

Regulatory Harmonization of the Saskatchewan Uranium Mines

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ABSTRACT

The uranium mining industry in Saskatchewan produces approximately 30% of the world's production of uranium. The industry is regulated by federal and provincial regulators. The Canadian Nuclear Safety Commission is the principal federal regulator. The principal Saskatchewan provincial regulators are Saskatchewan Environment for provincial environmental regulations and Saskatchewan Labour for occupational health and safety regulations. In the past, mine and mill operators have requested harmonization in areas such as inspections and reporting requirements from the regulators. On February 14, 2003, Saskatchewan Environment, Saskatchewan Labour and the Canadian Nuclear Safety Commission signed a historical agreement for federal/provincial co-operation called the *Canadian Nuclear Safety Commission - Saskatchewan Administrative Agreement for the Regulation of Health, Safety and the Environment at Saskatchewan Uranium Mines and Mills*. This initiative responds to a recommendation made by the Joint Federal-Provincial Panel on Uranium Mining Developments in Northern Saskatchewan in 1997 and lays the groundwork to co-ordinate and harmonize their respective regulatory regimes.

The implementation of the Agreement has been very successful. This paper will address the content of the Agreement including the commitments, the deliverables and the expectations for a harmonized compliance program, harmonized reporting, and the review of harmonized assessment and licensing processes as well as possible referencing of Saskatchewan Environment and Saskatchewan Labour regulations in the *Nuclear Safety and Control Act*. The management and implementation process will also be discussed including the schedule, stakeholder communication, the results to date and the lessons learned.

1. INTRODUCTION

The Canadian Nuclear Safety Commission (CNSC) and the Saskatchewan departments of Environment and Labour have negotiated an Administrative Agreement¹ (Agreement) which optimizes the participation of Saskatchewan Environment (SE) and Saskatchewan Labour (SL) in the administration of the CNSC's regulatory regime, while continuing to ensure the protection of health, safety and the environment with respect to uranium mines and mills.

The Agreement responds to the 1997 recommendation of the Joint Federal-Provincial Panel on Uranium Mining Developments in Northern Saskatchewan² that further co-operation between the federal and provincial agencies regulating uranium mines and mills would reduce costs, simplify compliance on the part of licensees and make it easier for the public to research the impacts of uranium mines and mills.

2. BACKGROUND

Uranium mining has a long history in Saskatchewan. Uranium mining can be divided into two distinct phases. The early era is associated with the initial growth of the nuclear industry. The modern era actually commenced with the Rabbit Lake mine in 1970. It was followed by the Cluff Lake mine, Key Lake mine, McArthur River mine and McClean Lake mine (Figure 1). The Cigar Lake Project is presently under construction.



Figure 1: Uranium Mining in Saskatchewan

The history of the regulatory process for uranium mining in Saskatchewan has evolved to meet the needs of society as well as industry. The CNSC's predecessor, the

Atomic Energy Control Board (AECB), was established under the *Atomic Energy Control Act* of 1946. Its role was to assist the Government of Canada in its efforts "... to make provision for the control and supervision of the development, application and use of atomic energy and to enable Canada to participate effectively in measures of international control of atomic energy." The AECB had three main functions in the areas of regulation, mining and research. The AECB's regulatory requirements progressed to keep pace and to protect the environment, health and safety of persons. The federal government recognized in 1997 that the legislation needed to be updated, resulting in the present *Nuclear Safety Control Act* (NSCA) and its associated regulations. On May 31, 2000 with the proclamation of the supporting regulations, the Canadian Nuclear Safety Commission replaced the AECB.

The CNSC uses a licensing process whereby the licensee is required to apply for a licence, and the application must have sufficient information as detailed in the NSCA and regulations. An assessment is done to verify the applicant is qualified, has sufficient numbers of trained employees, and the required policies and programs to ensure the protection of environment, health and safety of workers and the maintenance of national security and the measures required to implement international obligations agreed to by Canada. CNSC's compliance activities are CNSC's measures of promotion, verification and enforcement aimed at securing compliance. Promotion refers to all CNSC's activities related to fostering compliance with regulatory requirements. Verification includes all activities related to determining and documenting if a licensee's performance meets the regulatory requirements. Inspections are the principal source of information for verification. There are two types of inspections (Type I and Type II). Type I inspections are on-site audits and evaluations of the licensee's programs, processes and practices. Type II inspections are routine on-site checks of the licensee's facilities. Enforcement measures are taken to motivate the licensee back into compliance with the regulatory requirements in a timely manner.

In the province of Saskatchewan, the provincial Department of Labour and the Department of Environment are also regulating the province's uranium mines in occupational health and safety by Saskatchewan Labour (SL) and the environment by Saskatchewan Environment (SE). Compliance programs are based on the *Occupational Health and Safety Act* and regulations for SL. SE compliance is based on adherence to legislative requirements and confirmation of environmental assessment predictions based on monitoring.

As the federal and provincial regulatory processes evolved, it became apparent that there was growing concern to make them more effective and efficient. Industry and government identified the desire for a harmonized regulatory system for Saskatchewan uranium mines. The desire was also identified by the Joint Federal-Provincial Panel on Uranium Mines, during their 1993-1997 sessions.

In response to this recommendation, a Memorandum of Understanding³ (MOU) to advance this process was signed in October 2000 between the CNSC and the province of Saskatchewan, represented by SE and SL. The MOU guided the negotiations between the CNSC, SL and SE over the next two years. The objectives of the MOU were to:

- provide for the protection of the health and safety of workers, the public and the environment;
- meet the regulatory requirements of the CNSC, SE and SL;
- optimize the participation of SE and SL in the administration of the CNSC's regulatory regime, where practical;
- optimize regulatory efficiency and effectiveness;
- minimize regulatory overlap and duplication, and co-ordinate regulatory requirements. For example, this means a licensee would not be required to report the same information in two different formats;
- improve delivery of the regulatory program for industry and the public;
- allow for future opportunities to develop a "one-window" regulatory system, to the fullest extent possible; and
- not increase the financial costs to industry as a result of the harmonization.

To establish a more detailed path forward, the parties agreed to formalize their respective roles and responsibilities, which facilitated the drafting of an Administrative Agreement. The historic agreement was signed in February 2003.

3. ADMINISTRATIVE AGREEMENT

A joint press release issued by the Government of Saskatchewan and the Canadian Nuclear Safety Commission in February 2003 stated:

"The Government of Saskatchewan and the Canadian Nuclear Safety Commission (CNSC) today announced the signing of an agreement that will lead to greater administrative efficiency in regulating the uranium industry. This initiative responds to a recommendation made by the Joint Federal-Provincial Panel on Uranium Mining Developments in Northern Saskatchewan and lays the groundwork for the two groups to coordinate and harmonize their respective regulatory regimes."

The Administrative Agreement is for a three-year period, which would lead to further negotiations based on the progress made during the agreement term. The Administrative Agreement is more clearly explained by its objectives, guiding principles, commitments and deliverables.

3.1 Objectives

The objectives of the Agreement are to provide for collaboration between the CNSC, SE and SL in the regulation of uranium mines and mills in Saskatchewan, in order to:

- protect the health, safety and security of Canadians and their environment;
- harmonize the CNSC's, and Saskatchewan's regulatory requirements and regulatory activities, where practicable;

- optimize the participation of SE and SL in the CNSC's assessment, licensing and compliance programs for uranium mines and mills, where practicable; and
- improve the delivery of regulatory programs through a single regulatory process.

3.2 Guiding Principles

The guiding principles of the Agreement for uranium mines and mills are the foundation for the essence of the document, and are also the guiding principles for those involved in the implementation. The principles are listed as follows with the details provided in Appendix A:

1. Protection of health, safety and the environment.
2. Commitment to action.
3. Commitment to collaboration.
4. Transparency and stakeholder involvement.
5. To improve the delivery of their regulatory programs for industry and the public.
6. Timely sharing of information on interjurisdictional impacts.
7. Consult in the development of regulations, standards and guides affecting uranium mines and mills.
8. Share information on measures for national security, national measures of control and international obligations to which Canada has agreed.
9. Integrate, where practicable, their respective compliance, assessment and licensing activities.
10. Reducing overlap and duplication.
11. Incorporate by reference provincial statutes to the NSCA, where it is effective and efficient.
12. The regulatory activities undertaken will be clearly identified and the expectations clearly articulated.
13. Adequate resources.
14. The objectives are completed in a timely manner set out in this agreement.
15. The costs shall be borne by the Party for whom the activities are carried out.
16. Each Party remains accountable for their respective regulatory requirements.

3.3 Commitments

The commitments are as follows:

- The CNSC, SE and SL agree to develop and implement in a phased manner, a harmonized compliance program with trained provincial CNSC inspectors, which will lead, within three years, to the administration by Saskatchewan of agreed-upon elements of the CNSC's compliance program.

- The parties would develop harmonized licensee reporting requirements that meet the regulatory obligations and eliminate conflicting or duplicating reporting.
- In a pilot project, Saskatchewan officials will participate in the preparation of CNSC staff's licensing recommendations to the Commission. The results of the pilot project will be taken into consideration in the development and implementation of a harmonized licensing assessment process. These negotiations are to commence within two years of the signing of the Agreement.
- SE and SL would lead a process to determine the appropriateness of the incorporation of provincial regulations concerning the protection of health, safety and the environment by reference as regulations under the NSCA.

3.4 Deliverables, Schedule and Implementation

3.4.1. Harmonized compliance program

In the Agreement, CNSC, SE and SL agree to develop a harmonized compliance program. This is to occur as soon as reasonably possible. This consists of the following:

- CNSC delegates the responsibility of the CNSC's Type II routine inspection to SE and SL where practical. This requires developing a harmonized inspection and reporting that would merge the requirements of CNSC, SE and SL.
- The inspection and the reports of the inspection are to be of sufficient scope and detail to provide CNSC and the licensees an indication of the overall performance of the mine operations.
- SE and SL inspectors are to be trained by the CNSC and be appointed as provincial CNSC inspectors under the NSCA following successful completion of training.

This is to be followed by refinement of the harmonized compliance program and a formal agreement for provincial administration of agreed to elements of the harmonized compliance program by the end of the Agreement in February 2006.

The harmonized inspection reporting was scheduled to be completed in the second quarter of 2003, followed by training of SE and SL personnel to qualify as CNSC inspectors. Training consisted of classroom training in the NSCA and regulations, the licensing module, compliance module and harmonized inspection module in 2003, and field training for 2004.

The development of a harmonized compliance program is in progress and on schedule. The development of the harmonized inspection component of this program was completed in the first half of 2004. This involved the development of a risk-based harmonized baseline checklist of the elements to be checked in an inspection. A field report format was developed that allowed detailing the method and findings for the elements planned to be done at the inspection. A harmonized exit report was also

developed that would be used by the three regulators. These are presently in use and receiving favorable feedback, and will undergo periodic joint review for continuous improvement.

Training of provincial personnel has been successfully conducted. A program for training provincial personnel as CNSC inspectors was developed in the first half of 2003. Designated personnel from SL and SE underwent training in the last half of 2003 and the first half of 2004, which consisted of several two-day classroom sessions and field training. COGEMA Resources Inc. has been generous in allowing the entire base field training to be done at the McClean Lake Operation. The base field training is followed by field training at the designated operation to which the trainee will be assigned. The training will culminate in the designation of qualified provincial personnel as CNSC inspectors under the NSCA. As of February 1, 2005, two SL inspectors and two SE project officers have been appointed as CNSC inspectors, with others to follow. The provincial CNSC inspectors work closely with the CNSC project officers to ensure good communication and expectations are being met.

3.4.2 Harmonized licensee reporting

In the Agreement, the CNSC, SE and SL agree to review the existing reporting at the uranium mines, and in co-operation with the uranium mines operators, develop an efficient and effective reporting system that meets all the regulatory requirements within the Agreement term.

The schedule for the harmonized reporting has three parts. The first part is to review the annual report submitted by the licensee and agree upon an efficient and effective report that meets the regulators' requirements. The second part is then to review and harmonize the monthly reports and the frequency, and the third part is to review the Status of the Environment report, which is produced every five years.

Discussions on the harmonization of licensee reporting was initiated in May 2004. A committee consisting of representatives from the CNSC, SE, SL, industry licensees, and other relevant regulatory agencies has been formed to develop a harmonized licensee reporting framework, starting with the Annual Reports.

3.4.3 Harmonized licensing assessment process

In the Agreement, SE and SL agree to participate in the CNSC's licensing process on one or two major licensing assessment projects. Results of the pilot projects will be used for future negotiations of a harmonized assessment and licensing process. The Agreement states that within two years (February 2005), the CNSC, SE and SL will enter into further negotiations with respect to the development of a harmonized assessment and licensing regime. These negotiations will build upon the co-operative arrangements put in place under this Agreement, and take into consideration the lessons learned during the development of the harmonized compliance program and the pilot program on licensing assessment.

Provincial personnel have been observing and assisting the CNSC in licensing activities for two major projects, the McClean Lake Operation re-licensing and the

McClean Lake Sue E Pit licensing. This forms the basis for the continued discussions on the development and implementation of a harmonized assessment and licensing process that is scheduled to start in the second quarter of 2005.

3.4.4 *Reference as regulations under the NSCA*

In the Agreement, SE and SL agree to lead a process where the parties would review the federal and provincial statutes and regulations to determine the legal framework required and the appropriateness of the incorporation of provincial regulations under the NSCA.

Discussions between SE and Saskatchewan Justice have been initiated. These discussions are necessary for reviewing the legal framework for incorporation, by reference, of provincial legislation into regulations made pursuant to the NSCA. To date, these discussions have included the identification of the particular legislation that should be considered and the level of involvement that may be required from other regulatory agencies (based on the requirements of their legislation). It is expected that this commitment will require some time to meet, likely beyond the current three-year term of the Agreement because of the various levels of involvement required between several agencies.

3.5 Organization

The management of the Agreement is achieved by having two joint committees made up of equal representation from each of the three regulators. The first committee is the Management Committee that currently consists of:

- CNSC Barclay Howden, Director General, Directorate of Nuclear Cycle
and Facilities Regulation
Kevin Scissons, Director, Uranium Mines and Lands Evaluation Division
- SL Allan Walker, Executive Director, Occupational Health and Safety
Ernie Becker, Director of Mine Safety and Radiation
- SE Joe Muldoon, Executive Director
Blaine Ganong, Director

The purpose of the Management Committee is to oversee the implementation of the Agreement. This committee meets twice per year or as required.

The details of the implementation are developed, carried out, assessed and reported by the Co-ordinating Committee. This Co-ordinating Committee meets as required. The committee members are as follows:

- CNSC Rick Forbes, Project Officer, Uranium Mines and Lands Evaluation
Division

- SL Geoff Alderman, Inspector of Mines, Mines Safety Unit Occupational Health and Safety Division
- SE Tim Moulding, Environmental Project Officer, Environmental Protection Branch, Air and Land Section, Industrial, Uranium and Hardrock Unit

3.6 Stakeholder Participation

The stakeholders are participating staff from the CNSC, SE and SL, Saskatchewan uranium mines and mill licensees and their employees, and interest groups such as the Environmental Quality Committee who represents northern Saskatchewan communities on uranium mining issues. Presentations and consultations concerning the Agreement were given in the early stage of the Agreement and during its implementation with timely updates for the stakeholders.

3.7 Resolution of Disagreements

The Agreement includes a process for ensuring consultation between the CNSC, SE and SL to resolve any disagreements regarding the administration of the Agreement. The process for resolving disagreements does not interfere with the responsibilities of the CNSC, SE or SL to enforce their respective regulatory requirements, or to alter any rights of licensees or any persons affected by a decision to comment upon, dispute or appeal orders or decisions, as provided for in statutes.

4. FUTURE

There will continue to be further discussions on the licensing and permitting process to possibly lead to further effectiveness and efficiency. In addition, the respective roles of the CNSC, SL and SE under non-routine or extreme events at Saskatchewan uranium mine and mill sites will also be reviewed and co-ordinated.

It is likely that future negotiations will need to involve representatives from other federal agencies, particularly Environment Canada and Fisheries and Oceans Canada. This is becoming more evident as efforts to evaluate legislation continue. Ideally, regulation of the uranium mining industry in Saskatchewan should be as effective and efficient as present legislation allows, while ensuring the continued health and safety of workers and the public, and the protection of the environment.

5. LESSONS LEARNED

There have been many lessons learned to date. The more important ones are as follows:

- The negotiations were moved along to a successful conclusion once the participants had agreed to the guiding principles, the framework of using an Administrative Agreement approach, and a commitment to continue negotiations at the completion of the term of the Agreement.

- The two committee system (Management and Co-ordinating) has helped in the implementation of the Agreement. The Co-ordinating Committee works within the Agreement for the implementation. The Management Committee monitors and provides direction as required.
- Defining the requirements, deliverables and schedule has helped the Co-ordinating Committee to develop and implement the plan and provide the reporting structure to the Management Committee.
- The harmonized inspection and reporting was successfully implemented by having one participant provide the documentation for discussion and editing by the other participants.
- The process also calls for annual reviews of progress and assessment of implemented components of the Agreement. This allows for improvements to be made as we progress through the life of the Agreement.
- Finally, any success to this harmonization is directly attributable to the positive working environment of all participants.

6. CONCLUSION

The major success of the Agreement to date has been the development and implementation of a harmonized inspection program, culminating with the appointment of several provincial personnel as CNSC inspectors. This will be the basis for an overall harmonized compliance program. There will be annual reviews of the harmonized inspection program to assess and improve upon the lessons learned. At the completion of the three-year term of the Agreement, the parties will agree upon the elements of the compliance program that SL and SE will perform on behalf of the CNSC.

The harmonized reporting will continue to be discussed, developed and implemented throughout the term of the Agreement. The referencing of the provincial regulations in the NSCA will be by best efforts.

The Agreement was the result of sustained negotiations based on well-defined objectives with all parties co-operating. The Agreement is a well-structured and worded document based on the key guiding principles to implement the objectives. The co-operation between SL, SE and the CNSC has resulted in excellent progress in the implementation of the Agreement. The objectives of the Agreement are being met as the implementation progresses. There are some key areas which remain to be implemented, but with the sustained support of the parties, a successful implementation is certainly achievable.

7. REFERENCES

- [1] Government of Canada and Government of Saskatchewan, CNSC-Saskatchewan Administrative Agreement for the Regulation of Health, Safety and the Environment at Saskatchewan Uranium Mines and Mills, Regina/Ottawa (2003).

- [2] Government of Saskatchewan and Government of Canada, McArthur Uranium Mine Project – Report of the Joint Federal-Provincial Panel on Uranium Mining Developments in Northern Saskatchewan, Regina (1997).
- [3] Government of Saskatchewan and Government of Canada, Memorandum of Understanding between SERM, Labour and the Canadian Nuclear Safety Commission Respecting the Regulation of Uranium Mining and Milling Facilities in Saskatchewan, Regina/Ottawa (2000).

Appendix A

Guiding Principles

1. **Protection of Health, Safety and the Environment** - The Parties undertake that, when developing and implementing any arrangements or measures as part of this Agreement, the Parties' priority will be to ensure the protection of health, safety and the environment.
2. **Commitment to Action** - The Parties to this Agreement commit to timely action on matters within their jurisdiction while respecting the jurisdiction of the other Party.
3. **Commitment to Collaboration** - The Parties commit to recognizing each other's strengths and capabilities and to consult and co-operate with each other in the spirit of collaboration on matters of mutual interest.
4. **Transparency and Stakeholder Involvement** - The Agreement is in accordance with any CNSC or provincial practices or policies regarding regulatory transparency, and undertakes to provide licensees and other stakeholders affected by this agreement with opportunities to comment on its scope and provisions, and on its administration.
5. **Improved Access to Regulatory Regime** - The Parties undertake to improve the delivery of their regulatory programs for industry and the public through increased accessibility and responsiveness and by minimizing, where possible, stakeholders' points of interaction with the regulatory agencies through a "single window" regulatory process.
6. **Timely Sharing of Information on Interjurisdictional Impacts** - The Parties undertake to share, in a timely manner, information on regulatory activities and regulatory initiatives which are pertinent to activities and decisions within the jurisdiction of the other Party or Parties, subject to any provisions of federal and provincial legislation related to access to information.
7. **Regulations, Standards and Guides** - The Parties undertake to consult with the other Party in the development of regulations, standards and guides affecting uranium mines and mills, so as to avoid conflicting regulatory requirements and to minimize duplication to the extent possible.
8. **International Obligations** - The Parties commit to share information on measures to prevent unreasonable risk to national security and to achieve conformity with national measures of control and international obligations to which Canada has agreed, as they relate to uranium mines and mills.

9. **Integration** - The Parties undertake to integrate, to the extent practicable, their respective compliance, assessment and licensing activities related to the regulation of uranium mines and mills.
10. **Reducing Overlap and Duplication** - The Parties commit to harmonizing their regulatory regimes and activities, where practicable.
11. **Incorporation by Reference of Provincial Statutes** - The Parties commit to work together to incorporate by reference provincial statutes as regulations pursuant to the NSCA, where such incorporation is an effective and efficient means of reducing regulatory overlap and duplication.
12. **Audit of Regulatory Activities Administered by Another Party** - The Parties agree that, where regulatory activities are undertaken by a Party on behalf of the other Party, the regulatory activities undertaken will be clearly identified and the expectations with regard to the performance of the regulatory agency carrying out the activity will be clearly articulated and subject to audit.
13. **Adequate Resources** - The Parties undertake to ensure that adequate resources are available within the regulatory system, so as to ensure that the Parties and stakeholders have confidence in the regulatory work being performed.
14. **Timeliness** - The Parties undertake to ensure that undertakings, strategies and objectives are commenced and completed in a timely manner in accordance with the timelines set out in this agreement and any sub agreement.
15. **Cost Sharing** - The costs associated with activities taken pursuant to this agreement shall be borne by the Party for whom or on whose behalf such activities are carried out.
16. **Accountability** - The Parties agree that each Party remains accountable for the administration of their respective regulatory requirements, and for demonstrating that this Agreement and its implementation is effective and efficient in achieving its purpose and objectives.