

April 22, 2009

Honourable David Morse, Minister
Nova Scotia Department of Environment
5151 Terminal Road
Halifax, NS, B3J 2T8

Dear Minister Morse;

We are pleased to submit for your consideration the first annual report of the Remediation Monitoring Oversight Board (RMOB).

As you are aware the RMOB was established January 1, 2008, by Minister Mark Parent in response to Recommendation # 53 of Joint Review Panel for the Sydney Tar Ponds and Coke Oven Sites Remediation Project. Over the past year we have convened six meetings, conducted twenty-four interviews with project partners and reviewed a number of documents to assess the progress and effectiveness of Nova Scotia Environment's regulatory management process in relation to this project. Our primary purpose has been to assure the public that the remediation of the Sydney Tar Ponds and Coke Oven Sites is being appropriately regulated by NSE and the project is proceeding within the provincial regulatory guidelines, permits and approvals.

On behalf of the Board I would like to express our appreciation to your NSE staff and the other organizations involved in this project for their hospitality, advice and candid comments. Their professionalism and support have enabled us to convene a number of productive discussions.

We trust you will find the information provided in this report constructive. We are available to meet should you wish to discuss this report in greater detail.

Respectfully Submitted,
RMOB Members

Colin Hines, Member

Sinclair Dewis, Chair

Edwin Maclellan, Member

Sydney Tar Ponds and Coke Ovens Sites Remediation Project

Annual Report to the Minister, Nova Scotia Environment

Submitted by;

The Remediation Monitoring Oversight Board

April 22, 2009



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Executive Summary

On July 12, 2006, a Joint Review Panel completed an environmental assessment of the Sydney Tar Ponds and Coke Ovens Sites Remediation Project with the issuance of an Environmental Assessment Report. This report included a total of fifty-five recommendations of which number 53 dealt with the creation of a Tar Ponds and Coke Ovens, Remediation Monitoring Oversight Board. The Provincial Environment Minister, Mark Parent, moved forward with the Panel's recommendation and on January 2008 appointed a three-member Remediation Monitoring Oversight Board (RMOB).

Since our appointment, the Remediation Monitoring Oversight Board has been active in developing an understanding of the project and, in particular, evaluating the role and activities of NSE as the primary regulator. In this first annual report the Board has identified four findings including;

- The Board feels, based on the information reviewed to date, that NSE is effectively regulating the project and making informed decisions based on sound technical information. The public should have confidence that the NSE is taking "due care" to protect the environment.
- The Board feels that NSE has built a dedicated team appropriate for regulating this project.
- While all of the partners are committed to the project the Board feels there is a need to improve the efficiency and transparency of inter-organization interactions and communications.
- The Board feels that the MOA dealing with regulatory issues is an important document and will be a key aspect in the ongoing compliance monitoring of the project.

Background

On July 12, 2006, a Joint Review Panel completed an environmental assessment of the Sydney Tar Ponds and Coke Ovens Sites Remediation Project with the issuance of an Environmental Assessment Report. The Panel concluded that;

“the Project and the technically and economically feasible means of carrying out the Project are unlikely to result in significant adverse environmental effects provided that the recommendations of the Panel are followed and implemented”.

The report included a total of fifty-five recommendations of which number 53 dealt with the Tar Ponds and Coke Ovens, Remediation Monitoring Oversight Board. This states that;

“The Panel recommends that PWGSC and NSEL, before construction begins, appoint an independent three-member monitoring oversight board with a formal mandate tied in to the Federal-Provincial Regulatory Plan. The monitoring oversight board would act in a formal technical review capacity to ensure the general public that the project is proceeding within its approved guidelines. The board would meet as often as required and no less than twice a year and would report to PWGSC and NSEL. All reports from the Board would be made public. At the completion of the construction phase the role of the Board would be re-evaluated and would therefore be tied into the mandate of the Tar Ponds and Coke Ovens Remediation Maintenance and Monitoring Act.”

In response to Recommendation 53, Public Works and Government Services Canada (PWGSC) responded with the following:

“The GoC agrees in principle with the recommendation and believes that the objective concerning independent oversight will be adequately met through the activities of the EMC and the Independent Engineer as established pursuant to the MOA. The GoC acknowledges the need and desire to inform members of the public and stakeholders of the program results, as the Project

proceeds, in an open and transparent process. The GoC will work with its provincial partner to ensure that this occurs.”

Notwithstanding the federal PWGSC’s position, Mark Parent, the Provincial Environment Minister moved forward with the Joint Panel’s recommendation and on January 2008 appointed a three-member Remediation Monitoring Oversight Board (RMOB), consisting of the following individuals:

Sinclair Dewis, Chair
Colin Hines, Member, and
Edwin MacLellan, Member

The RMOB was provided with a Terms of Reference by the Minister which is described in Appendix E of the Nova Scotia Response to the Joint Panel Review Environmental Assessment. This states that “*the purpose of the RMOB is to ensure public confidence that the remediation is being appropriately regulated by Nova Scotia Environment and is proceeding within approved regulatory guidelines, permits and approvals*”. Further, the RMOB will report on the progress and effectiveness of NSE’s regulatory management process for the project. The key responsibilities of the RMOB include;

- reviewing project permits and approvals issued by NSE;
- reviewing any project regulatory issues that arise;
- taking public input into account and providing the public with the opportunity to provide feedback on regulatory issues;
- reporting annually to the Minister on project regulatory management issues.

Approach

Since our appointment, the Remediation Monitoring Oversight Board has been active in developing an understanding of the project and, in

particular, evaluating the role and activities of NSE as the primary regulator. Our approach to date has included;

- convening six RMOB meetings (Feb. 27, Mar. 26, Sept. 24, Oct. 29-30, 2008 and Jan. 5 and March 9, 2009);
- conducting twenty-four interviews with Nova Scotia Environment (NSE) staff and key project partners including representatives from Public Works and Government Services Canada (PWGSC), Nova Scotia Transportation and Infrastructure Renewal (NSTIR), the Sydney Tar Pond Agency (STPA), the Independent Engineer (IE), Earth Tech (now AECOM), Environment Canada (EC), NSE and EC enforcement staff, and the Community Liaison Committee;
- reviewing various reports and documents relating to the project;
- reviewing NSE legislation and all permits and approvals issued to date;
- developing an understanding of the project, the organizations involved, their roles and responsibilities and activities to date;
- reviewing regulatory issues and concerns including enforcement actions, public complaints, NSE response to complaints and concerns by the proponent regarding the NSE regulatory process;
- notifying the public of the creation and role of our Board (by circulating a notice and posting information on the NSE web site) and making ourselves available to receive questions or comments relating to the activities of NSE.

Specifically the Board has reviewed in a general manner the various project components and their status. An overview of this information is contained in the NSE Quarterly Reports developed for the RMOB which summarizes the approvals issued to date, correspondence, emergency calls, site audits, departmental response to

complaints/inquiries, compliance/non-compliance issues, monitoring data and committee participation.

In addition, we have reviewed, in a general manner, the Environmental Management Plan (including the Environmental Protection Plan, Public Reporting Protocol, Air Monitoring Program, and Ground Water Monitoring Program).

Introduction

The Sydney Tar Pond and Coke Ovens Sites Remediation Project is a very large scale project with a substantial budget of approximately \$400 million dollars. It aims to reduce the risk to both people and the environment in the Sydney area. The project will employ technologies which are new to Nova Scotia and which will be adapted to site specific conditions. While new to this area, it should be noted that this technology has been routinely used in other parts of the USA and Europe and will be adapted by an experienced contractor.

The project is very high profile and as such has received a great deal of public scrutiny and media attention, as noted in both the joint panel report and the ongoing media coverage. The level of attention has created a great deal of pressure on all the agencies, government departments and private companies involved to ensure that the project is done right, on time (planned completion by 2014) and within budget. It should be noted that few, if any, projects in Nova Scotia or possibly elsewhere in Canada have received the level of effort, scrutiny and specialized attention from government, and industry as elicited in this case.

The federal government has identified that all the Tar Ponds and Coke Ovens properties will be turned over to the Province at the end of the remediation project. In addition, the Joint Panel report identified *“that the Province will assume full ownership of the Tar Pond and Coke Ovens sites following remediation”* and that *“STPA, the regulators and the public must be prepared for the possibility that the Tar Pond site will have to be managed in perpetuity”*.

The Panel report identified that “*the main regulatory responsibility for the ongoing Project lies with the Province*” and “*Nova Scotia Environment and Labour*” (now NSE) will be “*the lead provincial department for environmental protection*”. As the lead provincial regulator, NSE is responsible for issuing permits and approvals and is also “*responsible for compliance monitoring and responding to environmental emergencies*”.

The Panel report identified that “*in addition to receiving required approvals, STPA would also be required to comply with a number of NSE administered regulations addressing air quality, handling and transport of dangerous goods, petroleum management, water and wastewater.*”

The Panel observed that this “*remediation Project represents a significant regulatory challenge*” for a number of reasons including; “*this is the largest remediation ever carried out in Nova Scotia, the variety of technologies and activities taking place, and the limited experience with these particular technologies*”.

The Panel observed “*that regulating the Project may be challenging because of its size and complexity, and because federal and provincial governments are involved both through their respective jurisdictions and because they own different areas of the Project sites*”.

The Panel also recommended (# 50) that “*ongoing maintenance and monitoring be guaranteed through a provincial act of the legislature*”. In their response to the Panel, NSE identified that it will amend its regulations to establish long term approval over site activities. Following from this NSE has made changes to the Activities Designation Regulations to capture any work taking place on this site. Any requirements for ongoing (long term) monitoring and maintenance will be included in specific clauses in the individual Approvals issued for the project.

In addition to NSE, a the number of different organizations are involved in the project planning and implementation including PWGSC, NSTIR, STPA, the IE, Earth Tech, EC, the Environmental Management Committee and the Community Liaison Committee.

Each of these organizations has different mandates and interests. Following from this there is a need for strong inter-organization co-ordination and communication to ensure the project proceeds in an efficient, timely and expeditious manner.

Issues / Findings

a) NSE as Regulator

As noted, the Province will inherit the tar ponds and cove ovens property on completion of the remediation project and hence any long term liability associated with this property. NSE has been identified as the lead provincial regulator and as such is responsible for issuing all project permits and approvals. Based on these liability and regulatory responsibilities, it is extremely important that the Province, through NSE, takes all “due care” to ensure that all work is subjected to sufficient scrutiny to provide a level of comfort to everyone concerned.

In our deliberations we received comments from several project partners indicating that in some cases NSE was slow in reviewing documents, asked for information which was not necessary for the regulatory process, on occasion the comments from NSE (staff and/or third party specialists) were somewhat unfocused and that NSE made unexpected changes to project criteria. Several partners expressed the concern that these issues may have resulted in delays and hence impacted project costs.

While there may be some truth to these statements we feel “due care” is required by NSE to ensure that they “get it right” and that they resist the considerable pressure by partners to rush their approvals. In addition, it is our understanding that the situation is improving as the review process evolves and the various project partners increase their capacity and experience with this new and challenging project and technology. A process has also been implemented where NSE staff review project documents at various stages in their development (75, 95 and 100 per cent completion) such that there are “no surprises” for anyone involved.

In a similar vein, we observed that some partners did not appear to completely understand the role of the regulator. As mentioned, some felt that NSE requested too much information, asked for supplementary information or for clarification on what they considered non regulatory details. It was also mentioned that some of the comments received from NSE were unfocused.

Conversely, it was mentioned that some of the project documents submitted to the regulatory body were lacking in detail and did not contain all the information needed by the regulator.

It must be emphasized that NSE is the lead regulator for reducing risks to human health and the environment and their permit/approval is required before any of the project components can proceed. Hence, the better the quality of the information supplied to NSE the less potential there is for supplementary comments and associated delays.

A number of comments were received relating to NSE's development and ultimate selection of the performance criteria for the S&S process, the analytical parameters that would be required and the air quality requirements for the project. This process appears to have resulted in some confusion.

The Board feels it is important that the regulator sets understandable and predictable criteria as early in the planning process as possible. This being said, in a project of this size and complexity it may be necessary to make changes or modifications over time as project planning evolves and new and more appropriate information becomes available. In addition, it is difficult for the regulator to issue a final approval until the final design details have been identified. It is our understanding that this issue has been resolved and the project criteria have now been finalized.

To date NSE has issued six Part V approvals including;

- TP2 - Material Processing Facility;
- TP6A - Flow Diversion;
- CO5 - Vertical Cut Off Walls;

- CO6 - CO Surface Cap;
- CO7 - CO Brook Sediment Removal & GW Collection;
- CO8 - Water Treatment Plant.

It is anticipated that a total of eleven approvals will be issued for the Tar Ponds and Coke Ovens project. The Board has reviewed all the approval documents but to date has not undertaken detailed audits as this work is in the planning and / or contract tender phase. The Board intends to evaluate these approvals in the coming year and will document our findings in subsequent reports.

It should be noted that NSE keeps close track of their response time relating to approvals, responding to complaints, criteria exceedance and on site inspections (Appendix B of NSE's Quarterly Reports to RMOB). To date, they have met or exceeded their requirements, with only a few minor exceptions.

Finding

Based on the information reviewed to date by our Board we feel that NSEL is effectively regulating the project and making informed decisions based on sound technical information. In our opinion, the level of scrutiny and regulatory attention is above and beyond anything that would be expected for any other project in NS or possibly Canada. We feel the public should have confidence that the NSE is taking "due care" to protect the environment.

b) NSE Capacity

In response to the Joint Panel recommendation (# 28), NSE, like all the project partners, has dedicated considerable staff and resources to this project. To date, they have staffed a dedicated team of seven individuals in the Sydney office including a Senior Manager, Senior Engineer, two Inspector Specialists, two Junior Engineers, and an Administrative Assistant. The Sydney staff are complimented by a number of technical specialists in the Halifax regional office.

Due to the complexity of the project and the associated technology that is being employed in this project, NSE has recognized the need to engage outside technical experts to compliment their in-house resources. It is our understanding that several administrative options and appropriate funding is available to retain third party experts on an as required basis. To date, third party contracts are in place to assist with the review of S/S technologies, air dispersion modeling and air technology support.

In our deliberations we heard comments indicating there was a steep learning curve for new staff on joining the project team and this in turn could relate to the timeliness and quality of inputs. In addition, it was noted that there is the need for the NSE Sydney staff to ensure that third party advice is scrutinized internally to verify that it is in context with the project and that there is value added to the planning process.

Following from these points it is our understanding that while there may have been some challenges in the past these are being worked out as the project regulatory process evolves. As mentioned, a review process has been put in place where project documents are reviewed by NSE at various stages of completion. In addition, there is a legislated requirement (Environment Act) for the review of project documents to be completed within 74 days. Data has been provided to the Board which identifies NSE has met or exceeded these required timelines.

Finding

Based on the information received to date, it is our opinion that NSEL has built a dedicated team appropriate for regulating this project. As NSE staff gain more knowledge, experience and understanding of the project their capacity should continue to increase.

We feel it is necessary and desirable for NSE to compliment their internal team with external experts on an as required basis. In our opinion, NSE should be commended on their commitment of resources to this project as well as the quality of the individuals that have been added to their team.

c) Communications

As already mentioned, this is a very large and complex project involving a number of different organizations all of which having somewhat different perspectives, roles and mandates. The complexity of the interactions and communications between these organizations is apparent when one looks at the Tar Ponds and Coke Ovens project management structure. During our discussions we received information indicating that inter organization relations and communications were improving as the project unfolds however there were still areas where further dialogue is needed.

The NS Response to the Joint Panel states that “*STPA will be required to submit detailed design and engineering plans as part of the Part V Approval application*” for review by NSE. As mentioned, the Board received several comments relating to the amount and scope of information requested by NSE and the timeliness and focus of some of these comments. The Board feels it is incumbent on the Agency and project managers to provide good quality and comprehensive information to NSE to facilitate their review and subsequent development of approvals for the various project components. If incomplete or inappropriate information is provided, NSE has no choice but to seek additional information or clarification prior to issuing their approvals.

Finding

It was apparent to the Board that all of the partners are committed to the project however there still appears to be a need to improve the efficiency and transparency of inter-organization interactions and communications. Due to the time pressures associated with the project, the Board feels that the current communications challenges should be promptly addressed. If these issues can not be resolved in a timely and efficient manner by the parties involved, there may be a need to employ outside expertise to facilitate a resolution.

In addition, it is important that the partners routinely clarify their individual roles as the project moves forward. Although the various parties identified that they were meeting on a fairly regular basis there appears to be some confusion or misunderstanding on the outcomes of some meetings. Hence, it would seem appropriate that the various parties meet on a regular formalized basis to discuss any issues relating to communications and responsibilities.

The Board feels that as the regulator, NSE has to maintain somewhat of an arms length posture while attempting to keep the lines of communication open with other organizations and the public.

With respect to meeting project timelines, the Board received information which indicated that NSE was reviewing the project documents at various stages in their development and that all Part V approvals have been completed within the required review periods.

d) Memorandum of Agreement

The Joint Panel recommended *“that it should be incumbent on the federal and provincial governments to prepare a regulatory plan for the Project and then commit to the plan through a Memorandum of Agreement”*. In response to this recommendation (#47) NSE indicated it had *“a history of working cooperatively with federal regulatory agencies”* and would work *“to formalize a plan for regulatory oversight”*. This MOA would focus on sharing technical resources and streamlining regulatory compliance.

Schedule E of the federal-provincial Final Cost Share Agreement Providing for the Financial and Governance Arrangement identifies that the *“PWGSC project leadership is viewed as visibly accountable for all federal interests with respect to the project, with commensurate responsibilities and authorities clearly delegated and communicated to federal managers. This accountability for the federal interest is qualified as not including the accountabilities for various regulatory responsibilities which will be exercised by other*

government departments, including Environment Canada and Health Canada”.

In addition, section 5.0 of the Government of Canada’s response to the joint panel identifies that *“within the context of the STP Project, EC will provide specialist advice and guidance to the lead federal department on environmental matters, will be represented on the proposed Environmental Management Committee (EMC), and will enforce relevant federal legislation and regulations.”*

A Memorandum of Agreement Respecting the Environmental Regulatory Management Plan for the Remediation of the Sydney Tar Ponds and Coke Ovens Sites between PWGSC and NSE was signed on March 27, 2009. The MOA outlines in general terms the process to be followed to ensure that the project meets both the federal and provincial regulatory requirements. Section 5.2 of the MOA states that *“The Parties agree that Nova Scotia will be the lead on all enforcement matters, except for enforcement under the federal Fisheries Act and Canadian Environmental Protection Act which are the responsibility of Environment Canada...”*. Section 5.2 of the MOA states that *“the Parties agree to share information on respective enforcement activities occurring on the Project site.”*

The MOA also identifies that communication on matters pertaining to regulatory issues will be facilitated through the Environmental Management Committee.

Finding

The Board feels that this MOA dealing with regulatory issues is an important document which will be a key in the ongoing compliance monitoring of the Project. This document identifies NSE as the lead agency for enforcement matters with Environment Canada enforcing appropriate federal regulations. It is expected that the majority of the enforcement responsibilities will fall to NSE as they will relate to the terms and conditions of the Approvals issued by NSE.

The agreement identifies that federal advice on environmental and regulatory matters will be conveyed through the EMC and

communicated to Nova Scotia by the Government of Canada, Co-chair of the EMC. It should be noted that PWGSC does not have any environmental regulatory enforcement authority.

Notwithstanding the MOA, we feel it is important that NSE continues to work closely with EC, as the lead federal regulator, as they are in a position to provide moral and technical support. In addition this cooperative approach will help avoid possible duplication of effort. We also feel it is important that the EMC continues to meet regularly and functions as a forum for dealing with all environmental issues, particularly those relating to regulatory compliance.

The RMOB will monitor the ongoing implementation and effectiveness of the MOA during the coming year