and endangers the large amount of pedestrian traffic along the roads in Waverley.

Questions From Council

None.

Mr. Jack Dowell, Fall River: Mr. Dowell advised that he was asked to speak tonight on behalf of some of the people of Fall River. He advised that the home in which he has lived since 1972 fronts on the Number 2 Highway just beyond Waverley on what is considered to be one of the most dangerous portions of the road, where there is a high rock bank on one side of the road and the lake on the other side with no room for ditches. He advised that there are two bends in the road, one before you enter the area bordered by the rock bank and one before you leave it. He advised Council, that three people have died in the lake in front of his house over the past several years before guard rails were put in and even after they were put in, people were still running into the rails because there is not sufficient road to carry the load that travels it. Therefore, he indicated his grave concern relative to the traffic situation there at the present time and with the potential of it to get worse with additional traffic which will certainly be created by the proposed Operation.

As well, Mr. Dowell was concerned with the Waverley arsenic problem. This, he did not wish to see worsen due to development of land and disturbance of the arsenic loaded soil and rock. He indicated his opinion that crushing the arsenic contaminated rock in Waverley and then to distribute it all over Nova Scotian highways did not make sense.

Mr. Dowell also questioned the statements made previously by the Proponents in their argument that no more truck traffic would be generated by their Operation, because the trucks travelling to and from their location would merely be taking business that is already there from the other two Quarries and would be competing with them and sharing their business. However, he advised, that the Proponents had also stated that they were going to be creating 17 new full time jobs. He did not think that was a logical argument in favour of the Proposal, if they were going to take the 17 jobs from the other two Companies.

He again referred to the traffic situation in Waverley which was so extremely bad that one had to be careful leaving and going into their driveway. However, he indicated that not only was the volume of traffic a dangerous problem, but the trucks in particular, are also speeding along the roads in Waverley. This claim, he substantiated by advising that he had followed a truck which had no license plate on it, no name on the truck and no tarp, which is required, and the truck was travelling at over 80 kilometers per hour. Mr. Dowell had complained about this incident to the RCMP who advised him that the trucks, and presumably other vehicles, can exceed any speed limit they like as long as they do not feel that they will cause any harm to themselves or to anyone else, as long the limit is not exceeded by more than 100 kilometers. This is upheld in Section 96 (1) of the Motor Vehicle Act which states that any driver can exceed the speed limit if he can show, (not prove) merely on his own judgement, that he is travelling at a safe rate of speed.

Mr. Dowell advised, that upon further questioning, he had determined that the reasoning for this, is to facilitate traffic, particularly commercial traffic, at hours like 2:00 A.M. Mr. Dowell, indicated that he had been advised by the RCMP, that truck drivers are now all aware of this clause in the Motor Vehicle Act and that the RCMP rarely try to enforce the speed limits where they pertain to truck drivers.

Questions from Council

None.

Dr. Janegan, Waverley Ratepayers' Association: Mr. Janegan advised that he was a Pathologist, who had been asked by the Ratepayers' Association to comment on the health hazards of rock dust. Dr. Janegan advised that he was a specialist in lung diseases, particularly occupational lung diseases.

Dr. Janegan proceeded to list the following well known general facts to begin his presentation:

1. The earth's crust contains arsenic and the arsenic content varies according to the area;
2. Where the airborne dust particles have been collected and analysed, arsenic has been found in the dust and again the content varies with the area;
3. Any arsenic carried in rock which reaches the body, inhaled into the lungs can be celluvalized by the body fluids, which is a slow process happening over the years;
4. In places where there is high exposure to arsenic dust, mainly in the mining industry, where there is smelting of ores such as gold, lead or copper which is accompanied by arsenic, there is a very high risk of lung cancers of workers in these industries.

He advised that the questions which come out of the above facts, based on Waverley's experience with arsenic, are relative to the long-term health risks of dust that carries a high arsenic content. He advised that there is no answer to this as yet; in fact, one Agency formed under the auspices of the World Health Organization, the United Nations and the International Organization of Labour made a recommendation in a 1981 Publication of a study of arsenic problems throughout the World. This recommendation was that, they do not have enough data on the dose affect of airborne arsenic, whatever the levels and they recommended to the nations involved that there be more monitoring of the dust.

Contrary to Mr. Edmunds' statements, Dr. Janegan did not feel that the load of dust that will be generated by this Operation is sufficient to produce silicosis; however, he questioned the affect of the arsenic that is carried on the stone dust and is inhaled. He felt this was a question that Council will have to consider.

He indicated that another thing which came out of other studies is that maybe rock dust or dust with a small amount of arsenic is in itself not harmful; however, there were questions about its effects with some other materials such as sulfer dioxide. He advised that some of the

experts in the field think that there might be an additive effect of things like arsenic or sulphur dioxide. This, he also felt was a relevant question for Council to consider.

Mr. Janegan then indicated that another item for consideration was the effect of dust on people who already have lung diseases. He advised that it was well known that people who have pre-existing lung diseases run into problems with an atmosphere which is polluted.

Mr. Janegan indicated his understanding that 300,000 metric tons of rock would be crushed annually and that some of the Proponent's own tests have shown that most samples are low in arsenic content but one area has a high content. He also understood that the Ratepayers' Association has done testing on its own and found other areas that were high in arsenic content.

He advised that if one were to assume, from the figures in the PUD Proposal, that the rock contains 17 milligrams of arsenic per kilogram of rock, then he had calculated over 9000 metric tons of airborne dust. Although, not all of this amount would be breathed in, he calculated the amount of arsenic in the 9000 metric tons, which came out to be about 360 lbs. of arsenic in that dust in one year. He indicated that this was a sensational figure which tells Council a little about the dust burden and the arsenic content in the dust burden.

His point here was that the dust burden, in itself, may not be enough to cause silicosis; however, he did not know what the effect would be of the dust carrying the arsenic rider, in the long-term.

Dr. Janegan's final question was what is the total accumulative dust burden in the Waverley area and the arsenic content of it with the present two Quarries in the area.

Dr. Janegan encouraged Council to consider the above questions when making their decision relative to the Metro Aggregates proposal.

Questions From Council

Councillor MacDonald questioned whether working with Municipal would be a high risk job from a health point of view.

Dr. Janegan advised that the closer one is to the dust, the greater the risk of developing silicosis and other lung diseases. He also advised that there have been numerous problems with the Workers Compensation Board in regard to people working with Rock Crushers and Quarries.

Councillor Deveaux questioned whether the risk of silicosis would be higher from rock dust than from coal dust to which Dr. Janegan replied, it would depend on the condition of the Mine.

There were no further questions for Dr. Janegan.

Mr. John Bottomly, Chairman of the Shubenacadie Lakes Advisory Board:
Mr. Bottomly advised that he resides in Fall River. He proceeded to read to Council a Report prepared by the Board, as follows:

"The Lakes Advisory Board first met with this Developer December 1, 1981. At that time, the Developer outlined a proposal for a rock crusher to be located in the Rocky Lake - Powder Mill Lake vicinity. As well as explaining his proposal, the Developer was also asked to respond to questions from members of the Board. As all questions could not be answered at that time, the Board subsequently wrote the Developer asking for further information on the following points:

1. Air quality information should be obtained on or near the site, both when the adjacent operations are active and inactive. This data will more closely reflect the existing on-site conditions.
2. The information on prevailing winds contained in the proposal shall be corrected and its impact in distributing dust over neighbouring communities reassessed.
3. Volume and size range of dust produced during crushing should be recalculated using available information for local Goldenville Quartzite.
4. Feasibility of controlling this dust solely by housing the crusher equipment and spraying the aggregate but not by physical removal, should be reassessed.
5. Feasibility of using the multiple pond system for settling out fines, evening out stormflows and producing cleaner water for recycling should be investigated.
6. The rate of sediment accumulation in the receiving waters of the pond plus the volume of material which will not settle after a reasonable lapse of time and which would be carried into the vegetated area behind or beside Powder Mill Lake should be recalculated.
7. The possibility of rephrasing the project to minimize the surface disruption should be investigated.

Following this request for additional information, nothing was heard further from the Developer until September of 1982. At that time, they were provided with a revised water control system for the project; the Board again reviewed the proposal and advised the Developer on September 20, 1982 that the revised water control system was a considerable improvement on the previous design; the board however had two remaining concerns with the water control system:

1. The flow of water across the strip of land between the Quarry and Powder Mill Lake; this could be reduced if the larger settling ponds were used for make-up water rather than Rocky Lake.
2. Operation and Monitoring of the System - the adequacy of the system depends entirely upon day to day operation and the fate of the silt cleaned from the ponds. The other points in the original correspondence were addressed and no comment was made.

Recently the Developer provided the Board with a revised PUD Application which included the revised water control plan. However, no comment was made regarding previous concerns.

In view of the fact that the County would be holding a Hearing on the proposal in mid-August, the Board again discussed the proposal at a meeting held on August 2nd, 1983.

During this meeting, the following additional factors were considered:

1. In spite of a history of environmental problems associated with the rock crushing operations, there is no legislation in existence which permits control or correction of problems occurring. Existing Provincial legislation is in the form of guidelines and is basically unenforceable.
2. As a result of information submitted at an Environmental Control Council Hearing, it was determined that the suspended solids and bottom sediments of Powder Mill Lake are extremely high in arsenic and mercury and any disturbance of these sediments could lead to serious down-stream affects.
3. As a result of the findings of the Environmental Control Council, the Federal and Provincial Governments have initiated a comprehensive year-long study of the sources of the arsenic and mercury in the system and the pathways and fate of the toxic materials. This study is to be done in April of 1983.
4. At the continued request of the Shubenacadie Lakes Advisory Board and the previous Councillor for the area, the Nova Scotia Department of Environment, initiated a Monitoring Program of the existing Rock Quarry at Rocky Lake. This Monitoring was begun in December 1981 and continued through 1982. While the results of this study are still being analysed the Department of Environment indicates the results of the survey are low, due primarily to the fact that as the economy was poor during 1982, the Rock Crusher was operated at a level well below its previous capacity. The study does confirm the fact that heavy siltation has occurred in Rocky Lake in a small pond beside the highway, a fact which was more than obvious to any resident of the area.

With specific reference to the proposed Rock Crusher, the PUD Application, the Board had the following comments:

1. Operation of a settling pond system is complex and not simple as suggested and will require careful monitoring, not only during cell cleaning but also during normal operations.
2. Drainage from the site goes to Lake William, Powder Mill and Rocky Lake; all three lakes should be analysed and no data is presented.
3. On a seasonal basis since most variables responsible for leaching and transport of dissolved and particular substances from the site, will be dependant on discharge rates from the site, baseline atmospheric quality from Mount Saint Vincent cannot be taken as an adequate baseline for the Waverley area.
4. The Developer comments on page 6 of the PUD "however, since arsenic was identified, although in low concentrations, a continuing monitoring program will be incorporated into the on-going development." The Board feels this is a vague and meaningless statement. A monitoring program is of no use unless it is properly designed, used and evaluated.
5. Deposition of dust on the vegetated buffer strip will affect the growth and possibly kill some of the vegetation.

6. Regarding compliance with the Nova Scotia Department of Environment Pit and Quarry Guidelines, the proposed limits of 100 milligrams per litre and 50 milligrams per litre maximum and mean suspended silicon concentrations in water discharge is very high, relative to the low suspended solid concentrations in the receiving waters of one to 20 milligrams per litre.
7. The Board also feels that since no effective legislation exists, to suspend operations of a Quarry should problems arise, it is imperative that the PUD contain provisions for a substantial performance bond and also provisions for continued County Council review of the performance of the Quarry with specific power to suspend operation if Council feels it is necessary for protection of the lakes.

In conclusion, the present proposal for water control devices as presented by Metro Aggregates is an improvement on the earlier proposal, but in common with all devices of this kind, has two major problems:

1. The inability to remove very fine material;
2. There is a difficulty of ensuring proper operation and maintenance.

Even if the system operates to its full potential, there will be very slow settling of small particles, which need many days to sink in slow moving or standing water, will not be removed. They will also probably not be moved as the overflow from the settling pond flows across the strip of land between the Development Site to Powder Mill Lake. This problem is compounded by that of inadequate operation and maintenance. He advised that an example of this is found at the Municipal Spraying Quarry. Unfortunately, the experience of residents in this area and the Shubenacadie Lakes Advisory Board with Quarry Crusher Operations is very unhappy. Complaints about the existing Quarry have been long-standing and vocal. The Shubenacadie Lakes Advisory Board and the previous Councillor for District No. 14 approached the Department of the Environment to examine this and report back on its problems, inadequacies and environmental impact. This process has been long, slow and inconclusive.

What is evident is an operation which has been creating problems with respect to air and water born dust for many years and a situation which to-date has been impossible to change. He advised that regulations to enforce good environmental responsibility are not strong enough and such as they are, are not properly enforced. The existing Operation does have properly designed settling ponds; however, they are not maintained. In this case there are ponding areas outside of the property which retain run-off water or otherwise, it would go right into the lake. Well designed water control devices in themselves are therefore, no guarantee of lake protection. The whole system only works if the regulations are strong and enforceable. Even if the present management of Metro Aggregates Limited has the best of intentions, during a twenty-year life of the Operation, Management and standards can change.

The Water in the Shubenacaide Lakes contains drinking water, not only along the lake system but also as it flows through the river valley to the Minas Basin. Within the entire area, the water can be used for many purposes provided every effort is made to maintain its good quality. Past experiences tell us that Rock Crusher Quarry Operations with low environmental standards are bad news for water quality and it makes no environmental sense to approve another until regulations requiring better standards of operation are strengthened and enforced. The adverse effects of this type of Development are culmulative. Consequently under these conditions, the Shubenacadie Lakes Advisory Board is not satisfied that its stated concerns have been addressed by the Proponent and the Board is unable to recommend this development to Council."

This completed the report of the Shubenacadie Lakes Advisory Board.

Questions From Council

Councillor Wiseman indicated her understanding that a copy of the PUD Agreement was sent to the Advisory Board; she questioned whether a response was requested at that time.

Mr. Bottomly advised that the Report was provided near the end of June, at which time Council was deciding a time to hold a Public Hearing.

She questioned whether his Report had gone to the Planning Advisory Committee, to which he replied it had not. The PLanning Advisory Committee has never requested information from the Advisory Board relative to this proposal. He advised that there has been no contact with the County whatsoever, relative to this proposal.

Mr. Bottomly also advised that at 4:15 this afternoon he had been contacted by Mr. John Sampson of the Information Services Department of the Department of Environment, with respect to a request that he had made of the Department to clarify its position with respect to this development. It had previously been indicated from the Department of the Environment that they had not finally addressed the proposal, he was led to believe at the previous evening of the Public Hearing, that the Department of Environment has essentially given approval. He advised that at 7:01 P.M. this evening a hand-delivered letter had been received from Mr. A. J. Crouse, P. Eng., Director of Environmental Assessment, on behalf of the Department of Environment. The letter (addressed to himself) read:

"I understand that in conversation with Linda Laffin of this Department, you asked for clarification of our position on the Metro Aggregates Proposal for Waverley.

The Nova Scotia Department of Environment received the Company's PUD Application in September 1981. We received the environmental impact statement and informed the Company that as far as it went we approved of the work done. However, we also advised Metro Aggregates that more information would be required before the Permit Review Process could enter its final stages. We have not yet received that information and consequently, cannot at this time provide final approval.

I hope this clears up any misunderstanding that may exist."

Councillor MacDonald questioned on what basis the Advisory Board reports to Council.

Mr. Bottomly advised that the Board has reported on several occasions addressing subdivision plans. He advised that the Board operates at the discretion of the County. If requested, the Board comments; however, they withhold the right to comment, if not asked.

Councillor MacDonald questioned whether the Board did not feel that the issue was important enough to report to Council.

Mr. Bottomly advised that he was not requested at any time to provide any reports relative to this proposal. In addition the fact that he was presented with the PUD Application at the end of June and the Hearing was in August would preclude that operation anyway. However, if asked, the Board would attempt to come back to PAC with any reports; as well, he advised that their terms of reference ensure confidentiality in these circumstances. Obviously, if they had the opportunity to do some groundwork before hand, it would solve these problems.

Councillor Lichter pointed out to Mr. Bottomly that PAC did not discuss, which Group, if any Group, should be consulted on the issue; this did not mean that PAC was not interested in anyone's opinion. The PAC recommended to Council a Public Hearing, which in his opinion, is the place where all the opinions are heard.

There were no further questions for Mr. Bottomly.

Mr. David MacDonald, Resident of Waverley: Mr. MacDonald addressed an item of particular concern to himself as a new resident of the area. He advised that after reading the fifth edition of the PUD which was the latest one, he was concerned particularly with the proposed water control system, item 8. He indicated that the proposed treatment system has very definite limitations.

He referred to the following excerpts from the proposal which he felt indicated some of these limitations:

1. Page 23: "There does not appear to be any information on the amount of fine material that will be generated from the Quarrying Operation itself".
2. Appendix "G" (6) - Stormwater Runoff Treatment - "A design particle size of 0.001 mm (one micron) is proposed to be removed in a settling pond to reduce the effect of siltation in the receiving waters (Powder Mill Lake) as a result of the Stormwater Runoff." ... "According to hydrometer analysis conducted on the sample of a process washwater from an adjacent Quarry collected by the Nova Scotia Department of Environment, approximately 10% of the fines are less than 0.001 mm. Therefore, it is expected that removal efficiency is 90% of the fine materials produced by the blasting and crushing operations of a typical Quartzite Rock Quarry."

He then commented on what the above meant to him advising that the first excerpt seemed to state that Metro Aggregates are admitting that they do not know what amount of fine material will be generated. Secondly, as a practical working limit, there will be 10% of these fines that cannot be removed from the water by their treatment settling ponds. He was concerned that Metro Aggregates Limited is asking County Council for approval to allow 10% of an unknown amount of suspended solids to be received in the effluent water leaving their property.

Mr. MacDonald, questioned what would happen to this 10% and where would it go. He found that in other areas of the proposal, there was some indication of the answer to these questions.

He referred again to Appendix "G" again in section 5.1, termed "Settling Pond", as follows:

"The settling Pond effluent will be allowed to outfall onto the undisturbed naturally vegetated ground of the well defined stream channel to approximately 150 meters across the property to an existing culvert under Rocky Lake Drive and then drain by overland flow into a marshy area where there is no defined stream channel to Powder Mill Lake." ... "The velocity of the water would also be reduced considerably in the Marshy area, any residual suspended solids from the settling pond should be removed from the effluent prior to its entry to Powder Mill Lake."

Mr. MacDonald indicated his concern that Metro Aggregate was planning to incorporate the nearby marshy area as part of their water treatment design as a final settling pond. He felt they were trying to remove approximately 10% of that unknown quantity of fine material before it is treated into the Powder Mill Lake.

Mr. MacDonald also indicated his concern that Metro Aggregates were intentionally planning to pollute the nearby marshy area.

Mr. MacDonald referred to Section 7.2 of Appendix "G" the following is described under the title "Water Control System Operation":

"Over the expected twenty-year life of the proposed Quarry Operation, it is anticipated that vegetation will grow through any deposite sediments as a result of overland flow of the Pond and would not create serious erosion problems" ... "If an erosion or siltation problem occurs downstream of the proposed water control system, additional straw bale siltation traps would be installed and-or chemical treatment would be used for particle coagulation to facilitate settling in the pond."

He was concerned by this statement that the water settling ponds that have been proposed by Metro Aggregates do not appear to have the design capability to give 100% protection to the surrounding water environment of the Waverley Lakes. He questioned how the Proponent could properly guarantee the protection of the environment from a dust problem which they themselves admit they have been unable to measure.

He referred to the last sentence of Section "G" (6), as follows:
"however, the degree of success can realistically be determined only when the Pond is placed into Operation and, therefore, has not been considered in the analysis."

He was concerned that this proposal would contain so much uncertainty in dealing with the protection of the environment. Based on this, Mr. MacDonald expressed strong opposition to the proposal and requested that Council do the same.

Questions From Council

None.

Mr. Harold Nesbitt, Resident of Waverley: Mr. Nesbitt advised that he lives in Waverley close to Haville Brothers Mobile Home Sales and quite close to the proposed Metro Aggregates Site. He advised that he and his wife already have to listen to the noise from the Quarry presently in existence.

For Council's information, Mr. Nesbitt brought along a tape recorder and a tape with the sound of crushing rock, which had been recorded from his home. He played this tape for Council.

Mr. Nesbitt then advised that his wife had called a Mr. Doug Cullin from the Federal Department of Water Quality Control in regard to the destruction of Fish and destruction of the beauty of the area surrounding the lakes. Mr. Nesbitt advised that the area of the proposed site and the surrounding area now resembles Parkland and, in fact, would be a good use for the land.

He then read from a Report sent to Mrs. Nesbitt from Mr. Cullin which was prepared in 1971 and pertained to the area of the proposed site which advised:

"The lands identified in this report, be put under Public Control by such means as purchase and perpetual easement and incorporated into a Regional Parks Program.

The wildlife habitat at the north end could form the basis for an interpretive program for the whole area. The dense vegetation there should be left because it serves the dual purpose of providing nesting cover for water fowl and of protecting the marsh from disturbance from the surrounding urban development. The southern half of the Lake could be developed for recreational activities polarizing the centre of activity away from the wildlife area. A more detailed plan can be drawn up later.

It is of utmost urgency that the lands around the lake be purchased or controlled for public use. Urban growth has already reached the area and can be expected to destroy its natural value soon, unless firm measures are taken by Government to preserve them.

It is quite possible that C.I.L. would look favourably at a request by Regional Authority to delete certain lands for creation of a park around the marsh. The company might also be encouraged to assist in the management of the marsh for water fowl. Such Agencies as the Canadian Wildlife Service and the Wildlife Conservation Division of Nova Scotia Department of Lands and Forest might also be approached for help, either in the form of expert advice or manpower.

Lake William Marsh has a number of assets that recommend its incorporation into an environmental park. The brook flowing from Powder Mill Lake into the marsh is not only picturesque but it is important for Bass spawning. In the spring it is possible to see the occasional male guarding its nest in some of the quiet gravelly pools. The forests along the stream and marsh edge consist of semi-open stands of middle aged white spruce, white pine, birch, and hemlock.

Together with the marsh, the old buildings, the ruins and roadway form a natural Park. Lake William Marsh, its surrounding uplands and in-flowing stream from Powder Mill Lake should be incorporated into a Wildlife Interpretation and Historical Park.

The Stream and Marsh system is an important habitat for the water fowl and fishery resources in the area. The old amunitions factory, is a link with the area's past. The wooded hill along the north bank offers an excellent park site overlooking the marsh and its wildlife communities."

This and the tape recording of the trucks dumping and the crusher grinding, concluded Mr. Nesbitt's presentation.

Questions From Council

None.

Mr. Gary Sirota, Chairman, Area Development and Planning Committee, Waverley: On behalf of Mr. Ernie Brandon, a Meteorologist who lives in Waverley and was unable to attend tonight, Mr. Sirota, read a report, prepared by Mr. Brandon. This report read:

"The Proponent's statement in his PUD that the year-round wind frequency is evenly distributed over all directions, etc., in the vicinity of the rock crushing site, is eroneous and deliberately misleading. It is apparently based on wind statistics for the period 1960 to 1972 which is very strange in view of the availability of wind statistics for a longer and more recent period, namely 1951 to 1980. These data are obtainable from Environment Canada, Atmospheric Environment Services under the title "Canadian Climate Norms, Volume Five, Wind 1951-1980" and are available for the sum of \$5.00. They indicate that there is an actual preference for wind flow in the direction of the Waverley population centre. Based on wind data from 1951 to 1980 at Halifax International Airport, it can be stated that winds will blow in the direction of the Town of Waverley the most populus portion of the Town most of the time during the period May through October. During the Winter

months it will blow in the direction of the population centres along the Portobello road. These winter winds will carry emissions from the site in a direction such as to deposit dust in Lake William and Lake Charles whereas summer wind flows from May to October will deposit emissions from the site into Lake Thomas. It turns out that the chosen site for the rock crushing operation is, in my opinion, the worst possible, in respect of these wind trajectories. The Proponent does not appear to make any attempt to estimate the fate of these emissions from the rock crushing operation, including loading, blasting, etc. He gives no figures for emission rates and deposition rates and locations of maximum deposition of dust. He does not describe the wind channeling in the location for the Operation which channeling will result in greatly accentuating frequency of wind flows in the direction of the above-mentioned population centres and lakes. The proponent's treatment of atmospheric loadings and air quality concerns is indeed a rather sorry effort."

The above, he reiterated, was prepared and signed by Mr. Ernie Brandon, Scientific Service Meteorologist, Atlantic Region, Atmospheric Environment Services.

Questions From Council

There were no questions from Council, relative to the submission of Mr. Brandon.

Mr. Sirota then proceeded to give his own presentation. He advised that he had been involved in Fisheries Research for approximately eight years, as a Fisheries Toxicologist and Research Chemist, which meant that he studies and determines what kills fish.

Mr. Sirota advised that he had attended today, a meeting between a Fisheries Biologist from the Federal Department of Fisheries and had obtained some information from this meeting which he proceeded to pass on to Council.

He advised that the Shubenacadie Lake System is part of an Inland Water Way which comes under the Directorate of the Federal Department of Fisheries. He read from the Fisheries Act, a Federal Law, the following: "Every person who carries out or proposes to carry out any work or undertaking that results or is likely to result in the deposition of deleterious substances in waters frequented by fish, or alteration, disruption or destruction of fish habitat, shall on the request of the Minister of Fisheries, make available such plans, specifications, studies, etc. of this type of Work." Mr. Sirota advised that he would make this documentation available to any Councillors who wish to read it. In, his opinion, it meant that the Waterways in Waverley and surrounding area, are not only important from a Recreational point of view but also to Inland Waters Directorate.

Mr. Sirota had also found that Lake William was a spawning ground for small-mouth Bass and spawning grounds are not that common and it is very important from that point of view.