COMMENTS RECEIVED DURING THE REVIEW OF THE PROPOSED
Aguathuna Dolomite/Limestone Quarry & Marine Facility

Dept. Of Government Services & Lands - Government Service Centre

Regulatory requirements:

Approval of the undertaking will require certain authorizations available through the Government Service Centre. These authorizations are subject to change without notice. The following is a list of current approvals/authorizations relevant to this proposal and available through the Government Service Centre:

A permit is required from the Government Service Centre in accordance with the Urban and Rural Planning Act for the construction of an access road in a protected area, or for any access onto a Protected road.

Unless connected to municipal services, any water supply, and sewage disposal facilities with a daily flow rate of 4546 litres or less will require approval from the Government Service Centre, under the Public Health Act; sewage disposal facilities with a daily flow rate greater than 4546 litres require approval from the Government Service Centre, under the Environment Act.

Any plans for fuel storage tanks must be reviewed by the Government Service Centre for compliance with the Fire Prevention Act (The National Fire Code) and The Storage and Handling of Gasoline and Associated Products Regulations.

Waste management issues must be addressed by the Government Service Centre for compliance with the Waste Material Disposal Act.

Building design plans will have to be reviewed for by the Government Service Centre compliance with the Fire Prevention Act and for compliance with or exemption from the Buildings Accessibility Act.

Any electrical work must be carried out in accordance with the Electrical Regulations. Applications for permits are available from the Government Service Centre.

Heating and/or refrigeration systems falling under the jurisdiction of the Boiler Pressure Vessel and Compressed Gas Regulations, will require approval under that legislation.

Dept. Of Environment & Labour - Water Resources Division

Regulatory requirements:

The Water Resources Division of the Department of Environment and Labour is responsible for the regulation of alterations of any bodies of water within the jurisdiction of the province of

Newfoundland and Labrador. This project, if carried as proposed, will entail the ***upgrading to the access road water, impoundments for settling basins, withdrawal of water, construction of marine facilities and other alterations***. As a consequence of the proposed ***removal of overburden and waste rock, the mining activity itself, disposal of tailings, site drainage alterations and general activity during construction and during operation of the quarry***, there will be considerable impacts on water quality, runoff characteristics and quantities of flow at any given time.

In order for the proponent to comply with the requirements of section 11 of the *Environment Act*, SN 1995 c E-13.1, plans and other information that may be required must be submitted for review and no work may be proceeded with until approved in writing.

Specifically, approvals will be required for ***marine facilities, settling basins and discharges, culverts and/or bridges, stream diversions and realignment, water intakes and discharges and any infilling of water bodies for waste or tailings areas***. In addition, water use authorization ***will be required for the withdrawal of water for consumptive or processing*** purposes.

The above mentioned approvals, if granted, typically contain specific provisions pertaining to the hydrologic and hydraulic design of the various water related components, provisions for the prevention of water quality degradation during construction and for the life of the structure if appropriate, any requirements for water quality monitoring and reporting and special conditions to ensure that rehabilitation with respect to water resources is properly carried out.

Environment Canada

From the information provided in the registration document, it is understood that the proponent plans to develop a dolomite and/or limestone quarry and marine facility at the former Aguathuna Limestone quarry. The activities during the operation phase includes drilling and blasting, crushing, dry and wet screening and ore stockpiling. It is planned to produce approximately 150 000 tons in 1998 with possible expansion to 500 000 tons per year thereafter. The product will be loaded via conveyors at the marine facility onto barges, initially, and onto ships in subsequent years.

Based on the information provided in the registration document, Environment Canada is of the opinion that further information is required in order to assess the significance of the impacts resulting from this proposed quarry development. Therefore, Environment Canada is recommending that the proponent prepare an Environmental Preview Report to address the following information deficiencies.

Regulatory Requirements

Environment Canada's mandate encompasses a number of pieces of legislation, key among them being the *Canadian Environmental Protection Act* (CEPA), the pollution provisions (Sections 36-42) of the *Fisheries Act*, the *Migratory Birds Convention Act*, the *Canadian Wildlife Act*, and the *Canada Water Act*. Stemming from this mandate, the department has expertise related to pollution control and prevention, waste management, wildlife and associated habitat, hydrology and hydrogeology. Through its Atmospheric Service, the department also has expertise related to atmospheric and

climate issues.

The proponent should be aware of the general applicability of Sections 36(3) of the federal *Fisheries Act* to quarries. Deleterious substances (e.g. dolomite, limestone, sediment, hydrocarbons, and other petroleum products) cannot be deposited into water frequented by fish. Drainage from the pit during site clearing and grubbing, general construction, excavation, operation and abandonment must not be harmful to fish.

The proponent should also be aware of the potential applicability of the Canadian Environmental Protection Act (CEPA). CEPA enables protection of the environment and human life and health through the following: the establishment of environmental quality objectives; guidelines and codes of practice (Part I); and through the regulation of toxic substances (Part II), nutrients (Part III), emissions and discharges from federal facilities (Part IV), international air pollution (Part V), and ocean disposal (Part VI).

The proponent should also be aware of *Canadian Environmental Assessment Act* (CEAA). The proposed development, if receiving federal funding, requiring an interest in federal land (e.g., lease or purchase), or requiring a federal permit/approval (e.g., ocean disposal permit), is subject to assessment under the new Act. It is the responsibility of the federal funding or regulatory agency(ies) to identify the assessment responsibilities, as well as to coordinate with any other federal agencies who may also have assessment responsibilities under the Act. To the extent possible, federal-provincial coordination of environmental assessment efforts is undertaken, as this will minimize the potential for duplication of effort. For information regarding CEAA requirements contact Mr. William Coulter (902-426-0564) at the Atlantic Regional Office of the Canadian Environmental Assessment Agency.

Information Required on the Project and/or Environmental Planning of the Project

In order to assess the significance of the potential environmental effects associated with the construction and operation of the proposed dolomite/limestone quarry and marine facility, and to determine Environment Canada's responsibilities under CEAA, the following information is required.

There is limited information presented with respect to the construction and operation of the marine facility. The proponent should provide detailed information regarding all activities associated with the construction, operation and abandonment of the marine facility, including the dock, conveyor system, and any ancillary facilities (e.g., fuel loading and storage).

Information pertaining to the construction of the marine facility is also required in order to determine if the proponent would be required to apply for an ocean disposal permit for the disposal of dredged spoils. If any activity required such a permit, the waste material and receiving site could require sampling and other evaluation. Due to historical use of the area, the sediment may be considered too contaminated to allow ocean disposal and the proponent may want to investigate alternatives to ocean disposal. If an ocean dumping permit is required for this project, a federal environmental assessment of the project will be required, pursuant to Section 5(1) of the *Canadian Environmental Assessment Act*.

There is the likelihood that the dolomite/limestone product may enter the marine environment during loading of the barges and/or ships. The proponent should provide more information regarding the activities associated with loading of the product onto vessels and indicate mitigations that will be used to prevent the product from entering the marine environment.

The registration document indicates that a wet screening process will be used at the quarry. Yet, there is limited information given to describe this process. For instance, it is indicated that this process will have a water recirculation system and that the system recirculates water from two settling ponds. However, there is no information regarding the settling ponds. Details with respect to the design, size, location, maintenance, etc., of the settling ponds should be provided. The it should be indicated whether it is the intention to use natural waterbodies on site, or construct the settling ponds. In addition, the proponent should clarify if there will be an effluent from these ponds and the receiving water into which it will be discharged.

The proponent should indicate whether there will be a requirement to dewater the quarries. For instance, will there be an influx of water into the quarry pit? If so, the proponent should clarify whether this water is to be pumped to the settling ponds.

The proponent should develop an environmental protection plan (EPP) that outlines mitigation measures for all phases of the quarry and marine facility (construction, operation and abandonment). The EPP would ensure that environmentally sound construction and operational practices are employed in the field. The following are examples of recommended mitigation practices that should be employed to ensure compliance with Section 36(3) of the *Fisheries Act*.

Erosion and Drainage Control

To ensure compliance with Section 36(3) of the Fisheries Act, it will be necessary to prevent sediment-laden drainage associated with site clearing and grubbing activities, general construction and operation of the quarry from entering nearby waterbodies, watercourses or the marine environment. Accordingly, the following drainage control measures should be implemented:

A vegetated buffer should be maintained between the area to be disturbed and surface waters.

- The extent of clearing and grubbing should be restricted to that which is absolutely necessary.

Control devices such as sediment traps and/or settling ponds should be in place to receive all drainage from the site, both during initial clearing and grubbing as well as during operational quarrying.

Discharges from control devices should be monitored on a regular basis to ensure they will not be harmful to fish.

Transport, Storage, Use and Disposal of Petroleum Products and Toxic Substances

To ensure compliance with Section 36(3) of the *Fisheries Act*, it will be necessary to provide for the proper transport, storage, use and disposal of substances which may be harmful to fish (e.g., petroleum products) so as to minimize the risk of chronic or accidental releases from occurring and to prevent a release from entering nearby waterbodies, watercourses and the marine environment. .

Refuelling and maintenance activities should be undertaken on level terrain, at least 100 m from any surface water, on a prepared impermeable surface with a collection system, to ensure oil, diesel, gasoline, hydraulic fluids, and other petroleum products do not enter surface waters of the marine environment. Waste oil should be disposed of in an approved manner.

Drums of petroleum products or chemicals should be tightly sealed against corrosion and rust and surrounded by an impermeable barrier in a dry, water-tight building or shed with an impermeable floor.

In order to ensure that a quick and effective response to a spill event is possible, spill response equipment should be readily available on-site. Response equipment, such as adsorbents and open-ended barrels for collection of cleanup debris should be available on-site. Personnel should be knowledgeable about response procedures. The proponent should consider developing a contingency plan specific to the proposed undertaking to enable a quick and effective response to a spill event.

As indicated in the registration document, the proponent will develop a reclamation plan for the site. It is recommended that the plan include, but not limited to, the following:

Organic topsoil stripped from the working site should be stockpiled separately from inorganic overburden for the purposes of rehabilitation.

- Stockpile areas should be located away from waterbodies or watercourses, on a dry, level ground, where they will not become contaminated.

  Organics should be dumped in small heaps less than 2 m high to reduce the effects of compaction on storage. Both the organic topsoil and overburden stockpiles should be seeded as they are subject to erosion and leaching of nutrients if stored for long periods of time.

- Upon abandonment, disturbed areas should be recontoured and stabilized to conform to the natural topography. The stockpiled overburden should be replaced in exposed areas and organics spread on the overburden. Disturbed areas should also be replanted and/or reseeded.

Contacts

Environment Canada
6 Bruce Street
Mount Pearl NF A1N 4T3

Mr. Kevin Power, Head, Pollution Prevention (772-4005)
Ms. Kim Coady, Environmental Assessment Coordinator (772-4087)
Mr. Graham Thomas, A/Environmental Emergencies Coordinator (772-4285)
Mr. Rick Wadman, Ocean Disposal Program (772-4269)

Environmental Emergencies 24-Hour Report Line:
St. John's (709) 772-2083
Other Areas 1-800-563-2444

Dept. Of Government Services & Lands - Land Management Division

Regulatory requirements:

The proponent will be required to submit a Crown Land Application for the erection of any structures on Crown Land including any new roads or powerline easements. Application can be obtained at the Government Service Centre - Corner Brook.

Dept. Of Health

Proponent to obtain necessary approvals and permits from the Government Service Centre.

Dept. Of Municipal and Provincial Affairs

Regulatory requirements:

There appears to be residential development near to the site of the proposed activity. The impact of noise and dust resulting from blasting, crushing and transportation of the material and the potential mitigative measures warrant further consideration.

Dept. Of Human Resources and Employment

Additional information required on the project and/or environmental planning of the project:

The proposed undertaking is described as seasonal and does provide a brief listing of the types of occupations which will be involved (page 5). However there is no forecast of the numbers initially required and of how these numbers will increase. Also, the Proponent does not indicate whether positions are expected to be filled from the local area. This is particularly helpful to know in an area such as this where the unemployment rate is very high.

Dept. Of Environment and Labour - Occupational Health & Safety Division

Regulatory requirements:

The information contained in the document is general and brief. There are no mine plans or related

information to enable any assessments from an OH&S point of view. This however should not be a reason to delay or stop the environmental assessment approval.

I would suggest that the proponent be informed that prior to mining startup they submit their pit mining plan to my attention. Also for storing or using any explosives at site they are required to obtain explosives permits from the OH&S. The mining act and health & safety regulations as well as the OH&S act and regulations will apply at the site and will be enforced as work begins at the site.

Dept. Of Forest Resources & Agrifoods

Regulatory requirements:

Cutting on crown land requires a permit from the Forestry/Wildlife office in St. George's.

Comments based on your experience and expertise, but not directly related to your Departmental mandate:

Compliance with provincial air, water and noise emission regulations will ameliorate any wildlife concerns in the area.

Dept. Of Environment and Labour - Pollution Prevention Division

Regulatory requirements:

Industrial Compliance Section:

I have reviewed the registration document from Midatlantic Minerals and have the following comments:

- This project ***will require an approval under Section 8 of the Environment Act.***
- Storage of Gasoline and Associated products must be in compliance with the GAP Regulations.
- Waste material must be disposed of in accordance with the *Waste Material Disposal Act.*
- The following additional information should be requested:
    - Quantities of and plans for the disposal of waste rock
    - Size of product stockpiles, if any
    - Design of settling pond system (including capacity and indication of final effluent quality)
    - Plans for disposal of deposits from settling pond
    - The document outlines various methods of dust control. Is Midatlantic Minerals committing to implementing these measures?
- As this is an existing quarry, if the above issues are adequately addressed, ***I recommend that no EA be required.***

Environmental Science and Monitoring Section:

I have reviewed the above document that has been registered with the Environmental Assessment Division and see very little concern with the proposed undertaking to quarry the dolomite and/or limestone in Aguathuna in western Newfoundland. This is a reactivation of a project that was ongoing from 1913 to 1964.

Total suspended solids and hydrocarbons have been addressed as potential sources of surface water contaminants that could lead to water pollution. However, no mention has been made to ammonia contamination to the surface waters from blasting operations and ammonia is regulated in the Water and Sewer Regulations at 2 ml/L.

Pesticide Control Section:

- no comments

Waste Management Section:

- no comments

Dept. Of Fisheries & Oceans

Regulatory requirements:

It is recommended that the proponent contact Mr. Al Pitcher, Area Habitat Coordinator - Western (Department of Fisheries and Oceans, 1 Regent Square, Corner Brook, NF, A2H 7K6, (tel: 637-4349) regarding appropriate approval for project works or activities which may impact upon fish or fish habitat (ie. water withdrawal, culvert/bridge installation, siltation control, dredging, etc.).

Additional information required on the project and/or environmental planning of the project:

Information required to adequately assess the potential impacts of the proposed undertaking on freshwater and mare fish and fish habitat includes, but is not limited to:

1. The proponent should identify, describe, and quantify potential impacts on marine fish, fish habitat and fisheries in the Aguathuna/Coasta Bay area, particularly in the area of the proposed marine docking and shipping facilities. Potential impacts on freshwater fish, fish habitat, and fisheries should also be identified, described, and quantified where appropriate. This information is required to determine whether the proposed undertaking will result in the

harmful alteration, disruption or destruction of fish habitat requiring Section 35(2) Fisheries Act authorization and in order to address the No Net Loss guiding principle of DFO's Policy for the Management of Fish Habitat.

2. Design and construction details of the proposed marine facility should be provided including, but not limited to, information on the location, size, orientation, materials, method of construction, blasting/dredging requirements, etc. This information will aid in determining if a formal approval is required under Section 5(1) of the Navigable Waters Protection Act and if proposed activities will result in the harmful alteration, disruption, or destruction of fish habitat.

3. The proponent has noted that a wet screening process will be used. The water source for this and any other related activities should be identified. The proponent should also provide appropriate information with respect to rate of withdrawal, timing, frequency, intake screens to prevent entrainment/impingement of fish, etc.

4. The proponent should provide a map of appropriate scale that clearly identifies all project related site features (quarry, access roads, plant, etc.).

5. An Environmental Protection Plan (EPP) should be developed to outline appropriate site and activity specific mitigation to address potential impacts on fish and fish habitat as a result of construction, operation and decommissioning of the proposed quarry and marine facility. The EPP should be submitted to end approved by all regulatory agencies prior to project start up.

Comments based on your experience and expertise, but not directly related to your Departmental mandate:

The above comments are based on Sections 20-22, 26-30, 32 and 34-35 of the Fisheries Act and Section 5 of the Navigable Waters Protection Act only. Issues related to Section 36 (ie., Deposition of Deleterious Substances into Fish Habitat) of the Fisheries Act will be commented upon by Environment Canada.