

Chapter 4: Environment – Environmental Assessments



Overall Conclusion:

- Poor monitoring of projects increases risks to the environment
- Monitoring of terms and conditions of project approvals is weak
- Department not evaluating whether terms and conditions are working
- Department meeting legislative requirements for issuing approvals

Why we did this audit:

- Protecting the environment is important to Nova Scotians
- Environmental impacts should be known before a project begins
- Steps should be taken to limit environmental impacts of projects
- Projects should be monitored to ensure the environment is protected

What we found in our audit:

Monitoring of approved projects

- Monitoring not done for almost half the project terms and conditions we tested
- Department not appropriately recording all approved projects in tracking system
- Department hasn't assessed if terms and conditions have decreased environmental risks
- Department taking steps to improve monitoring

Setting terms and conditions for project approval

- Some terms and conditions lack details such as deadlines and reporting requirements
- Approvals issued without consulting inspectors who know risks

- Lack of discussion with project owners on understanding terms and conditions
- Department doesn't follow up with project reviewers to ensure responses provided

Approving project applications

- Applications for approvals contained information required by legislation
- Minister given all required information to make project approval decision
- Terms and conditions of approvals can reduce risks, but are less useful because of poor monitoring



Recommendations at a Glance

Recommendation 4.1

Environment should develop and implement a process for entering approved projects and the associated terms and conditions into the Department's tracking system to help ensure regular monitoring is completed.

Recommendation 4.2

Environment should regularly review whether standard terms and conditions of approved projects are effective at addressing identified risks.

Recommendation 4.3

Environment should develop terms and conditions for approved projects in consultation with the inspectors responsible for ensuring they are met. Terms and conditions should include clear timeframes for completion and requirements to provide documentation to confirm terms and conditions have been satisfied.

Recommendation 4.4

Environment should provide relevant draft terms and conditions of approved projects that involve other departments to the respective departments for review and confirmation of their responsibility under the terms and conditions.

Recommendation 4.5

Environment should meet with project owners to discuss the terms and conditions once projects are approved. There should also be regular meetings between Nova Scotia Environment and project owners to discuss the status of terms and conditions of approved projects.

Recommendation 4.6

Environment should document and implement a process for using government reviewers on environmental assessment applications. The process should include how reviewers are selected, the Department's expectations of reviewers and a follow-up process if responses are not provided by the deadline.

Recommendation 4.7

Environment should complete and document a review of information sent to the Minister of Environment for deciding on whether to approve or reject a project.

4 Environment: Environmental Assessments

Background

- 4.1 Nova Scotia Environment uses environmental assessments to identify potential negative environmental impacts of proposed projects before they begin. The goal is to approve sustainable projects while also promoting the protection and appropriate use of the environment. The Minister of Environment decides whether a project can proceed if the results of the assessment determine the potential impacts can be properly managed.
- 4.2 An environmental assessment is not required for every proposed project. In Nova Scotia, the Environmental Assessment Regulations list the types of projects that require an environmental assessment. Projects requiring an environmental assessment can include wind farms, quarries, pipelines and energy facilities. From 2013 to 2016, 53 of 54 environmental assessments conducted were approved.
- 4.3 Terms and conditions that project owners must meet are attached to project approvals. The purpose of these is to address environmental risks identified through the assessment process and ensure steps are taken to reduce the impact of the project on the environment. A typical approval includes approximately 30 terms and conditions such as monitoring programs for wildlife, habitat and groundwater well surveys. Nova Scotia Environment is responsible for ensuring project owners are complying with the terms and conditions of the approval and determining whether risks to the environment are being reduced.
- 4.4 An environmental assessment approval allows a project owner to proceed with the proposed project. However, projects may not immediately start when the approval is received and for some types of projects, additional approvals, such as industrial approval or wetland approval issued by Nova Scotia Environment, are needed before the project can begin.

Significant Audit Observations

Monitoring of Environmental Assessment Approvals

Terms and conditions are not monitored

- 4.5 Nova Scotia Environment is not monitoring terms and conditions attached to approved projects. Terms and conditions are future actions added to

approved projects to address risks projects pose to the environment. These can include various wildlife and habit monitoring programs, or restricting construction during animal breeding seasons. Failure to properly monitor compliance with these requirements increases the risk that project owners are not protecting the environment. Without monitoring, Nova Scotia Environment does not know if the terms and conditions of approved projects are effective in reducing impacts on the environment.

- 4.6 We reviewed a sample of 22 approved projects which contained 672 terms and conditions. We then selected two to three terms and conditions from each approved project to determine if Nova Scotia Environment had evidence to confirm the term and condition had been satisfied. In total, we examined 53 of the 672 terms and conditions identified. For 23, the Department did not confirm the term and condition had been satisfied. For example, Nova Scotia Environment did not have evidence to confirm requirements such as groundwater well and wildlife surveys were completed by the project owner or work was completed outside of animal breeding seasons.



List of approved projects and terms and conditions not complete

- 4.7 Nova Scotia Environment did not record approved projects and their associated terms and conditions in its electronic tracking system. This meant inspectors were not assigned responsibility for monitoring terms and conditions of approved projects and were unable to take advantage of system features that help in monitoring. Features include reminders of when inspections and audits are due, and allows managers to monitor the work of inspectors.
- 4.8 Management uses the information included in the tracking system to ensure the required monitoring is completed. If approved projects are not in the tracking system, managers do not have access to complete information and may not know if terms and conditions are properly monitored.
- 4.9 Other approvals, such as industrial and wetland approvals issued by the Department, are automatically loaded into the Department's tracking system and assigned to an inspector. One division within Nova Scotia Environment is responsible for approving projects while another division oversees whether project owners are satisfying the terms and conditions of approved projects. Once the approval is issued, it must be manually entered by the division responsible for monitoring project owners for compliance with the terms and conditions. However, this did not happen.
- 4.10 Nova Scotia Environment conducted an internal review in 2015, finding that only 75 of the 276 environmental assessment approvals issued between 1989 and 2015 had been recorded in the tracking system. They also concluded for almost all the approved projects entered in the tracking system, the terms and conditions of the approval were not included. Until the Department identified



this issue there was nearly no monitoring of the terms and conditions attached to approved projects.

- 4.11 Nova Scotia Environment has worked to address these issues, but our work found that there are still problems. Four of the 22 approved projects we examined were not recorded in the tracking system. For 15 of the remaining 18 approvals, the terms and conditions were not added to the tracking system in a way which allowed the inspectors to use the system features for monitoring.
- 4.12 Information on terms and conditions was not stored in a single file for each approved project, making it difficult to confirm if terms and conditions had been met. When completing our work, we often had to look in several different locations to determine if terms and conditions had been satisfied.
- 4.13 For example, we identified several cases in which the project owner provided requirements such as wildlife surveys and confirmation of site restoration insurance to staff at Nova Scotia Environment or other government departments, but it was not passed on to the inspectors responsible for monitoring the approval. Inspectors did not know the information was provided nor did they follow up with the project owners to request the information.
- 4.14 All information related to the terms and conditions of approved projects should be kept in a central location so it can be quickly determined which ones have been satisfied and those that still require monitoring.

Recommendation 4.1

Environment should develop and implement a process for entering approved projects and the associated terms and conditions into the Department's tracking system to help ensure regular monitoring is completed.

Environment Response: *Agree. In February 2017, NSE implemented a System of Notification and Approval Processing (SNAP). Going forward, approvals will be captured in the system to enable terms and conditions to be tracked. Timing: Currently underway*



Regular assessments of terms and conditions not completed

- 4.15 Neither the Department nor project owners completed the required assessments for any of the projects we examined. Without this reporting, Nova Scotia Environment does not have the necessary information to ensure terms and conditions of approved projects were satisfied and environmental risks were properly managed.



- 4.16 Nova Scotia Environment's documented process for monitoring the terms and conditions of approved projects includes:
- a Department assessment of whether terms and conditions are met and effective at reducing risk; and
 - a review of the project owner's assessment of whether terms and conditions are met along with comments or suggestions for future environmental assessments.
- 4.17 Nova Scotia Environment's evaluation of the effectiveness of the terms and conditions of approved projects for reducing risks to the environment is especially important. This evaluation considers things such as the results of water or wildlife monitoring completed by the project owner, results of Departmental inspections, and complaints received against the project. Without this information, the Department may not be aware of the need for additional monitoring or changes to the terms and conditions. This process also provides information that can be used by the Department when approving future projects.
- 4.18 Nova Scotia Environment staff acknowledged this process is not followed and noted it needs to be updated since it was developed and implemented in 2002. While we recognize the process is old and there have been changes within the Department since 2002, regularly assessing the status and effectiveness of the terms and conditions of approved projects is an important practice that should be completed.

Recommendation 4.2

Environment should regularly review whether standard terms and conditions of approved projects are effective at addressing identified risks.

Environment Response: *Agree. We have committed to reviewing and updating the Internal Guide to EA Follow-up Procedures. This guide will establish procedures for reviewing Environmental Assessment terms and conditions to ensure enforceability leading to better compliance. Timing: 2017-18*

Approval of Projects



Wording of terms and conditions attached to approvals not clear

- 4.19 Applications are reviewed by Nova Scotia Environment to identify risks to the environment posed by the project. Approvals are subject to owners satisfying the terms and conditions included with it. If terms and conditions are not properly developed it is possible risks to the environment may go unaddressed.



- 4.20 The terms and conditions attached to approved projects were not always clear and well defined. We found problems with 11 of the 53 terms and conditions we examined. Specific issues included no established timelines for when the project owner must comply, no requirement to submit documentation to confirm a term and condition has been satisfied, and no indication of who the supporting documentation must be submitted to.
- 4.21 For example, one term and condition stated “*The Approval Holder must develop a turbine lighting plan in consultation with CWS [Canadian Wildlife Services] and Transport Canada*”. There was no deadline for the development of the plan and no requirement for the plan to be submitted to Nova Scotia Environment. The Department did not know this was completed until we asked about it as part of the audit.
- 4.22 Nova Scotia Environment’s ability to hold project owners accountable is limited when terms and conditions of approved projects are not clear. This increases risk to the environment. For example, if a project owner is not required to provide documentation to confirm a term and condition has been satisfied, it is difficult for the Department to act against the project owner if nothing is submitted. Inspectors told us they had concerns related to the enforceability of some terms and conditions. Inspectors believed their lack of involvement in the development of the terms and conditions contributed to this issue.
- 4.23 The Department’s process states draft terms and conditions are to be given to inspectors for review and feedback before final approval. However, based on our work, this did not always happen. For 11 of the 22 approved projects we examined, the terms and conditions were not given to inspectors for review before the approval was issued. Inspector input on terms and conditions is an important step in setting clear and enforceable expectations for project owners and limiting impacts on the environment.

Recommendation 4.3

Environment should develop terms and conditions for approved projects in consultation with the inspectors responsible for ensuring they are met. Terms and conditions should include clear timeframes for completion and requirements to provide documentation to confirm terms and conditions have been satisfied.

Environment Response: *Agree. NSE is undertaking a larger project to review terms and conditions of its approvals including EA authorizations. The project is intended to update/review existing terms and conditions to ensure requirements are relevant, clear, consistent and enforceable. Timing: 2018-19*



Responsibility for some terms and conditions not established

- 4.24 Nova Scotia Environment did not review terms and conditions of approved projects with other departments before approval. Departments other than Nova Scotia Environment are often responsible for receiving information from project owners and confirming if terms and conditions have been satisfied. However, Nova Scotia Environment did not consult with other departments on the terms and conditions before issuing the approval. For example, the project owner might have to develop a moose monitoring program that is to the satisfaction of the Department of Natural Resources. If Nova Scotia Environment does not discuss terms and conditions assigned to other departments with those departments, those other departments may not be aware of their responsibility or understand of what is expected of them. This could result in terms and conditions not being properly monitored or information not passed on to Nova Scotia Environment.

Recommendation 4.4

Environment should provide relevant draft terms and conditions of approved projects that involve other departments to the respective departments for review and confirmation of their responsibility under the terms and conditions.

Environment Response: *Agree. The review and update of the EA Checklists will ensure a record of communication with other departments is clear and a record is maintained. Timing: June 2017*



Review of terms and conditions with project owners not done

- 4.25 The Department did not review terms and conditions of approved projects with the project owners as required. These meetings help ensure project owners fully understand what is required of them and the expectations of Nova Scotia Environment. For example, meetings can provide an opportunity to discuss periods during the year when project owners are not allowed to clear land or steps that must be taken to monitor wildlife within the project area.
- 4.26 The Department's process is to meet with the project owner within four weeks of the project being approved to review the terms and conditions. This meeting did not occur for three of the 22 approved projects we examined. For another seven projects, the meeting was not held within four weeks of the approval being granted. In two of these, approximately a year had passed before Nova Scotia Environment met with the project owner.

Recommendation 4.5

Environment should meet with project owners to discuss the terms and conditions once projects are approved. There should also be regular meetings between Nova Scotia Environment and project owners to discuss the status of terms and conditions of approved projects.



Environment Response: *Agree. The Internal Guide to EA Follow-up Procedures will be updated to ensure the initial meeting with the approval holder is completed. Subsequent meetings with the approval holder to review terms and conditions will be captured during an audit or inspection process. Timing: 2017-18*

Better processes needed for reviewers of environmental assessment applications

- 4.27 Government reviewers were used to assess each of the 22 approved projects we examined. As an example, applications were sent to divisions within Nova Scotia Environment to assess a proposed project's impact on groundwater, while the Department of Natural Resources was used to identify risks to wildlife. Comments from reviewers were considered in developing terms and conditions for approved projects.
- 4.28 While the use of reviewers provides valuable feedback on proposed projects, improvements are needed. Currently, applications are sent to a broad list of reviewers. For some of the environmental assessment applications we examined, the documentation was provided to over 40 individuals. The Department does not have a process to identify the specific reviewers that should be used. Furthermore, no guidance is provided to reviewers on what Nova Scotia Environment's expectations are for the review. For example, it isn't clear whether the individuals are to review the entire application or just sections.
- 4.29 Also, Nova Scotia Environment does not have a process to follow up with reviewers if a response is not received. While comments from some reviewers were provided for each of the applications we examined, not all reviewers responded. The Department did not know if a reviewer did not respond because the request was not received, not enough time was given to review the application, or if the reviewer had no comments to provide.

Recommendation 4.6

Environment should document and implement a process for using government reviewers on environmental assessment applications. The process should include how reviewers are selected, the Department's expectations of reviewers and a follow-up process if responses are not provided by the deadline.

Environment Response: *Agree. The review and update of the EA Checklists will ensure interactions with reviewers are identified, carried out and documented. Timing: June 2017*

Project owners are submitting required information

- 4.30 The Environmental Assessment Regulations outline the minimum information project owners are to include with their application for an approval and what



the Minister of Environment must consider in making the decision to approve or reject the project. For example, project owners are to provide information on the purpose and need for the project, along with details on the potential effects on groundwater, vegetation, and wildlife in the area. Factors the Minister is to consider in making a decision include the nature and sensitivity of the project area, along with any potential or known environmental impacts on species at risk and their habitats.

- 4.31 For each of the 22 approved projects selected we examined whether project owners provided the required information and whether the summary of the project included all factors to be considered by the Minister in making a decision. We did not find any significant instances in which the legislative requirements were not met for the applications we examined. In all cases, the information provided by the project owners met the legislative requirements and the Minister was provided with all required information to be used in deciding to approve the project.
- 4.32 Terms and conditions to manage the risks of the project identified during the application process were attached to each of the approved projects we examined. However, the lack of monitoring of the terms and conditions of approved projects previously discussed weakens the work done by Nova Scotia Environment in deciding to approve a project. The value of the terms and conditions can only be achieved if there is regular monitoring to ensure project owners comply.
- 4.33 One area in which Nova Scotia Environment can improve its process is the review of an application before it goes to the Minister for a decision. When staff within the Department complete their review, a summary of the project and associated risks is compiled and forwarded to the Minister. However, there is no review of the summary to ensure the details and risks of the project are accurately and completely captured.

Recommendation 4.7

Environment should complete and document a review of information sent to the Minister of Environment for deciding on whether to approve or reject a project.

Environment Response: *Agree. A routing sheet will be instituted to ensure a review of information is in place before it is sent to the Minister. Timing: June 2017*



Appendix I

Audit Objectives and Scope

In winter 2017, we completed a performance audit at Nova Scotia Environment on the Environmental Assessment program. The audit was conducted in accordance with sections 18 and 21 of the Auditor General Act, and auditing standards of the Chartered Professional Accountants of Canada.

The purpose of the audit was to determine whether Nova Scotia Environment is appropriately reviewing environmental assessments to ensure potential impacts to the environment are avoided or reduced, monitoring the risks identified, and taking action when necessary.

The objectives of the audit were to determine whether Nova Scotia Environment:

- conducted environmental assessments that are consistent with relevant legislation, policies and procedures;
- has processes to monitor compliance with terms and conditions of environmental assessment approvals;
- has a process to evaluate the effectiveness of the environmental assessment program in reducing the impact of adverse effects or significant environmental effects.

Generally accepted criteria consistent with the objectives of the audit did not exist. Audit criteria were developed specifically for this engagement. Criteria were accepted as appropriate by senior management of Nova Scotia Environment.

Our audit approach included an examination of documentation of systems and processes; examination of legislation, policies, guidelines, standards, and other documentation; and testing compliance with legislation, policies, guidelines, and standards. We interviewed management and staff at Nova Scotia Environment. Our main audit period included activities between January 2013 to August 2016. However, we examined activities outside of this period when necessary.

We did not comment on the accuracy of the information provided by project owners included in environmental assessment applications, nor did we comment on the technical feedback provided on applications by government reviewers. Our work focused on whether the required steps were followed in issuing environmental assessment approvals and whether the Department ensured project owners met the terms and conditions of the approvals.