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March 1, 1999

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RE: AQUATHUNA QUARRY
REVIEW OF DRAFT COMPREHENSIVE STUDY REPORT

The Canadian Environmental Assessment Agency has completed a preliminary review of the draft comprehensive study report, dated February 10, 1999, for the above-mentioned project proposed by Aguathuna Quarries.

Attached you will find our comments which focus on the content required under the *Canadian Environmental Assessment Act (the Act)*. The review focused on whether the draft information meets the requirements of the Act and requirements of the Agency for a comprehensive study. The review did not address the technical or scientific validity of the information presented in the documents as this is the purview of the responsible authority.

I hope that these comments will be helpful in preparing the final comprehensive study report. I would appreciate receiving the next draft of the comprehensive study report prior to its official submission to the Minister and to the Agency. We usually ensure that the report meets the requirements of the Act before beginning the public comment period.

If I can be of further assistance, please contact me at (819) 953-2537.

Sincerely,

Marie-France Therrien
Senior Analyst
Project Assessment

Enclosure

Canada

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Involvement of Federal Authorities

Section 1.4 of the report provides an overview of the involvement of different federal authorities in the environmental assessment. The second paragraph of this section outlines which Departments are not responsible authorities. As stated in the Introduction (page 1), you may wish to confirm in this section, who is the responsible authority and what has triggered the Canadian Environmental Assessment Act.

It would be useful to indicate why the project does not require the involvement of the Canadian Coast Guard (Section 5(1) of the *Navigable Waters Protection Act*) and the involvement of the Department of Fisheries and Oceans (Section 35(2) of the *Fisheries Act*). It is not obvious why these two « Law List » triggers do not apply in this case, as the project involves the construction of a marine terminal and infilling into a marine environment.

Furthermore, it would be useful to confirm which federal authorities are involved in the comprehensive study as expert departments and what domain of expertise they cover. As well, you may wish to confirm what role PWGSC is playing in the environmental assessment of this project.

Description of the project

Page 12 : The project description mentions that the operational phase will include drilling and blasting. No further information is found on blasting. How often will blasting be required ? Will explosive be stored or/and manufactured on site ? If so, will the old existing shed be use for storage ? Did **Natural Resources Canada** provide comments on this aspect of the project? **Did they confirm whether they were likely to be involved in the assessment as a responsible authority** ? Further information on this subject is required.

Page 13 : It would be useful to add, in section 2.6, the number of vessels (frequency) which will be using the marine terminal.

Page 14 : In the third paragraph, it is mentioned « *Should weather conditions dictate, a wet screening system may also be installed.* » What kind of weather conditions are we referring to ? Will this system be installed at the beginning of the project and use only when the weather conditions dictate or will this system be built only if necessary. If the system is built only if necessary, who will decide if it is required and what will be the triggering conditions ?

It may be useful to know, how many jobs will be created by this project and whether the workers will come from the local communities.

Other comments

Table 1.1 / Page 4 : Beside the « Canadian Environmental Assessment Act », the responsible agency listed should be the responsible authority, « ACOA » and the « Canadian Environmental Assessment Agency » rather than « Environment Canada ».

FACTORS TO BE CONSIDERED - COMPREHENSIVE STUDY

Every Comprehensive Study of a project shall include consideration of the following factors:

1. Environmental Effects of the Project

16(1)a *the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects from the project in combination with other projects or activities that have been or will be carried out;*

Comments

Environmental effects of the project are changes in the biophysical environment caused by the project, as well as certain effects that flow directly from those changes, including effects on human health, socio-economic conditions, physical and cultural heritage, including effects on things of archaeological, paleontological, or architectural significance and, the current use of land and resources for traditional purposes by aboriginal persons. Environmental effects also include the effects of any changes to the project that may be caused by the environment.

The potential environmental effects of the proposed project are described in Sections 7 to 12 of the comprehensive study report. Section 4 - Existing Environment also includes information relevant to the consideration of potential environmental effects.

Description of the Existing Environment

In general, section 4 of the report does not contain sufficient information to allow the reader to confidently concludes whether certain type of effect could arise from the construction and operation of the project. The report should contain additional information on the following subjects :

- Description of communities/residences which are located near the project area. Page 17 mentions that the project lies between the communities of Boswarlos and Bellman's Cove. It should be clearly stated how many people live in these communities and at what distance from the site. Are there individual residences which are located closer to the site ? Do these

communities/residences rely on wells for their water supply. What are the adjacent land use ? This information is particularly important as some of the concerns listed in Section 5 relate to the effects of dust, noise and blasting on people.

- Groundwater : It is not clear whether community or residential wells could be affected by pit dewatering or blasting. A discussion of this issue should be included in the report.
- Land use in the area ?
- Traditional use by First Nation : Confirm whether any area use by First Nations are likely to be affected by the project.
- Sections 4.1 and 4.2 : Did DFO confirm their agreement with the information provided in these sections (especially with regard to the conclusion that no fish habitat will be disturbed or destroyed). Any species, other than lobster, are fished in the project area ? Page 19 mentions a fish and habitat survey was conducted. The reference for this survey should be provided. It may be useful to add the views of DFO to these sections.

On page 19, reference is made to one small stream that could be affected by the project. Page 21, refers to several small streams in the project area. The CSR should clearly state how many streams are in the projects area, and which ones could potentially be affected by what components of the project.

- Section 4.3 : One paragraph to describe the terrestrial resources to be found on the site is insufficient. Additional information should indicate what research and studies were conducted and who was consulted to obtain information For example, it is mentioned that the project area contains grouse and moose habitat. What is the reference for this information ? Information should be provided on the importance (kind, quality, quantity) of these habitats. What % of these habitats are found on the site in comparison to habitat found in the larger region ? Is the project area use by community members or First Nations for hunting ? How was it determined that the site contains no rare or endangered species ?

Accidents and Malfunctions

Section 8.4.1 : This section should provide further details on the subject of fuel spills. What kind, quantity of fuel will be kept on site ? In what type of storage tank ? What measures/ contingency will be in place to mitigate the effects of accidents. Some general information should be included in the CSR with a reference to the EPP for further details.

Other effects

Pages 61-62 : How much vegetation clearing will be necessary ? Will top-soil be set aside for eventual rehabilitation ? What about effects on wildlife from noise and human presence ? Generally, the information provided on the existing environment appears insufficient to allow a determination of the significance of effects (see previous comments).

Page 68/Table 10.2 : The table states that noise from blasting could affect wildlife and surrounding communities. The section on mitigation concludes that « The remoteness of the quarry from surrounding communities eliminates adverse effects of the blasting related noise ». This statement does not apply to wildlife. Furthermore, the report does not offer any information to substantiate this statement.

Air quality : Please provide the reference for the Air Quality Modelling study. It may be useful to append the complete results of this study to the CSR. In figure 11.1, it is unclear what the numbers referred to on each contour line represent. The conclusion, page 75, states that « *In all cases, the predicted concentrations were well below the regulatory limit of 120 µg/m³ for the 24-hour average. This is mainly due to the incorporation of the changing emission factors at different times of the day, i.e. essentially zero emissions between 6 pm and 8 am* ». It would be useful to know what were the results before including the value of zero emissions between 6 pm and 8 am. The report should clearly state what are the expected level of dust emissions, during operating hours, on the site and at the closest residential or commercial buildings. How do these levels compare with provincial and federal ambient air quality criteria ?

Noise effect : No information is found on the potential effect of the project on ambient noise levels. According to section 5 of the report, this issue has been raised by the community. Taken into account that quarry operation can be noisy, information should be provided on this potential effect.

2. Significance of Environmental Effects

16(1)b *the significance of environmental effects referred to in paragraph (a);*

The Agency recommends that the comprehensive study report includes clear statements of whether the adverse environmental effects, taking into account any mitigation measures, are significant or uncertain.

The approach taken to considering the significance of effects is provided in Section 7 of the report. The results of the assessment are summarised in Tables 8.2, 9.2, 10.2 and 11.4. These sections provide sufficient information on the significance of the environmental effects.

The responsible authority should ensure that federal expert departments concur with the conclusion on significance of effects.

3. Public Consultation

16(1)c *comments from the public that are received in accordance with the Canadian Environmental Assessment Act and the regulations;*

Comments

The public consultation program carried out by the proponent is presented in Section 5. This section describes the consultation program undertaken and the main issues raised during the consultations.

It would be useful to describe in the comprehensive study report how the public concerns have been addressed. A summary of the concerns raised through the consultation program and how they are being addressed would be useful. A cross-reference to the section of the report that indicates where the concern has been addressed would also be useful. The reader should also be able to determine whether all issues have been resolved or whether there are any outstanding significant public concerns.

4. Mitigation Measures

16(1)d *measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project;*

Comments

Mitigation measures are discussed and described in sections 7.8, 8.6, 9.6, 10.6 and 11.6 of the CSR. In several instances, the reader is referred to the EPP (not yet available) for details on the mitigation measures. The information on mitigation measures is important since the conclusion on the significance of effects is based on the implementation of these measures. Furthermore, the Minister of the Environment will base its final decision on the information found in the CSR after taking into account the implementation of the appropriate mitigation measures. As well, the Minister will require that the RA ensure that the mitigation measures, described in the CSR, are implemented. Unless the EPP is available prior to the Minister's decision and appended to the CSR, as much information as possible on mitigation measures should be included in the CSR.

When appropriate, the report should specify when such and such mitigation measures are to be implemented. For example, when will dust suppressant be used? What level of dust emissions will be sufficient to trigger the appropriate mitigation measures?

On page 47/Table 8.2 : With reference to blasting residue, it is mentioned that « associated bi-products to be controlled and treated as detailed by the EPP ». Further information should be provided on this mitigation measure in the section discussing the effect of blasting.

Page 54/Section 9.6 : This section states that « decant water pumped from the working areas containing blasting residue (nutrients) will be sufficiently diluted to reduce eutrophication in aquatic environments ». This measure, which also addresses blasting effects, is not the same as the one proposed on page 47 (see previous comment). The report should clearly state what mitigation measures will be required to reduce the effect of blasting residue.

Page 56/Table 9.2 : This table states that no refuelling is to take place within 10 m of surface water. On page 51, it is stated « The EPP will detail fuel handling procedures and required buffer zones from water (i.e. 30 m). These two buffer zones seem to be contradictory. Which one is to be used.

5. Other Factors

16(1)e *any other matter relevant to the comprehensive study such as the need for the project and alternatives to the project, that the responsible authority or the Minister after consulting with the responsible authority may require to be considered*

Comments

An assessment of alternatives to the project was included in Section 3 of the Comprehensive Study Report.

The responsible authority may wish to confirm in the comprehensive study report whether any other factors have been requested through the terms of reference.

6. Purpose of the Project

16(2)a *the purpose of the project;*

Comments

Section 16(2)(a) of the *Canadian Environmental Assessment Act* requires that every Comprehensive Study includes a statement of the purpose of the project.

Section 1 of the report contains a clear statement on the purpose of the project.

7. Alternative Means of Carrying Out the Project

16(2)b *alternative means of carrying out the project that are technically and economically feasible and the environmental effects of any such alternative means;*

Comments

« Alternative means » of carrying out the project are methods, activities, facilities, practices, designs, etc. of a similar technical character or are functionally the same. In contrast, « alternatives to » the project are functionally different ways of achieving the same end or objective. Alternative means that are technically and economically feasible must be considered in the comprehensive study.

The consideration of alternative means is provided in Section 3 of the CSR. The information presented in this section is adequate.

8. Follow-up and Monitoring

16(2)c *the need for, and the requirements of, any follow-up program in respect of the project;*

Comments

Some information on the follow-up program is provided in Section 13.2. The responsible authority should confirm whether any other key elements should be included in the follow-up program. Will monitoring of noise level be warranted ?

The objectives of the follow-up program should be well defined as they will form the basis of the program to be carried out after the project is approved. The report should provide enough information to allow the reader to determine whether the program is likely to be effective in meeting the objectives as defined. For example, information such as the location, frequency and type of air quality monitoring study should be included in the CSR. Who will be conducting the monitoring ? If problems are identified during monitoring, who will be responsible to ensure that corrective measures are implemented ? If a problem is identified by the population with regards to dust or noise, will any structures/mechanisms be in place to resolve the issues ?

9. Renewable Resource Impacts

16(2)d *the capacity of renewable resources that are likely to be significantly affected by the project to meet the needs of the present and those of the future*

Comments

A comprehensive study must also consider the effect of the project on the capacity of those renewable resources that are likely to be significantly affected to meet present and future needs.

Information on the effects of the project on sustainable use of renewable resources is included in Section 7.3. This information is adequate.

10. Consultation with Expert Departments

12(3) *Every federal authority that is in possession of specialist or expert information or knowledge with respect to a project shall, on request, make available that information or knowledge to the responsible authority or to a mediator or a review panel.*

Comments

Federal authorities with specialist information and expertise have a special role to play in a comprehensive study. Under the Act, expert departments must provide specialist information and expertise related to the project when requested by the responsible authority. **To ensure that all scientific or technical matters have been adequately addressed in the comprehensive study report, the responsible authority should make certain that all relevant expert federal departments have provided specialist information or expertise, have reviewed and commented on the comprehensive study report and that these contacts (i.e., a record of consultation as well as a discussion of any unresolved scientific or technical concerns) have been documented in the report.**

In addition, the responsible authority should **obtain written input from each of the expert** departments on whether they agree with the mitigation measures, conclusions and recommendations outlined in the final comprehensive study report. This information should be transmitted to the Agency as soon as possible.

