

1 **COGEMA Resources Inc.:**
2 **Environmental Assessment Screening**
3 **Of COGEMA Resources Inc.'s proposal**
4 **to mine and mill uranium ore from its**
5 **Sue E site, situated at the McClean**
6 **Operation in Northern Saskatchewan**

7
8 **05-H13.1 / 05-H13.1.A**

9 **Oral presentation by**
10 **COGEMA Resources Inc.**

11 **MR. CHING:** Thank you and good afternoon,
12 Madam Chair and Members of the Commission.

13 For the record, I am Don Ching, President
14 and CEO for COGEMA Resources Inc.

15 With me here today, on behalf of COGEMA
16 Resources, are Bob Pollock, to my immediate right, Vice-
17 president of Environment Health and Safety and behind me
18 is John Rowson, Director of McClean Lake Regulatory
19 Affairs and Jim Corman, General Manager of McClean Lake
20 Operations.

21 In addition, we have staff available by
22 videoconference at the CNSC office in Saskatoon, should
23 there be a detailed question that we are unable to
24 adequately deal with.

25 I am as well pleased to advise that there

1 are two of the in-scope employees also present in
2 Saskatoon from our mine site, Mr. Nesbitt and Mr. Pinger,
3 Mr. Pinger being the President of the union local
4 representing the in-scope employees at the mine site.

5 We are here today in support of the
6 screening report prepared by the CNSC staff for the Sue E
7 project and their recommendation that the Commission
8 accept the screening report and take the decision to
9 proceed to consideration of a licence application made by
10 COGEMA Resources for development of the project.

11 On the monitor is the list which outlines
12 our presentation today and since this is my first
13 appearance before the Commission, I would like to take a
14 few moments to introduce myself to the Commission before I
15 introduce the project.

16 Jim Corman will then provide a brief
17 overview of McClean Lake operation and describe the
18 proposed Sue E Project.

19 John Rowson will next describe the
20 environmental assessment approach and methodology and our
21 comprehensive stakeholder consultation process. And,
22 lastly, Bob Pollock will provide the remainder and the
23 conclusion of our presentation.

24 With regard to myself, I graduated from law
25 school at the University of Saskatchewan in 1967. After

1 practicing law in Saskatoon for four years I was named
2 Deputy Minister of Labour for the Province of Saskatchewan
3 in the fall of 1971. Part of my responsibilities as
4 Deputy Minister was to draft the labour laws for the
5 Province of Saskatchewan.

6 During my term the Department revised the
7 *Trade Union Act*, the *Labour Standards Act* and the *Workers*
8 *Compensation Act*.

9 It was during this time that I became
10 fascinated by the issue of safety in the workplace. And
11 one of the major achievements of my career, I consider,
12 was the drafting of and the championing of the first
13 comprehensive *Occupational Health and Safety Act* on the
14 North American continent.

15 This legislation, the *Saskatchewan*
16 *Occupational Health and Safety Act, 1972* has since become
17 the template for similar legislation in every jurisdiction
18 across Canada. It was this legislation which, for the
19 first time, legislated the joint responsibility of
20 employees and managers for good health and safety in the
21 workplace by requiring joint employee/management
22 committees in every workplace with 10 employees or more.

23 It gave to those occupational health and
24 safety committees control over health and safety in the
25 workplace and recognized the right of every employee to

1 refuse to perform any type of work which that employee
2 might consider to endanger their health and safety, until
3 such time as the Occupational Health and Safety Committee
4 had reviewed the nature of the work and pronounced it to
5 be safe.

6 I note the ensuring worker health and
7 safety is one of the statutory objectives of this
8 Commission and I know that COGEMA Resources prides itself
9 on its record in this area and I can assure that as long
10 as I am CEO we will continue to pursue excellence in the
11 field of employee health and safety.

12 After the Department of Labour, I held a
13 number of senior management positions, generally related
14 to industrial relations and, for a time, practised law
15 specializing in labour relations matters.

16 More recently and just prior to taking up
17 my responsibilities in COGEMA Resources I was President
18 and CEO of Saskatchewan Telecommunications Corporation,
19 more commonly known as SaskTel. When I took up my duties
20 as head of SaskTel it was a provincially-owned Crown
21 corporation operating a telecommunications monopoly in the
22 Province of Saskatchewan.

23 It was during my term of office that the
24 field of telecommunications was deregulated in
25 Saskatchewan requiring a transformation of SaskTel from a

1 monopoly service provider to a company operating in a
2 fully competitive, fast moving, telecommunications market.

3 We also made the transition from provincial
4 regulation to federal regulation under the Canadian Radio
5 and Telecommunications Commission, or the CRTC.

6 All of this took place in a period of
7 active technological change in our industry. Despite this
8 turbulence, I think SaskTel remains financially sound,
9 with strong customer support and is well regarded as an
10 employer.

11 I am now President and CEO of COGEMA
12 Resources, part of a much larger organization known as
13 AREVA. It is clear that those aspects of my past which I
14 have just been talking about remain as important in this
15 job as in my previous jobs.

16 What is somewhat newer to me is a higher
17 profile on protection of the environment, not just during
18 the operating period of our facilities, but far into the
19 future. The care with which COGEMA Resources takes care
20 of the environment determines whether we continue to have
21 the support of the public, or government and of this
22 Commission.

23 If we fail to discharge our responsibility
24 to the environment we will be viewed negatively by all and
25 our operations will be therefore restricted.

1 Thus, our approach is to be proactive and
2 continually striving to protect the environment and to
3 define strategies and aggressively pursue environmental
4 objectives that will ensure our long-term success within a
5 healthy environment.

6 In summary, I feel I bring to COGEMA
7 Resources a strong commitment to protect worker health and
8 safety, to maintain good labour relations, to protect the
9 environment, to ensure the stakeholders are well informed
10 and to maintain public support for our activities.

11 I would now like to move on to the Sue E
12 Project.

13 The purpose of this project is
14 straightforward, to mine the Sue E ore body and to produce
15 uranium concentrate from the ore. The project will thus
16 provide additional ore supply to the McClean Lake Mill or
17 JEB Mill, as it is frequently called.

18 The project is an extension of activities
19 already approved for McClean Lake, activities carried out
20 with high levels of protection for both workers and the
21 environment and providing positive economic employment and
22 business opportunities, particularly to Northern
23 Saskatchewan but more broadly throughout the province.

24 Development of Sue E was not part of the
25 original environmental assessment carried out for the

1 McClean Lake Project by the joint federal-provincial panel
2 during the 1990s, however, and that is why one is now
3 required.

4 I would like to now turn over the
5 presentation to Jim Corman.

6 **MR. CORMAN:** Thank you, Don.

7 For the record, I am Jim Corman, General
8 Manager of the McClean Lake Operation.

9 As outlined in our written submission,
10 McClean Lake Operation consists of three main areas;
11 namely the JEB area where the mill tailings management
12 facility and camp are located; the Sink/Vulture Treated
13 Effluent Management System and the Sue mining area.

14 This figure, which it should be noted is
15 not true to scale, outlines the general area where the
16 proposed Sue E Pit is located. It is located about 500
17 metres south of the Sue C Pit and close to the small
18 shallow Sils Lake located to the east. McClean waste rock
19 stockpile is proposed in the northwest of the Sue E Pit.

20 About 600 hectares of land has been
21 disturbed at McClean Lake Operation to date, representing
22 about 16 per cent of the current surface lease area.

23 The Sue E Project will require about 56
24 hectares of additional disturbance related largely to pit
25 development and waste rock stockpile construction and

1 about 12 hectares of wetland disturbance in Sils Lake.

2 This slide illustrates to scale the Sue E
3 Pit and associated facilities superimposed onto a
4 satellite image of the Sue site. Presently we are
5 organizing to commence mining of the Sue A Pit this
6 summer.

7 The Sue E deposit will also be developed
8 using conventional open pit mining methods. The Sue E Pit
9 design is based on extensive geotechnical slope stability
10 analysis, taking into consideration the geometric outlines
11 of the ore body, the distribution of ore within the ore
12 body topography, geology and economic factors.

13 The pit has been designed to and will be
14 operated to meet all provincial and federal regulations.
15 The mining plan incorporates the experience gained during
16 the previous successful mining of the JEB and Sue C open
17 pits.

18 The Sue E Pit is similar in depth to the
19 mined out Sue C Pit. However, it is only about two-thirds
20 the size in terms of volume.

21 The ore mined from the Sue E Pit is
22 proposed to be hauled to and processed at the existing JEB
23 Mill which is currently undergoing expansion to receive
24 and process slurry ore from Cigar Lake. Both the existing
25 mill and the expanded mill will be able to process Sue E

1 ore with no modifications required.

2 Mining and milling Sue E ore will result in
3 incremental contributions to three key waste streams; they
4 are the waste water, tailings and waste rock. These next
5 three slides briefly discuss these incremental
6 contributions.

7 With respect to waste water, Sue E Project
8 activities will result in an additional release of
9 approximately 3 million cubic metres of treated effluent,
10 representing approximately three per cent of a
11 conservative estimate of the total over the life of the
12 McClean Lake Operation.

13 No changes to water treatment processes or
14 treated effluent management procedures are expected to be
15 required as a result of mining and processing Sue E ore.

16 As noted in our written submission and in
17 our recent presentation supporting a renewal of the
18 operating license for McClean Lake, the operation of the
19 water treatment plants have consistently met regulatory
20 requirements by substantial margins. The achieved results
21 in terms of concentrations and loadings of key potential
22 contaminants in the treated effluent have been better than
23 predicted in the original environmental assessment.

24 The JEB Tailings Management Facility, or
25 TMF, is designed for all tailings resulting from uranium

1 ore processing at McClean Lake Operation. The facility
2 incorporates numerous mitigative measures to minimize
3 environmental effects both during operations and for the
4 decommission facility over the long term.

5 About 460,000 tons of tailings will be
6 produced from milling Sue E ore, representing about 13 per
7 cent of the total projected tailings production over the
8 life of the JEB Mill.

9 No changes to the tailings management
10 system are required for preparing and managing Sue E
11 tailings.

12 Operational performance of the tailings
13 management system has been satisfactory to date and the
14 Tailings Optimization and Validation Program, or TOVP,
15 continues to demonstrate that objectives for long-term
16 performance are being met.

17 The TOVP results have been reported
18 annually to the regulatory agencies and we are now
19 compiling a comprehensive report on this five-year
20 program.

21 We have also initiated publication of the
22 key scientific work and findings in the peer-reviewed
23 scientific literature.

24 Sue E waste rock management was considered
25 in the context of all waste potentially to be managed at

1 McClean Lake Operation. A number of management options
2 were evaluated during the course of this assessment.
3 COGEMA Resources' preferred option provides a good balance
4 between minimizing the potential for long-term contaminant
5 flux to the environment and land disturbance related to
6 surface stockpiles while preserving mined-out open pit
7 volumes for disposal of potentially problematic materials
8 best disposed by this method.

9 The assessment of disposal options has
10 incorporated results from various waste rock
11 characterization studies that have been completed in
12 recent years. An investigation of the Sue E waste rock,
13 both clean and problematic, potentially problematic,
14 provided a comparison of results with those from other
15 studies. This approach resulted in a sound basis for the
16 current assessment.

17 Throughout the baseline and operational
18 periods, a large amount of information has been obtained
19 on the existing environment in the McClean Lake Operation
20 area. In support of this EA, supplemental baseline
21 investigations were conducted specifically at the Sue E
22 site.

23 Valued Ecosystem Components, or VECs, have
24 been identified in consultation with northern residents,
25 specifically the EQC members. The VEC framework is used

1 to identify ecological assessment endpoints which also
2 form the basis for monitoring an assessment of potential
3 operational effects on the local environment.

4 Overall, the monitoring results indicate
5 that activities at McClean Lake Operation to date have had
6 limited effects on the surrounding terrestrial and aquatic
7 environment.

8 The documented effects are consistent with
9 or less than those predicted in the original environmental
10 assessment for the project.

11 This ends my portion of the presentation.
12 John Rowson will provide an overview of the assessment
13 approach and methodology and stakeholder consultation
14 process.

15 **MR. ROWSON:** Thank you, Jim.

16 For the record, I am John Rowson, Director
17 of McClean Lake Regulatory Affairs.

18 I would like to start with some general
19 comments about this assessment.

20 This assessment is somewhat unique in that
21 the Sue E Project is an additional activity that will
22 largely utilize existing facilities which are or will be
23 used for a number of other current and planned activities.
24 This means that mitigative measures and operational
25 controls are already in place and their effectiveness is

1 illustrated by the operational monitoring and performance
2 record.

3 Furthermore, operational and environmental
4 performance data are available for input into predictions
5 of future performance. This provides confidence in these
6 future predictions.

7 Another important aspect of this assessment
8 is that we are able to benchmark current environmental
9 effects against the predictions from previous
10 environmental assessments.

11 It is important to note that Sue E
12 development will take place concurrently with a number of
13 other activities which are either currently licensed or
14 which have received government approvals following
15 environmental assessment.

16 Some potential effects are related only to
17 the Sue E development such as the additional disturbance
18 of surface land. However, in most cases, it is neither
19 practical nor desirable to attempt to consider only
20 additive effects related to the Sue E Project.

21 For example, there is only one tailings
22 management facility, the JEB TMF, at McClean Lake
23 Operation and thus the assessment should consider the
24 effects of the total amount of tailings to be disposed;
25 that is, the assessment needs to determine whether or not

1 the tailings from the Sue E Project, when combined with
2 tailings from the existing and approved projects, are
3 likely to result in significant adverse effects.

4 Similar arguments apply to the
5 consideration of waste rock management and treated
6 effluent releases.

7 Thus, we have considered the overall
8 effects when determining whether the Sue E Project is
9 likely to cause significant adverse effects. We have also
10 specifically identified the incremental effects.

11 The assessment of effects involves two
12 different timeframes. These are the operational period,
13 which includes the operational decommissioning and near-
14 term post-decommissioning period and the long term on a
15 scale of thousands of years.

16 The Operational Assessment Framework
17 focuses on emissions to air and surface water. This
18 assessment integrates contaminant dispersion modelling and
19 contaminant exposure pathway modelling to estimate
20 contaminant fate and the potential exposure of and risk to
21 valued ecosystem components.

22 The Long-Term Assessment Framework focuses
23 on the potential for groundwater transport of contaminants
24 over the long term from the disposal of tailings and waste
25 rock. This assessment uses hydro-geological and

1 contaminant transport modelling to estimate the timing and
2 location of any future releases to the receiving
3 environment.

4 As illustrated in this slide, assessment of
5 operational effects considered a variety of pathways by
6 which various biota, including humans, could be exposed to
7 potential contaminants from air and water emissions.
8 Emphasis was placed on incorporating site-specific
9 information and actual performance data in the
10 mathematical models used in the assessment. When combined
11 with a probabilistic assessment framework to address
12 uncertainty, a robust methodology resulted for identifying
13 and assessing potential effects during the operational
14 period.

15 For the long-term, both the tailings in the
16 JEB TMF and the waste rock in the Sue, Sue C, Sue A and
17 Sue E pits will be physically stable and isolated.
18 Groundwater, however, represents a pathway for potential
19 contaminant transport to surface waters. Extensive field
20 data acquisition, laboratory testing and modelling
21 programs were developed to assess the long-term effects.

22 In addition, sensitive analyses were
23 performed to account for uncertainties in the hydro-
24 geological and geochemical parameters.

25 Calculated long-term surface water

1 concentrations were compared to surface water quality
2 objectives and aquatic toxicity benchmarks. The predicted
3 results are only marginally above natural background
4 levels and well below benchmark values.

5 In summary, extensive operational
6 performance data and environmental monitoring data
7 underlie the future predictions made in this environmental
8 assessment. We are confident that this approach was
9 technically sound.

10 The approach resulted in an assessment that
11 consequently generated a limited number of comments from
12 the technical reviewers. All comments have been
13 satisfactorily addressed.

14 The results of this assessment indicated
15 that the predicted operational effects are generally
16 consistent with or less than those predicted in original
17 environmental assessments. The predicted operational
18 effects are limited to the Sink/Vulture Treated Effluent
19 Management System. These effects are expected to be
20 temporary and the integrity of local ecosystems and their
21 productive capacity will be maintained. Effects in the
22 area will be negligible after McClean Lake operation has
23 been decommissioned and the operation ceases to exist.

24 Sustainable development is at the heart of
25 AREVA strategy and COGEMA Resources is committed to

1 developing and enhancing social partnerships. Engaging
2 the public in meaningful discussions, particularly those
3 in Northern Saskatchewan, where our Uranium production
4 activities take place, is important to establishing and
5 maintaining partnerships.

6 As previously described, a wide range of
7 public information and consultation activities are
8 undertaken on an ongoing basis.

9 A focused Stakeholder Consultation Program
10 was developed and implemented for this assessment. The
11 primary goals were to provide information and to ensure
12 that the environmental and health and safety questions and
13 concerns were effectively communicated to and addressed by
14 COGEMA Resources during the course of this assessment.

15 A summary of consultation activities was
16 included in our written submission. As noted there, the
17 annual northern community meetings in 2004 and 2005, which
18 were extended to Saskatoon, took place while the Sue E
19 assessment was underway. Project information and progress
20 reports have been provided regularly to the stakeholder
21 groups, including the Athabasca Working Group and the
22 Environmental Quality Committee and provided in various
23 publications which cover a broad audience.

24 The environmental assessment process also
25 included two formal public review steps coordinated by

1 Saskatchewan Environment, the first for the Environmental
2 Impact Statement, or EIS, Draft Guidelines and the second
3 for the EIS itself.

4 In addition to the EIS, the review package
5 included a technical review comments and responses and a
6 CNSC draft screening report.

7 During this public review process, COGEMA
8 Resources also distributed the EIS Executive Summary to
9 all EQC and Athabasca Working Group members and to 11
10 environmental organizations.

11 This completes my portion of this
12 presentation. Bob Pollock will conclude.

13 **MR. POLLOCK:** Thank you, John.

14 For the record, I am Bob Pollock, Vice-
15 President, Environment Health and Safety.

16 Before concluding our presentation, I would
17 like to comment briefly on the integrated approach to
18 environmental protection that has been developed for
19 McClean Lake operation. It consists of integrating three
20 main components: environmental assessment; continual
21 improvement and adoptive management.

22 Within this framework, decisions are
23 precautionary with a degree of conservatism reflecting the
24 level of uncertainty that exists at the time the decision
25 is made.

1 We include a brief description of the
2 framework and an illustrated figure in our written
3 submission. The key point is that we are not just using
4 environmental assessment as a planning tool but rather
5 linking it to our environmental management system as the
6 basis for evaluating ongoing performance. This
7 facilitates both continuous improvement and, if necessary,
8 adaptive management through additional mitigative
9 measures.

10 In conclusion, I would like to summarize
11 our key points as follows. The proposed Sue E Project is
12 an extension of activities already being successfully
13 carried out at McClean Lake.

14 We believe that a sound technical approach,
15 making use of the operational and environmental data
16 available underlies our technical studies. We believe
17 that the stakeholder consultation process and the
18 technical review process have been satisfactorily
19 concluded. We agree with and support the conclusions of
20 the CNSC staff.

21 COGEMA Resources thus requests that the
22 Commission accept the staff conclusions and take a
23 decision that will allow consideration of our application
24 for an operating licence amendment for development of Sue
25 E to proceed.

1 We would be pleased to respond to any
2 questions which Commission Members may have. Thank you.

3 **THE CHAIRPERSON:** Does that conclude the
4 presentation from COGEMA Resources?

5 **MR. POLLOCK:** Yes, that concludes our
6 presentation, Madam Chair.

7 **THE CHAIRPERSON:** Thank you.

8 I would like to then, before we open the
9 floor for questions to the licensee, I would like to move
10 to the presentation from CNSC staff.

11 This is outlined in CMD document 05-H13,
12 and I will turn to the Director General responsible, Mr.
13 Barclay Howden.

14 Mr. Howden, you have the floor.

15 **05-H13**

16 **Oral presentation by**

17 **CNSC staff**

18 **MR. HOWDEN:** Thank you.

19 Good afternoon, Madam Chair, and Members of
20 the Commission. For the record, my name is Barclay
21 Howden. With me today are Kevin Scissons, Director of
22 Uranium Mines and Lands Evaluation Division; Michael
23 Rinker, Environmental Assessment Officer with the
24 Processing Facilities and Technical Support Division, and
25 the rest of our regulatory team for this project.

1 COGEMA Resources Incorporated has applied
2 to develop and mine the Sue E ore deposit and to produce
3 uranium concentrate at their McClean Lake operation.

4 In compliance with the requirements of the
5 *Canadian Environmental Assessment Act*, a screening
6 environmental assessment was conducted resulting in the
7 screening report which is the subject of today's
8 presentation.

9 Our presentation will ask you for your
10 decision on the recommendations in the screening report.

11 I will now ask Michael Rinker to present
12 the CMD.

13 **MR. RINKER:** Good afternoon, Madam
14 President and Members of the Commission. My name is
15 Michael Rinker from the Processing Facilities and
16 Technical Support Division.

17 Today I will present to you the screening
18 report for the environmental assessment of COGEMA's
19 proposal to develop and mine the Sue E deposit and to
20 produce a uranium concentrate.

21 In presenting the screening report, I will
22 briefly define or outline COGEMA's proposal. I will
23 review the environmental assessment process as applied to
24 the project. I will discuss the impacts identified in the
25 environmental assessment and whether or not the impacts

1 were determined to be adverse and significant.

2 I will describe the mitigation measures
3 that COGEMA has included as part of the proposal. I will
4 discuss follow-up considerations. Finally, I will make
5 recommendations to you with regards to the Screening
6 Report.

7 The purpose of the COGEMA proposal is to
8 mine the Sue E deposit located at McClean Lake Operation
9 and to produce a uranium concentrate for shipment to
10 customers. The proposed project involves mining the Sue E
11 ore body by open pit methods. If the project receives
12 approval the ore would be processed at the JEB Mill and
13 the tailings would be disposed of in the JEB Tailings
14 Management Facility. Waste rock will be managed on site.
15 No changes are proposed to the existing mill, the tailings
16 and management facility or the existing water treatment
17 facilities.

18 The proposed mining and milling of the Sue
19 E development is an undertaking in relation to a physical
20 work that would require authorization in the form of a
21 licensed amendment. Therefore, the proposal is defined as
22 a project under section 2 of the *Canadian Environmental*
23 *Assessment Act* and there is a trigger under the Law List
24 Regulations of the *Canadian Environmental Assessment Act*.
25 The project is not of a type identified in the

1 Comprehensive Studies List Regulations of the *Canadian*
2 *Environmental Assessment Act*.

3 CNSC staff are not aware of any potential
4 environmental effects or public concerns associated with
5 this project that would warrant referral to a mediator or
6 review panel pursuant to section 25 of the *Canadian*
7 *Environmental Assessment Act*. Therefore, pursuant to
8 subsection 18(1) of the *Canadian Environmental Assessment*
9 *Act* the CNSC is required to ensure the conduct of a
10 screening environmental assessment and the preparation of
11 a screening report before the proposed approval decision
12 can be made pursuant to the *Nuclear Safety and Control*
13 *Act*.

14 The CNSC is the only federal responsible
15 authority for this assessment. The federal authorities
16 for the assessment have been identified pursuant to
17 Federal Coordination Regulations. The federal authorities
18 are Environment Canada, Fisheries and Oceans Canada,
19 Natural Resources Canada, Indian and Northern Affairs
20 Canada and Health Canada.

21 COGEMA was required to conduct an
22 environmental impact assessment of the project and prepare
23 and submit an Environmental Impact Statement to the
24 Minister of Environment for Saskatchewan. Under the
25 Canada/Saskatchewan Agreement on Environmental Assessment

1 Cooperation federal and provincial environmental
2 assessment processes are coordinated for projects under
3 joint federal and provincial jurisdiction. In accordance
4 with the agreement Environmental Assessment Branch,
5 Province of Saskatchewan is the lead agency for this
6 assessment. Pursuant to subsection 12.4(1) of the
7 *Canadian Environmental Assessment Act* the Canadian
8 Environmental Assessment Agency is the federal
9 environmental assessment coordinator for this EA. Because
10 of this the environmental assessment is being conducted
11 under both federal and provincial jurisdictions.

12 In keeping with the Canada/Saskatchewan
13 Agreement on Environmental Assessment Cooperation,
14 preparation of the Environmental Assessment Guidelines was
15 coordinated with the Saskatchewan Environment to ensure
16 that the requirements for both the federal and provincial
17 approval processes were identified and to allow
18 coordination of subsequent reviews.

19 CNSC staff, together with Saskatchewan
20 Environment solicited comments from the public during the
21 development of the Project Specific Guidelines. No
22 comments were received from the public during this
23 consultation period.

24 The Project Specific Guidelines were
25 approved by the Province of Saskatchewan and a designated

1 officer of the Commission and issued to COGEMA. Pursuant
2 to section 17 of the *Canadian Environmental Assessment Act*
3 the CNSC delegated to COGEMA the completion of technical
4 studies to satisfy the requirements of the EA Guidelines.
5 Also delegated were certain responsibilities for public
6 consultation.

7 COGEMA provided technical studies in the
8 form of an Environmental Impact Statement, which was
9 submitted in November 2004. The Environmental Impact
10 Statement was reviewed by Saskatchewan Environment, CNSC
11 staff and the federal authorities for the EA. COGEMA
12 responded to the comments of the reviewers by issuing an
13 addendum to the Environmental Impact Statement. This
14 addendum was submitted in February 2005. The combination
15 of the Environmental Impact Statement and the addendum was
16 accepted as the final version of the technical studies.

17 CNSC drafted a Screening Report based on
18 the information in COGEMA's Environmental Impact Statement
19 and its associated addendum. Staff distributed the Draft
20 Screening Report to federal authorities for concurrence
21 and received concurrence from all federal authorities.

22 CNSC staff, together with Saskatchewan
23 Environment, solicited comments from the public on the
24 Draft Screening Report, the Environmental Impact Statement
25 and the Addendum. These documents were made available in

1 public libraries located in Ottawa, Saskatoon, Regina,
2 Prince Albert and La Ronge. Documents were also provided
3 directly to several northern hamlets, First Nations and
4 specific interest groups. In addition to direct mailing
5 and Internet notification, comments were invited by way of
6 radio broadcast in Cree, English and Dene, and public
7 notice advertisements were placed in the Saskatoon Star
8 Phoenix, the Prince Albert Daily Herald, and the La Ronge
9 Northerner. COGEMA also distributed an Executive Summary
10 of the EIS in English. Oral transcription of the
11 Executive Summary was also distributed in Dene and Cree.
12 CNSC staff submitted the Screening Report to the
13 Commission Secretariat for presentation to the Commission
14 today.

15 The structure of the Screening Report is
16 intended to serve as a framework for explaining how the
17 assessment factors are systematically considered. The
18 introductory chapters describe the screening process,
19 including the application of the *Canadian Environmental*
20 *Assessment Act* and the determination of scope of project
21 and scope of assessment.

22 The purpose of the project description is
23 to identify the specific works and activities of the
24 project that have the potential to interact with the
25 surrounding environment during normal operations, during

1 malfunctions and accidents. The project description also
2 includes proposed mitigation measures.

3 Information about the existing environment
4 is provided in the Screening Report to establish a base-
5 line against which environment effects, the project works
6 and activities can be assessed. The assessment effects
7 includes the identification of potential interactions
8 between the project and the existing environment, the
9 description of the resulting changes likely to occur as a
10 result of the interactions, the technically and
11 economically feasible mitigation measures that might be
12 applied to each likely effect and the determination of
13 significance of any effects remaining after the
14 application of mitigation measures.

15 The Screening Report provides a
16 consideration of the effects of the project together with
17 those of other projects and activities that have been, or
18 will be, carried out and for which the effects are
19 expected to overlap in the same geographic area and time.
20 These are referred to as cumulative effects of the
21 project.

22 The Screening Report provides the
23 consultation activities undertaken by the proponent, by
24 the province, and by CNSC staff. The report includes a
25 preliminary design and implementation plan for follow-up

1 and describes the approach for further developing the
2 follow-up program should the project be approved.

3 Finally, the Screening Report presents the
4 conclusions reached by CNSC staff and the resulting
5 recommendation.

6 The proposed Sue E Project would be located
7 within the boundaries of the McClean Lake operation that
8 is currently licensed. The McClean Lake operation is
9 located in the Athabasca Basin area of Saskatchewan
10 northwest of Wollaston Lake. The nearest community is
11 Wollaston Post located approximately 50 kilometers from
12 the mine site on the east side of Wollaston Lake.

13 The natural environment is described in the
14 Screening Report in terms of the aquatic environment,
15 atmospheric environment, geology and hydrogeology,
16 terrestrial environment and socioeconomic conditions.

17 The socioeconomic environment is described
18 in terms of population, economic base, land use, renewable
19 and non-renewable resources, cultural heritage, aboriginal
20 interest and health status.

21 The description of the natural environment
22 and the socioeconomic environment provide baseline
23 conditions that form the foundation for the environmental
24 assessment.

25 COGEMA provided an integrated approach to

1 this assessment which considered the Sue E Project
2 together with past, current and potential future
3 activities that could occur at the McClean Lake Operation.
4 Within this methodology, the incremental effects of the
5 Sue E Project are intermingled with other activities which
6 occur concurrently at the McClean Lake operation,
7 providing a quantitative and rigorous approach as the
8 basis for this assessment; that is, the technical document
9 provided an assessment of project activities from all past
10 activities, current operations and expected future
11 operations, together with the proposed Sue E Project that
12 is the subject of today's hearing.

13 At the initial screening, all project
14 activities were examined to identify those that could
15 possibly interact with the environment. In all, 324
16 potential interactions were identified.

17 At the second screening, each of the
18 interactions was assessed to determine its potential for a
19 measurable change to the environment. Among the criteria
20 used for the second screening were regulatory standards
21 and guidelines, scientific literature and the experience
22 of technical specialists. Those effects that were
23 determined to result in measurable changes to the
24 environment were advanced to a detailed assessment which
25 included consideration of the ability of COGEMA's planned

1 mitigation measures to reduce, control or eliminate
2 adverse effects.

3 Among COGEMA's planned mitigation measures
4 were the following: disposal of special waste in a mined-
5 out pit, disposal of tailings in the existing JEB Tailings
6 Management Facility, radiation protection measures such as
7 dust suppression, shielding, cleaning of equipment, and
8 operation of a modern water treatment facility.

9 Residual impacts are those impacts that
10 would occur after the implementation of mitigation
11 measures. Residual impacts were predicted to occur as a
12 result of air emissions, effluent release and land
13 disturbance.

14 Residual impacts from land disturbance
15 occur within the licensed area and would be remediated at
16 the end of the project.

17 Residual impacts from air emissions were
18 predicted to remain within the site boundary and below the
19 critical load for sensitive terrestrial and aquatic
20 systems.

21 Residual impacts from effluent release were
22 predicted to remain within the Sink/Vulture Treated
23 Effluent Management System. Only molybdenum was
24 identified to potentially affect muskrats downstream to
25 the Sink/Vulture Treated Effluent Management System. All

1 effects are predicted to reverse into the post-
2 decommissioning period.

3 This slide illustrates several aspect of
4 the assessment. The surface lease for the McClean Lake
5 operation is indicated by the green line. The location of
6 the proposed new facilities, including the Sue E open pit,
7 are shown in red and are located within the existing
8 surface lease.

9 All effects related to land disturbance are
10 also maintained within this licensed area. All effects
11 related to air emissions are maintained with this licensed
12 area. Most of the effects related to effluent release are
13 maintained within the Sink/Vulture Treated Effluent
14 Management System coloured bright green on this slide.
15 Effects related to molybdenum are also predicted in the
16 east basin of McClean Lake. Effects were not predicted
17 further downstream in Collins Creek that passes by the
18 Rabbit Lake mine. This has important implications towards
19 the assessment of cumulative effects as discussed on the
20 following slide.

21 Several potential malfunction and accident
22 scenarios were considered in terms of their probability of
23 occurring and potential effects. The scenarios included
24 means for potential contaminant release caused by spills,
25 leaks, power outages and system failures. The assessment

1 found at the plan design features of the project, combined
2 with the administrative controls such as audits,
3 procedures, inspections and codes of practice, would
4 address any potential adverse effect related to
5 malfunctions and accidents.

6 Therefore, there are no adverse effects
7 caused by malfunctions and accidents that are considered
8 likely that cannot be mitigated.

9 In considering the effects of the
10 environment on the project, COGEMA identified both
11 physical and biophysical conditions which might interact
12 with the project. The assessment found at the plan design
13 features of the project, combined with administrative
14 controls, would address any potential adverse effect.

15 Therefore, there are no adverse effects of
16 the environment on the Sue E Project that are considered
17 likely and that cannot be mitigated.

18 Cumulative effects are the effects on the
19 environment which result from the effects of the Sue E
20 Project when combined with those of other past, existing
21 or future projects. Cumulative effects would occur over a
22 certain period of time and space. The Rabbit Lake
23 facility is the nearest mine in the region but is located
24 beyond the reach of predicted effects. It was determined
25 that the only project that would potentially have effects

1 that overlap in time and space with effects from the Sue E
2 Project is the Caribou Project.

3 The Caribou Project is a potential future
4 project that represents a small ore pod located within the
5 McClean Lake facility. The assessment found that there
6 were no adverse cumulative effects that are considered
7 likely and that cannot be mitigated.

8 Other consultation activities were
9 implemented to ensure that the public is provided with the
10 information required to understand the environmental
11 assessment of the project and provide comment on the
12 findings presented in the Screening Report. The public
13 consultation activities were shared by CNSC staff,
14 Saskatchewan Environment and COGEMA.

15 The primary documents for this assessment
16 and that were included in public consultation are: the
17 project's Specific Guidelines, the Environmental Impact
18 Statement representing the technical studies, the Addendum
19 to the Environmental Impact Statement representing the
20 technical review comments and COGEMA's disposition of
21 these comments, the Executive Summary of the Assessment
22 representing COGEMA's summary of their environmental
23 assessment, and the Draft EA Screening Report representing
24 the federal EA document that is the subject of today's
25 hearing.

1 Staff ensured that all of these documents
2 were easily accessible to the public and that the public
3 was invited to provide comments specifically on the EA
4 Screening Report. No comments were received from the
5 public on any of these documents.

6 As the responsible authority for the
7 project, the CNSC has an obligation to ensure that the
8 Follow-Up Program is designed and implemented. The
9 objectives of a Follow-Up Program are to verify if the
10 environmental effects of the project are as predicted and
11 to confirm that the mitigation measures are implemented
12 and effective in reducing, controlling or eliminating
13 environmental effects. The Follow-Up Program for the Sue
14 E Project is associated with the hydrogeology of the Sue E
15 area and source term assumptions specific to the Sue E
16 waste rock and the potential short-term risk associated
17 with the residual molybdenum wastewater releases.

18 The mechanism for ensuring the development
19 and implementation of the Follow-Up Program is the CNSC
20 Licensing and Compliance Program. The objectives and
21 results of the Follow-Up Program will be posted on the
22 Canadian Environmental Assessment Registry located at the
23 Canadian Environmental Assessment Agency website.

24 The Minister of Environment for the
25 Province of Saskatchewan provided ministerial approval for

1 the mining of the Sue E ore body at the McClean Lake
2 operation. The reasons for a decision were communicated
3 to COGEMA on the 30th of May 2005. The Minister of
4 Environment concluded that the mining of the Sue E ore
5 body at McClean Lake is environmentally acceptable and
6 will not pose a significant risk to the environment in the
7 long term. The Minister also concluded that further
8 public review under the *Provincial Environmental*
9 *Assessment Act* is not necessary.

10 CNSC staff and other federal departments
11 have reviewed the environmental assessment documentation,
12 including the proposed mitigation measures. On the basis
13 of this review, CNSC staff concludes that the proposal to
14 develop and mine the Sue E deposit and to produce uranium
15 concentrate, taking into account the mitigation measures,
16 is not likely to cause significant environmental effects.

17 CNSC staff recommends that the Commission
18 accept this conclusion and proceed with the course of
19 action consistent with paragraph 20(1)(a) of the *Canadian*
20 *Environmental Assessment Act*. That course of action would
21 be consideration by the Commission under the *Nuclear*
22 *Safety and Control Act* of the application by COGEMA
23 Resources Inc. to develop and mine the Sue E deposit and
24 to produce uranium concentrate.

25 This concludes my presentation. Thank you.

1 **MR. HOWDEN:** Madam Chair, that concludes
2 the staff presentation. We are ready to respond to
3 questions.

4 **THE CHAIRPERSON:** Thank you. As such,
5 then, the floor is now opened for questions. May I start
6 with Mr. Graham?

7 **MEMBER GRAHAM:** Thank you. My first
8 question in that presentation, the Caribou Project is not
9 part of this. It is mentioned but it is not part of this;
10 is that correct? That would be for the CNSC staff.

11 **MR. RINKER:** Mike Rinker, for the record.
12 The Caribou Project was identified as a
13 potential future project. It has not been part of this
14 project.

15 **MEMBER GRAHAM:** Thank you. That was just
16 for clarification.

17 My first question is to the officials of
18 COGEMA with regard to your method of mining. In the past
19 you have always used a method of mining pits and perimeter
20 roads and excavation that way.

21 Has all of the EA study been focused around
22 that type of mining or could you use conveyor systems to
23 bring the ore body out which probably would be cheaper and
24 so on if you brought conveyors and so on? Can you use
25 whichever method you want or is it strictly to use the

1 methods you have in the past or past experience?

2 **MR. POLLOCK:** I will ask Jim Corman in a
3 moment to elaborate on your question, but the short answer
4 is we plan to use open pit mining, the same as has been
5 used to date at McClean Lake and, I might add, at the
6 other uranium mining operations in the Athabasca Basin. I
7 am not aware of any conveyor-type systems of tar sands
8 type of operations, for example. In northern Saskatchewan
9 uranium mining has been open pit right across the board.

10 **MEMBER GRAHAM:** I was referring to still
11 being an open pit but using -- to get the ore from the
12 bottom of the pit to the ground level and to the
13 stockpiles to get it in the form of a conveyor but that is
14 not your intention.

15 **MR. POLLOCK:** No.

16 **MEMBER GRAHAM:** Your intention would be to
17 use the same conventional way?

18 **MR. POLLOCK:** Yes, we are all truck and
19 shovel. I can ask Jim to elaborate. I am getting a
20 little off my area of expertise here when it comes to
21 mining operations.

22 **MR. CORMAN:** Jim Corman, for the record.

23 Yes, we are a conventional open pit truck
24 truck/shovel operation. The removal of material from the
25 pit itself, primarily the ore material, in using the

1 conveyor system, you end up double handling the ore and
2 with higher grade ores, you want to minimize the amount of
3 additional material handling.

4 **MEMBER GRAHAM:** My other question when I
5 was reading through the documentation was with regard to -
6 - there is really three types of material you are taking
7 off. You are taking off the overburden first and then you
8 are taking off the waste material and then you are getting
9 into the ore which would be a different type.

10 You are going to put the first two stages
11 into Sils Lake. I don't think I am pronouncing that
12 right, Sils Lake. If you take the vegetation off and use
13 that for the last part to put back on, really, that is
14 going to be in the bottom of the lake or the bottom part.
15 Will that be segregated or is that going to be kept in
16 such a way that it would be in a separate stockpile?

17 **MR. POLLOCK:** We will place the overburden
18 material from the Sue E pit in Sils Lake. The clean waste
19 rock will actually be stockpiled on the other side of the
20 pit from Sils Lake. On one of the illustrations there is
21 an area showing where the clean waste rock will be
22 stockpiled. So the overburden will be placed in Sils
23 Lake.

24 I will ask Jim to confirm and elaborate a
25 little bit, but I believe the actual organic material is

1 going to be further segregated and kind of stacked on the
2 end of the overburden or at the end of the overburden pile
3 so that it will -- it is good stuff when you come for
4 reclamation down the road. High organic content soils are
5 not very prevalent there. So we like to try and stockpile
6 it when we can for future reclamation, but I will ask Jim
7 to confirm that.

8 **MEMBER GRAHAM:** Well, that was my question.
9 It will be kept separate.

10 I guess before he does answer it, my other
11 question would be if it was in the lake and being the type
12 of material it is, not a rock and so on, sediment may
13 disperse through all of the lake. I was wondering, to
14 make sure that it didn't do that, how you are going to do
15 it and maybe you could explain?

16 **MR. POLLOCK:** The short answer is we hope
17 to be back in about two weeks to talk in a little bit more
18 detail about this initial work, but I will ask Jim. So we
19 don't have any good graphics with us today to illustrate
20 this, unfortunately. I will ask Jim to elaborate
21 verbally.

22 **MR. CORMAN:** Jim Corman, for the record,
23 again.

24 I terms of segregating out the organic
25 material from the till material, the till is essentially

1 glacial till, relatively impermeable type of material that
2 you can take and put into the lake and it will have
3 minimal dispersion into the water itself. The Sue area,
4 Sue E area itself on the west side of the pit is actually
5 a little bit higher topography. So that is where we will
6 start the stripping activities of the till to build a base
7 in Sils Lake. So we will start on the high end of the
8 topography where there isn't much for organics and that
9 will go into Sils Lake and then we will strip off the
10 organics, place that on top of the till in the north end
11 of Sils on top of the glacial till and then continue the
12 stripping.

13 **MEMBER GRAHAM:** The other question I had
14 with regard to displacement in Sils Lake, your water
15 treatment capacity can handle the displacement of the
16 water as it is treated and so on. Your existing water
17 treatment capacity can handle that?

18 **MR. POLLOCK:** Yes. It is not a big lake
19 and we have lots of water treatment capacity.

20 **MEMBER GRAHAM:** One further question I have
21 and that is with regard to the presentation. It is on
22 Section 2 and it is with regard to the -- if you go with
23 the Option 1B in Sue E the maximum mass flux of arsenic
24 released from both Sue C, A and E is about 616g per day,
25 which is gallons I presume.

1 the Sue E pit under their option. It is not material
2 which anyone would be around to treat. This would be
3 released into the groundwater system and would eventually
4 over several thousand years make its way into Collins
5 Creek and the McClean Lake area.

6 The amount that they estimate here is less
7 than the amount that was estimated in the last versions of
8 environmental assessments for this area which was for
9 disposal of Cigar Lake waste rock in the Sue C pit.
10 Because of changes with these options that they are
11 proposing, the actual amount of arsenic they are
12 predicting to be released is diminished. So this is not
13 material that would be treated and it's being predicted as
14 being of a lesser impact by adopting this option.

15 **MEMBER GRAHAM:** In other words, then, the
16 616 -- and I apologize for my not understanding that --
17 but grams per day is not an alarming amount and it is a
18 treatable amount or it is an amount that can be absorbed
19 into the environment and so on?

20 **MR. FLAVELLE:** For the record, Peter
21 Flavelle, and that's correct.

22 **THE CHAIRPERSON:** Mr. Taylor.

23 **MEMBER TAYLOR:** Thank you, Madam Chair.

24 A general comment or question about these
25 federal and provincial comments which are properly

1 presented and their responses presented, but have either
2 CNSC or COGEMA received any feedback from the people who
3 made the original comments?

4 **MR. POLLOCK:** The short answer is that as
5 we are dealing with these comments, we tend to have
6 discussion back and forth with the actual person or group
7 that the comments came from both to make sure that we
8 understand what the question that we are responding to and
9 that our response is on target. The formal conclusion of
10 this process is we actually received a letter both to make
11 sure that we understand the question that we are
12 responding to and that our response is on target. And the
13 formal conclusion of this process is we actually received
14 a letter -- in this case it came from the provincial
15 environmental assessment group because they are the lead
16 in terms of the formal process -- essentially a letter
17 confirming that the technical review was concluded and
18 that it was now technically acceptable and the process can
19 move ahead to the public review step. So there is
20 actually a formal marker in addition to the informal
21 discussions.

22 **MEMBER TAYLOR:** Thank you.

23 Further on in one of the other documents
24 you were talking about open pit mining and its advantages
25 and a point is that it provides greater distribution of

1 socioeconomic benefits to northern Saskatchewan than
2 underground mining methods.

3 Could you expand on that? Why is that?

4 **MR. POLLOCK:** Bob Pollock, for the record.
5 I guess I have been neglecting to introduce myself before
6 previous answers.

7 Basically, the open pit mining involves a
8 lot of use of heavy equipment, trucks and other types of
9 heavy equipment. And northerners, northern residents have
10 a good aptitude for that and also have the sort of
11 qualifications that you are looking for to enter into
12 training programs, whereas with underground mining there
13 is good progress being made -- I digress a little -- but
14 Tyson Mining, for example, is making good progress on
15 recruiting and training northerners in underground mining
16 at some the CAMECO sites. But, historically, the
17 underground miners tend not to be -- there tended not to
18 be too many northerners that were underground miners.

19 So it has been a bit of a long road to
20 travel to both attract them and to train them, plus there
21 is clearly perhaps more skilled trades and there still
22 aren't a lot of northern journeymen tradesmen,
23 millwrights, mine electricians, et cetera. So if you look
24 at the skills you need, they are better served -- they are
25 more easily met by the existing northern labour force than

1 the underground.

2 **MEMBER TAYLOR:** Thank you. And my final
3 question illustrates clearly my lack of experience in this
4 area.

5 What are tremie placement of tailings?

6 **MR. POLLOCK:** Bob Pollock, for the record.

7 I will give you a simple answer and then I
8 will ask John to elaborate a bit.

9 It is basically placing material -- in this
10 case tailings -- but I believe it originates from concrete
11 where, if you are placing concrete under water you stick
12 your pipe down into the existing pool of concrete, as
13 opposed to discharging into the water column. And I will
14 now ask John to confirm if I got it more or less right.

15 **MR. ROWSON:** I don't think I need to add
16 any more. It is a term that is frequently used in the
17 concrete construction business and it is a way of more
18 controllably distributing -- place concrete where you want
19 it through the form of a pipe that is -- the end of which
20 is immersed in a pool of concrete and you direct the
21 concrete flow into all the nicks and corners of your
22 forms, using this tremie technique.

23 **MEMBER TAYLOR:** Thank you.

24 **THE CHAIRPERSON:** Dr. Dosman?

25 **MEMBER DOSMAN:** Thank you, Madam Chair.

1 My first question is for COGEMA and, Mr.
2 Ching, I realize that you are relatively new in the
3 position, but I am just wondering if you could comment on
4 the commitment that you see in the AREVA Board, your
5 owner, and in your Board, on the commitment to the
6 environment and specifically within COGEMA how you ensure
7 that these goals are met.

8 **MR. CHING:** Well when I -- sorry, Don
9 Ching, for the record.

10 When I was being considered for this job
11 one of the things that I sort of felt around on, so to
12 speak, was the approach which COGEMA and its parent,
13 AREVA, took with regard to issues like employee safety and
14 industrial relations. Those issues have been important to
15 me over my life.

16 I also, perhaps a little less aggressively,
17 looked at the approach taken by COGEMA and its parent
18 directed towards environmental issues.

19 I must say that when I was looking at those
20 things I was very pleased with the approach taken by the
21 company. It has, in my mind, a very positive attitude on
22 those issues. It has built into its operating structure
23 methods of encouraging improvement in those areas on the
24 part of its actual operating entities.

25 A thing called "The AREVA Way" is a process

1 of continually forcing the operating entities within the
2 AREVA group to endeavour to improve through self-
3 examination and through setting of targets, all of their
4 performance in the areas of industrial relations, safety
5 and environmental.

6 So from my vantage point, one of the things
7 that attracted me very strongly to COGEMA and the AREVA
8 group was those characteristics within their corporate
9 structure. And I have not been the least bit displeased
10 in what actually takes place within the company in that
11 regard because I continually see devices used by the
12 company and by individuals within the company to prompt
13 improvement in all those areas. And I find it really a
14 comfortable framework within which to work.

15 **MEMBER TAYLOR:** Madam Chair, I wonder if I
16 just might pursue this?

17 How do you, Mr. Ching, ensure that the
18 message gets down to the actual operations, both within
19 the company and specifically to contractors on the
20 operations?

21 **MR. CHING:** Well, first of all -- Don
22 Ching, for the record.

23 First of all, I think it is my
24 responsibility and those of the rest of the management
25 team to constantly be going to site and to talking with

1 our employees, both management and in-scope employees.
2 And some of those issues have to be continually talked
3 about because I think that one of the things which the
4 senior management team does is to paint the framework for
5 driving that sort of an agenda.

6 I think it's not only our responsibility to
7 make sure that we within COGEMA try to improve in areas of
8 labour relations and safety and environmental protection,
9 but we have an obligation to make sure that all of the
10 people who are our surrogates by coming to the mine site
11 to assist us and to perform functions for us, that they
12 bring those same set of attitudes.

13 I guess the only thing you can do, really,
14 is to roll up your sleeves and make sure that you are in
15 constant contact with your employees and your on-site
16 management team and to make sure that you are in contact
17 with the companies that come on site as your
18 subcontractors, to promote those objectives.

19 **MEMBER TAYLOR:** Thank you.

20 I wonder if I might ask another question
21 and I am not sure to whom -- perhaps Mr. Pollock, or to
22 yourself -- I wonder if you would be willing to summarize
23 the steps that you are taking now in the planning that
24 will be useful to you in the decommissioning, sort of in
25 the light of lessons learned?

1 **MR. POLLOCK:** Bob Pollock, for the record.

2 Well I think it starts with the document
3 that you are -- in fact, it started many years ago, if I
4 go back to the original environmental assessments for
5 McClellan Lake and their successor, including this one, that
6 decommissioning is clearly part of that environmental
7 assessment. It is not looking just at the
8 construction/operation of the facility, it is looking at
9 the decommissioning. And I would be hard pressed to
10 justify what percentage of the effort -- an estimate of
11 what percentage of the effort has gone into looking at the
12 long-term management of waste rock and tailings, but it is
13 certainly substantial. I would suggest it is probably the
14 -- there is probably more time spent on those topics than
15 on the operational considerations.

16 So we have looked very hard at what you do
17 with the tailings, what you do with the waste rock, so
18 that you do not create a long-term environmental issue.

19 In our case there were a number of
20 questions or issues about tailings performance. We have
21 put a major program, the Tailings Optimization and
22 Validation Program that has run five years, where we are
23 just in the process of writing a major five-year report to
24 sum it all up to confirm that we actually understand the
25 basis of long-term tailings, both geochemistry and

1 geotechnical.

2 So that that is certainly one major area.

3 There are other things you do. If I look
4 at the new sites in northern Saskatchewan, McClean,
5 McArthur, Cigar we have actually gone to a -- it is almost
6 like a regional processing approach so that all you have
7 got at many of the new sites now, McArthur, Cigar, Midwest
8 and future is a mine. We continue to use the existing
9 mills and waste management facilities at the existing
10 sites so that the footprints of these new mines will be
11 very small and after decommissioned, there is essentially
12 no waste left at those sites -- put it back the way we
13 found it.

14 The footprints were also quite small at --
15 you know, we are already doing restoration work in terms
16 of disturbed areas at McClean; that if the use has already
17 been made, one can do reclamation on a progressive basis.

18 And certainly in terms of the operational
19 part, we don't ignore it. The major item is the control
20 of the liquid effluent, treated effluent releases and we
21 have talked at some length so I won't repeat it this
22 afternoon, on setting, you know, administrative levels
23 that are much less than the actual regulatory limits or
24 the formal action levels so that if we go outside these
25 administrative levels, then action is required of the

1 operator.

2 So we want to run at the optimum
3 performance of the water treatment plants and minimize the
4 releases into the aquatic environment, not simply meet the
5 regulatory limit but run at optimum performance.

6 We do all of this within a framework of a
7 very comprehensive quality management system to ensure
8 that we have both -- you know, we have consistency in our
9 operations and defined processes and last but not least,
10 we have quite substantial financial assurances on the
11 table, so if we don't deliver, the money is there for the
12 government to come and do the job in any event.

13 So that was the short answer. If you would
14 like the long answer, just let me know.

15 **(LAUGHTER)**

16 **MEMBER DOSMAN:** The short answer is fine,
17 Mr. Pollock. I'm just wondering, Madam Chair, if I might?

18 I take it that the overburden stockpile is
19 really a way of providing a dam between Sils Lake and Sue
20 E. Is that -- do I have it right? I know that Mr. Graham
21 explored this question. Is that right and does that
22 represent an unreasonable environmental risk to the small
23 Sils Lake?

24 **MR. POLLOCK:** The short answer is no. This
25 EA is predicated on the north end of Sils Lake being

1 filled in. I mean, you could stockpile -- you do want to
2 segregate the overburden because eventually you're going
3 to want to reclaim it and reuse it during restoration and
4 reclamation activities.

5 In this case, it needs to be stockpiled in
6 the north end of Sils Lake to provide a solid barrier to
7 provide safety in the adjacent pit as we mine it.

8 **MEMBER DOSMAN:** Madam Chair, I would ask
9 CNSC staff, taking that this is a combined approach
10 between Saskatchewan environment and CNSC, I would just
11 like to ask you very briefly to outline the steps that
12 have been taken to conduct these steps jointly and how the
13 process has gone.

14 **THE CHAIRPERSON:** Since I was going to ask
15 a query to that, I'll come back to the proponent and ask
16 how they think that process went at the end. So I'll let
17 you think about that while the first part is being
18 answered.

19 **MR. RINKER:** Mike Rinker, for the record.

20 To start off, this is an established
21 process. It was not the first time we have gone through
22 this process. I could go through the steps perhaps of how
23 we work together.

24 The first step would be to determine
25 whether there were environmental assessment requirements

1 or not. That was conducted independently. When it was
2 determined that both the province and Canada had
3 environmental assessment requirements for this project,
4 then we started working jointly together.

5 The province took the lead on the
6 environmental assessment guidelines as they are the lead
7 for the entire assessment up and to the point of decision,
8 whether or not, you know, we're separate again. The
9 province provided draft guidelines to us. We distributed
10 them to federal authorities and provided our comments, and
11 the guidelines in the end, I think, became quite sound
12 where everyone's requirements were included as opposed to
13 substituted. So they are good guidelines.

14 There was only one technical document
15 provided for both processes and it satisfied both
16 processes, so that was quite efficient. We had
17 essentially an extra team of reviewers on the province's
18 side, so we had a comprehensive review of the document
19 over and above what we normally would have.

20 The province's consultation process or
21 technique is slightly different than ours which required
22 again an additive effect where we felt that public
23 consultation was extremely thorough that included not only
24 our Screening Report but also on the technical documents
25 which is the province's requirement.

1 After the documents were accepted by both
2 the province and by us as a responsible authority, then we
3 went into the processes for a decision and that's where we
4 departed. And CNSC staff worked independently for the
5 preparation of the Commission Member Document and for this
6 hearing today, and the province went separately for their
7 ministerial decision, but the process itself I thought was
8 very well done.

9 **MEMBER DOSMAN:** Thank you, Madam Chair. I
10 planned to ask, in reference to your question, to COGEMA,
11 -- I'll explain the question. I planned to ask that if
12 there is a member of Sask Environment either here in the
13 audience or by teleconference in Saskatoon to have their
14 view on this process and I would be happy to ask that
15 question either before or after the question that you
16 posed to the proponent.

17 **THE CHAIRPERSON:** Let's ask the proponent
18 first and then there will be some checking on Sask
19 Environment. I don't think there is anyone there so we
20 will have to leave that for a future time to Mr. Ching.

21 **MR. POLLOCK:** Bob Pollock, for the record.

22 I think if one looks at it from the overall
23 question of process and from the starting point that the
24 legislative requirements that exist through the *Canadian*
25 *Environmental Assessment Act* and which fall on the

1 Canadian Nuclear Safety Commission as a responsible
2 authority when there is a trigger and the legislative
3 requirements that exist in Saskatchewan through the
4 *Provincial Environmental Assessment Act*, if you look at a
5 process that -- because at the end of the day, one has to
6 meet those legislative requirements. That is not even a
7 question.

8 So the process, I think, works quite well
9 in terms of meeting everybody's requirements and I think
10 this word "harmonize" is perhaps misunderstood in the
11 sense that out of "harmonized" people perhaps jump to the
12 conclusion that there is just sort of one process or one
13 EA and that is not true because there are separate
14 legislative requirements and both have to be met.

15 You need a process that meets everybody's
16 requirements in as efficient a way as possible. And the
17 process seems to do that quite well. If one looks back,
18 with the wisdom of hindsight there is perhaps areas here
19 and there where one might make it work a little bit
20 quicker but that's more a matter of incremental progress
21 out of experience than any fundamental change to the
22 process.

23 We, for example, are working at minimizing
24 the amount of time between the day that we receive the
25 formal guidelines and the date that we put our EIS on the

1 table. This past time, it was about 60 days. There is no
2 reason why we couldn't do that somewhat quicker in future.

3 I'm not sure -- I'm well satisfied with
4 what was achieved this time but -- so one can see
5 possibilities to perhaps make some of these incremental --
6 you know, make incremental progress on the timeline here
7 and there but I'm hard-pressed to flowchart out a
8 different process that would be any better, unless there
9 were some quite formidable changes to the governing
10 legislation itself, something that actually from a
11 legislative perspective dealt with some of the sort of
12 structural issues. Given the structural issues that are
13 there, the process was quite good.

14 **MEMBER DOSMAN:** If I asked a question ---

15 **THE CHAIRPERSON:** One more question and
16 then we'll move on ---

17 **MEMBER DOSMAN:** Thank you.

18 Well, when there are two agencies, it is
19 kind of like getting two disciplines on a PhD thesis from
20 students. Sometimes you get duplication or you get sort
21 of an excess number of requirements, or the requirements
22 are nearly but not quite the same and it results in a lot
23 of extra work and so on and I just wonder if this -- I
24 mean in this process, we want to make sure both, I guess,
25 that it's thorough and that the environment is adequately

1 protected but also that it's flexible and optimally
2 workable.

3 So would you comment on that aspect of the
4 process being as a -- how two jurisdictions really need to
5 be happy with the outcome?

6 **MR. POLLOCK:** Bob Pollock, for the record.

7 I suppose if this was a perfect world one
8 could perhaps design an environmental assessment process
9 where you only had one EA process that satisfied all
10 comers, but given that there are separate and distinct
11 legislative requirements, we deal with what we have to
12 deal with as opposed to some imaginary process that might
13 be better.

14 I mean one example of -- and I think that
15 all of the people involved, it is not like they are
16 strangers to each other so there is a good history of
17 cooperation and communication.

18 If you look at how we handled the questions
19 that came out of the technical review, we actually do the
20 federal questions and we do the provincial questions, and
21 that's because the province does theirs by sort of a
22 ranking of type 1, 2 and 3. The federal ones tend to come
23 by whichever federal authority has authored the questions
24 without being ranked in a similar way to the provincial
25 system.

1 And you might think, "Well, why doesn't
2 somebody like the EA coordinator combine all these things
3 and just give you one list?" And I can tell you from past
4 experience it is faster just to take the questions and sit
5 down and answer them, and if you find that you're giving
6 the same answer a second time, well, just cross-reference
7 back to the first one.

8 So yes, there is maybe little things you
9 could tinker with, but some of these people are strangers
10 and they communicate well with each other.

11 **MEMBER DOSMAN:** Thank you.

12 **THE CHAIRPERSON:** Dr. Barnes.

13 **MEMBER BARNES:** Thanks.

14 Just a few questions. You have a section
15 dealing with pit wall instability, and this has happened
16 on a number of pits in Saskatchewan.

17 You don't see any significant problem with
18 pit wall instability here in this pit in the Sue E?

19 **MR. POLLOCK:** Bob Pollock, for the record.

20 I won't even speculate on that. I'll just
21 ask Jim to reply directly.

22 **MR. CORMAN:** Jim Corman, for the record.

23 Sue E is geologically a very similar
24 setting as to the two previous pits which we have mined,
25 the JEB and the Sue C pit.

1 Prior to finalizing our pit design on Sue
2 E, we brought a consultant to site and did four
3 geotechnical holes, slope stability holes, studies of the
4 ground that was intersected in those holes, a review of
5 the geology of the area, a review of the experience that
6 we had from our Sue C pit and then consequently designed
7 our pit slopes for Sue E, taking those factors into
8 consideration.

9 Ultimately, on Sue E we have come back with
10 a more conservative design than our Sue C and JEB pits,
11 some flatter slopes in some of the areas that have given
12 us some problems in the past.

13 Through our experience at mining, we have
14 modified some of the things that we're doing in terms of
15 blasting techniques and wall stability work. So we feel
16 the combination of the things that we have learned from
17 our existing pits, the design of this pit with flatter
18 slopes and the fact that it is also a smaller pit that we
19 will be in and out of in a shorter period of time than the
20 Sue C pit will be beneficial to us and we don't anticipate
21 problems.

22 **MEMBER BARNES:** In and out from a mining
23 viewpoint. But still, you want to use Sue E for a
24 repository for other waste. So you don't want it to fill
25 in and occupy that space.

1 **MR. CORMAN:** That's correct. The design of
2 the pit itself is for the long term. Operationally, when
3 you have got people in there working at the bottom of the
4 pit that's when you have the most concern.

5 When we are placing waste rock back into
6 the pit, we will be working at higher elevations.

7 **MEMBER BARNES:** I'm not sure how -- would
8 you say that the diagrams you presented in terms of the
9 area of Sue pit are pretty accurate or are these sketches
10 at this point?

11 **MR. CORMAN:** The slide with the satellite
12 photo is a representative photo to scale.

13 **MEMBER BARNES:** Let's say Figure 6.2 which
14 is fairly detailed. It shows Sue E pit, the temporary
15 overburden, stockpile and Sils Lake, Figure 6.2.

16 **(SHORT PAUSE)**

17 **MR. CORMAN:** That's Figure 6.2 in what
18 document, sir?

19 **MEMBER BARNES:** I guess it's attached to
20 the CEAA Screening Report, just after page 92. It's with
21 all the coloured diagrams.

22 **MR. CORMAN:** Yes, that is an accurate
23 representation.

24 **MEMBER BARNES:** So when you have removed
25 the temporary overburden into that stockpile and partially

1 filled in Sils Lake -- but you have disturbed the
2 stockpile so it has a different geotechnical property.
3 You have still got it, as I read it there, abutting a
4 certain amount of the Sue E wall.

5 Do you see any potential for a slumping of
6 the overburden back into the pit? Do you see any
7 possibility of leakage from Sils Lake through the
8 overburden -- to replace the overburden?

9 **MR. CORMAN:** Jim Corman, for the record.

10 For those assessments we currently have
11 just completed a geotechnical assessment. We have dug
12 some additional test pits around the perimeter of Sils
13 Lake and some additional geotechnical samples of the till
14 from Sue E, and we are currently waiting on the
15 consultant's report on that.

16 We certainly don't anticipate -- the
17 overburden material in this area compacts quite well, is
18 relatively impermeable and leakage is certainly a
19 possibility but we don't anticipate a significant issue
20 with it.

21 **MEMBER BARNES:** Okay. I was interested in
22 your Option 1b which is, I think, fundamental to what
23 we're talking about here, the disposal of the waste, and I
24 wonder if you could just walk us through it a little bit?
25 This is on page 97, just a few pages past the last diagram

1 that I was referring to. So it's Figure 6.6, "Waste Rock
2 Placement in Sue C/A Pit" Option 1b.

3 **MR. CORMAN:** I have the figure ahead of me
4 here.

5 **MEMBER BARNES:** Yes, first of all, at page
6 313 of COGEMA's document you refer to problematic special
7 waste. What did you mean by problematic special waste?

8 **MR. CORMAN:** Jim Corman, for the record.

9 **MEMBER BARNES:** That's below the 410 level.

10 **MR. CORMAN:** What we have identified is
11 there is the potential for material below the 410
12 elevation in the Sue E pit that could have elevated
13 sulfides associated with it. That material if left on
14 surface could cause acid generation problems. So that's
15 what we have identified. Below that elevation there is
16 the potential and certainly, as you get closer to the ore
17 body, a higher potential of intersecting that material
18 which can be problematic.

19 In some cases, there is elevated sulfides
20 associated with this material without uranium associated
21 with it. So it's a little bit more difficult for
22 separating out. So what we're proposing is material below
23 that elevation to go directly into the Sue C pit.

24 **MEMBER BARNES:** Okay. In the Figure 6.6
25 where you show three cross-sections through the Sue C/A

1 pit, what is the elevation of the Precambrian Athabasca
2 contact there? Is this a critical level? You keep
3 referring to certain elevations, here the 418, 410 and so
4 on for the certain level that you are building, that you
5 in-filling the pit to. Is this tied to that particular
6 horizon?

7 **MR. CORMAN:** No, not necessarily. There is
8 some material up in the sandstone that is problematic
9 material as well in the E pit. The cross-section on the
10 Sue C pit, our contact between the sandstone and basement
11 rock is around the 390 elevation, 380 to 390. It varies
12 throughout the pit.

13 **MEMBER BARNES:** Let me put it another way.
14 In the cross-sections that you show in 6.6 and in Option
15 1b, what is the magic about -- what would it be, just
16 below 430, the level to which you fill this?

17 **MR. CORMAN:** The 430 elevation is the
18 elevation that takes us with the fill of the materials
19 going into C pit, including the Cigar Lake waste rock. If
20 we place problematic material in the Sue C pit above --
21 significantly above that elevation there is a potential
22 then on a groundwater basis to affect the groundwater
23 regime and short circuit up to some of the surface lakes.

24 **MEMBER BARNES:** So in this pit, could you
25 remind me again what is the contact level of the Athabasca

1 sandstone and Precambrian in the Sue C/A?

2 **MR. CORMAN:** In Sue C it's around the 380
3 to 390 elevation.

4 **MEMBER BARNES:** So are you using the same
5 principle of enough wells to pump out any contaminates; is
6 this right?

7 **MR. CORMAN:** No, there's no wells around
8 the Sue site.

9 **MEMBER BARNES:** Okay. And so there is no
10 danger of materials from the material you are putting in
11 the pit, which contains problematic material from, in a
12 sense, leaking out into the Athabasca sandstone, which is
13 ---

14 **MR. POLLOCK:** Bob Pollock, for the record.
15 We've done the modelling of the long-term
16 performance looking at what could be the potential amount
17 of soluble contaminates, and arsenic tends to be the key
18 one, in the pore spaces in the waste rock and what's the
19 long-term transport of that over to the -- it moves in the
20 direction of Collins Creek. And the numbers that are -- I
21 think, they're on page 92 of -- no, sorry, I have the
22 wrong page here. It will take me a moment to find it. I
23 can recall the numbers. The maximum long-term predictions
24 were about 0.3 micrograms per litre of arsenic in Collins
25 Creek in thousands of years from now, and that compares to

1 50 micrograms per litre as the Saskatchewan surface water
2 quality objective and five as the Canadian Water
3 Guideline.

4 So yes, there is some very long-term
5 transport of potential contaminants from the waste rock
6 placed in these pits. When you put it underwater that
7 clearly cuts off the oxygen so acid generation is not an
8 issue, but there is some movement of potential
9 contaminants over the very long term, but not at
10 concentrations that are going to represent any significant
11 risk to the aquatic environment.

12 **MEMBER BARNES:** Unless you're operating in
13 a pit concentration of so-called problematic special waste
14 and putting this at an elevation above the significantly
15 porous Athabasca sandstone, you're driving groundwater
16 around this pod of problematic waste, for which you're
17 saying there is going to be very little transport of that
18 material away from that burial site.

19 **MR. POLLOCK:** Yes. Bob Pollock, again, for
20 the record.

21 Yes, what we're saying is that the amount
22 of transport that takes place is not significant in terms
23 of its long-term impact on the aquatic environment.

24 **MEMBER BARNES:** Could I ask CNSC staff --
25 Mr. Flavelle perhaps to confirm that as a particular model

1 and to suggest why that would be the case?

2 **MR. HOWDEN:** Barclay Howden speaking.

3 I will ask Peter Flavelle to reply.

4 **MR. FLAVELLE:** For the record, my name is
5 Peter Flavelle.

6 The modelling that was done for this
7 project is an extension of the modelling which has been
8 developed over the last several years by COGEMA for these
9 sites.

10 Essentially what happens is these pits will
11 become flooded with the lake on top of the waste rock, and
12 because, of course, the permeability of a water column is
13 infinite compared to the permeability of the waste rock,
14 the real issue then becomes how much of the waste rock is
15 placed against the source of the water along the pit wall.
16 And has been pointed out in this discussion, the higher up
17 you are against the pit wall the more the groundwater
18 seeps into the waste rock and into the pit lake and
19 subsequently out.

20 Because of the difference in permeability
21 though, not as much ground water goes into the waste rock,
22 as being diverted upward directly into the lake, and the
23 water balance that is calculated is in the order of 15 to
24 20 per cent of the water going through the lake actually
25 goes through the waste rock, and most of it goes through

1 the lake and dilutes what is released from the waste rock.

2 The result is that the mass of arsenic and
3 other contaminants which is released from the pit is
4 sufficiently low that, as pointed out, by the time it
5 reaches Collins Creek and a receiving water body it is
6 well below water standards and objectives.

7 **MEMBER BARNES:** Just a separate more
8 philosophical topic. But in many places within the COGEMA
9 document you refer, for example, on page 8-1 that
10 sustainable development is part of your business strategy.

11 How would you define sustainable
12 development in the uranium mining business and in this
13 project, if you like, where you are using the term?

14 **MR. POLLOCK:** There are certainly many
15 definitions of sustainable development out there that one
16 could find in the literature.

17 The particular approach that would define
18 it in our context, I think it is probably fair to say for
19 the uranium mining in the Athabasca Basin is that mining
20 is a temporary use of the land; that we will do the mining
21 and then after we are finished we will restore the site
22 and we will manage the waste in such a way that the
23 traditional uses of the land that have taken place in the
24 past can resume. And that during the course of carrying
25 out those operations, that we have met, in effect, the

1 three attributes that one quite often sees as
2 characterized in sustainable development of environmental
3 protection, social responsibilities, social equity and
4 economic viability.

5 So that we carry out the operations meeting
6 social, economic and environmental protection attributes
7 and we design the facilities for decommissioning from the
8 start so that, in effect, the mining activity is a
9 temporary use of the area or of the land.

10 **MEMBER BARNES:** And just as a final
11 question, on, for example, that diagram that we referred
12 to before, Figure 6.2 or the initial map, where you've
13 developed Sue B, C and now E, they are more or less along
14 a liniment, right, and it approaches on 6.1 your boundary
15 with the UEX Claim.

16 As you pointed out in the documents, Sue E
17 area was not part of the initial EA process, and I guess
18 at that time you either were not fully aware of the
19 potential reserves that you are now mining at Sue E or
20 price of uranium has made it such that you can now mine
21 this area.

22 Do you anticipate further mining
23 developments along this general access of A, B, C, E?

24 **MR. POLLOCK:** Bob Pollock, for the record.

25 There is a Sue D as well but we have no

1 current plans for it. We also continue to explore quite
2 vigorously on our lease area. Certainly anything you can
3 find this close to your existing facilities, even a fairly
4 marginal deposit can be viable if all the infrastructure
5 is already there.

6 To date the only success we've had so far
7 is this caribou pod, but we certainly continue to explore,
8 and if you ask the geologists I'm sure they would tell you
9 that it was almost a sure thing, but we'll have to see.

10 **MEMBER BARNES:** So where is Sue D relative
11 to the other pits you have shown, roughly?

12 **MR. POLLOCK:** I'll ask Jim Corman to point
13 out where it is.

14 **MR. CORMAN:** Jim Corman, for the record.

15 D is just between C and E. C, D, E. It's
16 a little bit deeper than the mineralization in Sue C. So
17 it wasn't by itself an economic deposit.

18 **MEMBER BARNES:** Thank you.

19 **THE CHAIRPERSON:** Dr. McDill.

20 **MEMBER McDILL:** Thank you.

21 My questions go back. Again, they are
22 fairly specific.

23 First, Table 6.6, "Malfunctions and
24 Accidents". It's page 24.

25 Mitigation options are that all synthetic

1 pond liners are inspected every six months, and I think I
2 have asked this question before but I am not sure if it
3 was to this group or not.

4 Do you actually empty the pond to inspect
5 the pond liner or are you just checking around the edges?

6 **MR. POLLOCK:** Bob Pollock, for the record.

7 Many of the ponds are periodically emptied
8 in any event so it is not necessarily that the pond is
9 always full, but I will ask Jim to provide a better
10 answer.

11 **MR. CORMAN:** Jim Corman, for the record.

12 As Bob mentioned, most of the ponds that we
13 have empty out on a batch basis. At the time, we do
14 inspections on a routine basis but officially every six
15 months.

16 **MEMBER McDILL:** Thank you, and these are
17 ultra-high molecular weight polyethylene or something of
18 the sort?

19 **MR. CORMAN:** Yes, high density polyethylene
20 liners.

21 **MEMBER McDILL:** My next question is ---

22 **(SHORT PAUSE)**

23 **MEMBER McDILL:** I missed the first one. On
24 page 14, and it is with respect to yellow cake packaging
25 and again, it's -- there are no modifications necessary

1 but you are operating for more hours. So I assume that
2 there has been an adjustment maintenance schedule to deal
3 with the fact that you don't have as much down time to
4 deal with maintenance and issues of that nature.

5 **MR. POLLOCK:** Bob Pollock, for the record.
6 You refer to the yellow cake packaging line
7 with that?

8 **MEMBER McDILL:** Yes, the yellow cake
9 packaging line.

10 **MR. POLLOCK:** Yes. I think it is fair to
11 say that the packaging circuit doesn't have a high avail -
12 - or doesn't have a high duty cycle as it currently
13 stands.

14 **MEMBER McDILL:** So this is not going to be
15 an issue of 24/7 and no one can get to it. Okay. Thank
16 you.

17 My next question is on page 58. With
18 respect to "Health Status", and I guess this relates to
19 the hiring and general improvement of the status of living
20 of the population locally, things like the high infant
21 mortality rates being twice the provincial average, is
22 this something that we expect to improve substantially or
23 somewhat with this project?

24 **THE CHAIRPERSON:** Or with socioeconomic
25 prosperity?

1 **MR. POLLOCK:** Bob Pollock, for the record.

2 I don't know if you could attach all that
3 much to this specific project but certainly both operating
4 companies run a range of wellness programs that hopefully
5 extend beyond the immediate workplace in terms of some of
6 the attitudes or behaviours that are hopefully encouraged
7 and other less healthy attributes discouraged.

8 We also participate in a broader initiative
9 that involves sort of community vitality studies and
10 programs that involve a number of stakeholders. So one
11 would hope that over time and that certainly I think there
12 is lots of information out there that poverty also is a
13 contributing factor to poor health. So hopefully between
14 improved economic circumstances and some of these broader
15 programs one would see improvements over time.

16 **MEMBER McDILL:** I think I would like to
17 link that to the statements that are -- I guess they were
18 a provincial question and followed by a comment that you
19 are not going to be using local facilities for the minors.
20 They are going to basically commute in. That is correct?

21 **MR. POLLOCK:** Yes. All the Northern
22 Saskatchewan mines are a seven-in/seven-out type of camp
23 operations where people commute from their home community.

24 **MEMBER McDILL:** So presumably it is the
25 socioeconomic improvements of the community in a very

1 large sense that are going to improve. Thank you.

2 And my last question is Figure 6.9, the
3 Management Structure for the McClean -- I guess it is for
4 the McClean Lake operation which is -- my question is a
5 general question with respect to management structure. I
6 noticed the management quality individual is stuck out on
7 the far right and the quality engineer is down on the
8 bottom left. Perhaps you could just address that in a
9 general sense for your operations?

10 **MR. POLLOCK:** Bob Pollock, for the record.

11 There is actually a dashed line missing off
12 that diagram and there should be a dashed line that shows
13 a functional relationship between the Quality Engineer at
14 the McClean Lake operation and the Manager of Quality at
15 the corporate office. That dashed line exists for the
16 Quality Engineer or Quality Coordinator in each unit of
17 the company. I hadn't noticed before that it is not on
18 this figure but it should be.

19 **MEMBER McDILL:** Thank you.

20 **THE CHAIRPERSON:** Perhaps you could just
21 keep 6.9. As it turns out, my question is about that and
22 this is a -- my interest is piqued a bit by Mr. Pollock,
23 your comment in the overhead when you try to approach the
24 integrated environmental protection, because it has been a
25 discussion that the staff has had with the Commission in

1 that sort of an integrated approach as well at the
2 Commission site.

3 So I wonder if you could link the approach
4 that you talked about of integrating three main components
5 of EA and continual improvement adaptive management? If
6 you could link that to how in the management structure
7 that is ensured -- that you ensure that happens in terms
8 of that integrated approach? Who is actually accountable
9 and responsible for that integrated approach?

10 **MR. POLLOCK:** Bob Pollock, for the record.

11 I guess ultimately the gentleman beside me
12 is, but in terms of from a practical nature of how it gets
13 done it is a -- and you're probably not going to like this
14 word but it is a shared responsibility, in the sense that
15 at the site level, site people are responsible for setting
16 their targets and submitting them to the corporate office
17 for review and approval for environmental performance and
18 not just environmental performance but we use a wide range
19 of targets so that there are targets for not just
20 environment but also quality, safety, production.

21 So the targets come up from the site. They
22 are reviewed and tracked. We have regular meetings
23 involving both site and corporate people so that -- and I
24 guess it is quarterly. We just had one where we looked at
25 the senior management level at all of the targets and

1 objectives right across the whole organization, including
2 McClean, in terms of how we are doing.

3 If you look at the sort of specific aspects
4 of -- so on the continuous improvement side -- I'm not
5 sure that is a very clear answer but continuous
6 improvement tends to be driven more from the bottom up
7 than the top down. It is the site people that have to
8 identify the opportunities where they believe they can
9 improve. The corporate role is to review them and confirm
10 that, yes, that they are being ambitious enough and to
11 also provide oversight that in fact it is happening.

12 If you look at some of this other part
13 where we talked about adaptive management that is a little
14 bit of a different aspect whereby one is taking a lot of
15 environmental mining information, information that comes
16 out as very specific Follow-Up Program initiatives and
17 basically looking at this from a science point of view, do
18 we correctly understand how our models are representing
19 the environment, so that the lead for that tends to come
20 out of the Environment, Health and Safety Department from
21 the technical specialists within the department in terms
22 of evaluating this information and looking at how it
23 compares with what we expected and is there a need for
24 further mitigation, for example.

25 So the continuous improvement and the

1 adaptive management tend to be somewhat different in terms
2 of how one gets at that.

3 **THE CHAIRPERSON:** I guess maybe I -- well,
4 let me try this and you can tell me if it is right. I am
5 getting back to sort of the systems approach to
6 environmental management system in terms of the role of
7 the EA and the continuous monitoring program and then
8 feeding back and whatever because I am very interested in
9 this because we are operating on the same site again and
10 again and how do we use the data that is available through
11 your management system and your dashboard or of indicators
12 or whoever -- however you want to term it in order for us
13 to be able to, therefore, from a CNSC point of view,
14 monitor also the right information and seek to feed that
15 back as well into our screening as well.

16 So it's you who has the responsibility for
17 ensuring that the EA works within the environmental
18 management system and then the manager of quality manages
19 it from a quality management point of view; would that be
20 fair to say?

21 **MR. POLLOCK:** Bob Pollock, for the record.

22 If they went and looked at where you would
23 sort of -- how this would be documented and what you would
24 actually find if you came out to audit it, what you would
25 find would be within the top level corporate document is

1 pretty much a description that builds off of that diagram
2 that we put in the written submission in terms of, broadly
3 speaking, what do we do and who does what. Then, as you
4 move down, if you went and looked at the McClean one, you
5 will find that many of the things that are tied to
6 continuous improvement in the environmental area fall out
7 of either ISO 14001 or the proposed CNSC standard on
8 environmental management systems. Broadly speaking, there
9 are many similarities.

10 So you would find that the description of
11 the program at the site level is in the site document and
12 then there is a whole tier of procedures and work
13 constructions that specify in some detail then who does
14 what.

15 If you came and -- you will have to wait
16 and come a little bit later because we haven't got it all
17 in place yet, but if you come and look at the departmental
18 manual for the Environment Health and Safety Department it
19 then needs to pick up this other part of it in terms of
20 what are the sort of -- you know, the approach and the
21 procedures for this sort of overview type of scientific
22 evaluation of the data and are we tracking. We clearly do
23 -- all the pieces are there.

24 I mean, this Tailings Optimization and
25 Validation Program is a good example of an actual working

1 example and I can point to many others.

2 In terms of our initiative on molybdenum
3 was basically this type of approach where we could see
4 that we needed to take action on molybdenum and we did.

5 In terms of formalization within my group
6 we still have got a little piece to go.

7 The role of the Quality Department is in
8 many ways to ensure that the responsible owners for
9 carrying out the activities have in fact got the processes
10 and procedures in place and to audit them for compliance
11 against those processes and procedures.

12 **THE CHAIRPERSON:** Then a question,
13 actually. Mr. Ching mentioned long-term interest in
14 worker safety and safety in a longer area and as you note
15 that in Northern Saskatchewan we probably have a fairly
16 unique circumstance. We do have a unique circumstance, in
17 fact, in the richness of the deposits. So clearly,
18 protection of workers is a particular challenge that is
19 outside normal mining as well.

20 My colleague has talked a little bit about
21 some of the other questions about the environment but I
22 think it is -- just to comment that one of the things that
23 we will be talking to you about -- I didn't talk about
24 them today because this is an EA which has a very specific
25 purpose, but one of the things I am quite famous for is

1 talking to CEOs about safety culture and about quality
2 management and safety management.

3 So I will just leave that with you as
4 illustrating the emphasis that I put on those particular
5 items in all of the licensees that are under our Act.

6 The mining companies have participated
7 fully in the discussions of these particular initiatives,
8 but I think there is an opportunity perhaps on a return
9 visit. I think it is a bit early and a very specific
10 topic today to ask you to comment on that, but this is an
11 area where, as you said, leadership has to come from the
12 top of the organization and it's been absolutely
13 demonstrated here in Canada that that does work when the
14 leaders talk about specific things and that this does
15 permeate the organization and pays off, we believe. We
16 audit it so we make sure that it happens as well.

17 So that's just more of a comment than it is
18 anything else.

19 I am just going to take a 10-minute break
20 and then we will come back.

21 --- Upon recessing at 3:08 p.m.

22 --- Upon resuming at 3:22 p.m.

23 **THE CHAIRPERSON:** Ladies and gentlemen, if
24 you could take your seats please.

25 We will just start round two of

1 questioning.

2 Mr. Graham.

3 **MEMBER GRAHAM:** Thank you. I just have a
4 couple of questions of clarification.

5 First of all, is the site fenced, because I
6 read somewhere in the report with regard to migration of
7 animals, large animals and so on? Are those large pits
8 fenced or not, or is the outside part of the site fenced
9 for because I read somewhere in the report with regard to
10 the migration of animals, large animals and so on, is --
11 are those large pits fenced or not, or is the outside part
12 of the site fenced for -- that you don't have someone
13 having an accident or animals falling in?

14 **MR. POLLOCK:** Bob Pollock, for the record.

15 No, we don't have fences at the sites at
16 McClean or other sites in Northern Saskatchewan other than
17 control gates on the roads in and out of the sites.

18 **MEMBER GRAHAM:** There has not been any
19 major mishaps of migrating animals or anything, caribou or
20 moose or so on, through there that got into the -- in any
21 of the ponds or anything?

22 **MR. POLLOCK:** Nothing that has come to my
23 attention.

24 **MEMBER GRAHAM:** One question I have, the
25 ore bodies, you had A and then B went to the north and

1 then C was within the A confinement and then you talk
2 about D between E and so on.

3 Are those segregated bodies or is that a
4 continuous seam of where you're mining the most feasible
5 part first and then the thinner seams are not mining it
6 right now but you may go to it later, like with D and so
7 on?

8 **MR. POLLOCK:** Bob Pollock, for the record.
9 I'll ask Jim Corman to talk more about the
10 geology.

11 **MR. CORMAN:** Jim Corman, for the record.
12 The ore bodies themselves are distinct. In
13 some cases there is maybe only 100 to 200 metres of barren
14 ground in between the pods of mineralization but they are
15 not continuous. The majority of the ore bodies are hosted
16 within the same maybe geology, the same structure but they
17 are discontinuous.

18 **MEMBER GRAHAM:** Thank you.
19 My third question is with regard to the ore
20 coming out of Sue E, it will be transported up to the ore
21 transfer pad and then stockpiled there and then hauled
22 from there to JEB or will it be hauled continuously to --
23 hauled directly from Sue E to JEB or will it just be
24 stockpiled there?

25 **MR. CORMAN:** Jim Corman, for the record.

1 It will be handled as we have mined and
2 handled ore in mining of Sue C in that coming out of the
3 pit, it will go through a radiometric scanner and then put
4 onto our ore transfer pad and then transferred up to the
5 mill on an as required basis.

6 **MEMBER GRAHAM:** The reason I asked that was
7 when you had talked about conveyors to the surface that it
8 would be handled, manhandling it another time and I failed
9 to see that because a conveyor could transfer it right
10 onto a pad, but you're saying it is handled a second time
11 to JEB from the transfer pad; is that correct?

12 **MR. CORMAN:** That's correct.

13 **MEMBER GRAHAM:** One other question I have,
14 Madam Chair, and only one other, is with regard to
15 burning. I read in the -- in reading this, read about
16 burning of garbage and so on. Is that a method of
17 disposal of burning waste and so on? Is that a permitted
18 method in Saskatchewan with regard to burning of garbage
19 and so on? In some provinces, it is not and I just
20 wondered if Saskatchewan permits that.

21 **MR. POLLOCK:** Bob Pollock, for the record.

22 We burn camp waste in an incinerator that
23 is permitted by -- a proper incinerator that meets the
24 regulatory requirements of the province for such an
25 incinerator.

1 **MEMBER GRAHAM:** Okay. When I read it, it
2 talked about incineration but then it talked about burning
3 other types of waste and I thought maybe it was just burnt
4 in a pit, but you're saying that any garbage that is
5 burned, it is burned through an incinerator and no other
6 way; is that correct?

7 **MR. POLLOCK:** That is correct.

8 **THE CHAIRPERSON:** Any further questions?
9 Yes, Mr. Taylor.

10 **MEMBER TAYLOR:** Thank you, Madam Chair.

11 Could we ask the -- do you have Union
12 representatives available? Did you have anyone back in
13 Saskatchewan?

14 **THE CHAIRPERSON:** Could we connect through,
15 please, to Saskatchewan? Is our representative of the
16 Union there today? Is there a representative of the Union
17 here today?

18 **UNION REPRESENTATIVE:** Yes, there is.

19 **THE CHAIRPERSON:** Mr. Taylor has a question
20 for you, I believe.

21 **MEMBER TAYLOR:** I would like to ask a Union
22 representative whether from the Union's perspective it has
23 any observations about the environmental material
24 contained in this assessment.

25 **UNION REPRESENTATIVE:** Do we have any

1 concerns about the -- excuse me, could you please repeat
2 the question?

3 **MEMBER TAYLOR:** Yes. From the Union
4 perspective, do you have any observations that you would
5 like to make about the environmental material presented in
6 this environmental assessment screening?

7 **UNION REPRESENTATIVE:** Well, from the Union
8 perspective, we have seen their past history on activity
9 and the mine practices from C and we have no reservations
10 about the future environmental problems associated with E.

11 **MEMBER TAYLOR:** Thank you.

12 **THE CHAIRPERSON:** Any further questions?

13 **MEMBER DOSMAN:** Very briefly, Madam Chair.

14 **THE CHAIRPERSON:** Yes, Dr. Dosman.

15 **MEMBER DOSMAN:** I wonder if CNSC staff
16 could indicate if in their belief that the concerns of the
17 Environmental Quality Committee have been met in this
18 process? There was a submission but I understand we don't
19 have anyone present either in Saskatoon ---

20 **THE CHAIRPERSON:** Dr. Dosman, we'll be
21 handling that in a few minutes actually as a written
22 submission. So if we could just hold -- if you wouldn't
23 mind just holding that question.

24 **MEMBER DOSMAN:** Fine.

25 **THE CHAIRPERSON:** Thanks.

1 Any further questions?

2 Well then, what we would like to do then is
3 move to the interventions and Dr. Dosman, the second
4 gentleman will be from the Environmental Quality
5 Committee. We do have an intervenor, though, from
6 Saskatchewan who will be joining us by videoconference
7 from Saskatchewan. It is the Greater Saskatoon Chamber of
8 Commerce. This is outlined in CMD Document 05-H13.2 and
9 Mr. Smith-Windsor is with us I believe and the floor is
10 yours, sir.

11 **05-H13.2**

12 **Oral presentation by**

13 **the Greater Saskatoon Chamber of Commerce**

14 **MR. SMITH-WINDSOR:** Thank you very much.

15 I should indicate that from time to time
16 your audio is breaking out. So hopefully you are not
17 experiencing that from our side, and right now we seem to
18 have lost some of your video as well. But I'll continue
19 with my presentation.

20 As outlined in our written submission, I
21 just thought it would be an interesting opportunity to
22 talk about our experience that occurred in June of 2004
23 where our Chamber along with a number of others in
24 Saskatoon had the privilege of hosting a Technical
25 Committee of the International Atomic Energy Agency.

1 Their work was specifically dealing with
2 environmental management of uranium production facilities
3 and the comments were quite heartening. I think we in
4 Canada sometimes have a bit of a tendency to be a little
5 hard on ourselves and the comments that I made in my
6 written submission were not my words but those voiced by
7 others, including the chair of that particular technical
8 committee, that identified the work that was going on in
9 this area where they did, in fact, outline what their
10 plans were relating to the Sue E site; in specifics, that
11 they regarded the activity in this area operating at the
12 gold standard for the world.

13 I think that that is probably a large
14 testament to the culture of both CAMECO and COGEMA. In
15 this case, we are speaking specifically to COGEMA's
16 activity. But also as a result of the -- if I can use the
17 term "creative tension", that is the result of the efforts
18 of your Commission and the organization COGEMA, where it
19 is very clear to me based on the discussion that I heard
20 over the elements of objectives for improvement using the
21 best available technology, those comments were made not
22 only by the senior management that were making formal
23 presentations, but given that we did stay at a site
24 overnight, I had an opportunity to have brief
25 conversations with a number of workers in the area and

1 they talked all about the commitment to safety and
2 continuous improvement.

3 Finally, if I were to make a comment
4 generally in terms of what is going on in Northern
5 Saskatchewan and some of the challenges that we have to
6 engage that community not only in terms of employment but
7 productive use of the area and improving the lives of the
8 citizens of that area, the services that are offered on
9 site relating to providing training programs for safety
10 and prevention initiatives for healthy lifestyles and like
11 have a capacity to pervade far beyond the borders of this
12 particular venture. It has got a specific benefit to
13 Northern Saskatchewan that extends beyond the Sue E
14 facility or the Northern uranium mining activities in a
15 broader context.

16 Not particularly -- not identified in the
17 written submission is my work as a volunteer in Saskatoon.
18 I have had the privilege of working with a group called
19 the Saskatchewan Institute on Prevention of Handicaps for
20 very close to 20 years, 12 serving in the capacity of
21 Chair. I just recently retired from that position and
22 will serve in the capacity of past chair.

23 This whole issue of creating messages that
24 are accessible to audiences for safety at the work site
25 and as that pervades into the lifestyles of the people in

1 their family setting, in their community setting, there is
2 no question from what I saw that this is the very best
3 example that we have available in our province and based
4 on my familiarity with work that has gone on across the
5 country, it is probably the best that we have in the
6 country.

7 Thank you.

8 **THE CHAIRPERSON:** Thank you very much.

9 Were there any questions or comments for
10 Mr. Smith-Windsor?

11 Thank you very much, sir, for joining us
12 from our site in the Saskatoon offices.

13 **05-H13.3**

14 **Written submission of**

15 **Saskatchewan Environmental Quality Committee**

16 **THE CHAIRPERSON:** We will now then move to
17 the submission that was referred to earlier. This was
18 originally an oral submission from the Saskatchewan
19 Environmental Quality Committee, who have joined us on a
20 number of occasions. It is outlined in CMD 05-H13.3.
21 However, at their request we have changed it from an oral
22 to a written submission. They will not be joining us in
23 person nor will they be joining us via conferencing today,
24 so it is accepted as a written submission.

25 As such, I would like to turn it over to

1 Dr. Dosman.

2 Dr. Dosman, if you would like to ask your
3 question of staff now that would be fine.

4 **MEMBER DOSMAN:** Thank you, Madam Chair.

5 Perhaps also a comment from COGEMA. It
6 concerns the matters surrounding the appearance and the
7 state of the site after the project is completed and the
8 concerns that the EQ committee had on that issue.

9 I wonder if CNSC staff could confirm that
10 these concerns have been adequately addressed by the
11 proponent.

12 **MR. RINKER:** Mike Rinker, for the record.

13 We have had a continuing dialogue with the
14 EQC, in particular with the Northern Mines Monitoring
15 Secretariat for the EQC, throughout this EA and had the
16 opportunity to meet with them in the north of Saskatchewan
17 a couple of weeks ago to discuss this project, amongst
18 many others.

19 I did not, during these discussions here,
20 have any concerns related to the residual impacts of
21 surface construction that were not addressed within the
22 EA. I did not hear any negative comments about the
23 assessment itself and the project that was assessed.

24 **MEMBER DOSMAN:** I wonder if I might ask if
25 COGEMA specifically addressed the issue the committee had

1 surrounding the appearance of the site when mining was
2 completed and what measures the company has taken to
3 reassure the environmental quality committee on this
4 issue.

5 **MR. POLLOCK:** Bob Pollock, for the record.

6 I will ask Jim to comment if he is aware of
7 any particular issues, but we have a decommissioning plan
8 for the site that we believe will restore it close to its
9 original quality.

10 Ultimately, as you are well aware, we have
11 embarked on that activity at Cluff Lake. We have the EQC
12 at each site each year, so I think as time goes on perhaps
13 one of the best markers or best measures will be what they
14 actually see at Cluff Lake over the next few years in
15 terms of whether that broadly addresses the issues.

16 **THE CHAIRPERSON:** I would just draw your
17 attention to specifically CMD 05-H13.3 because there are
18 some specific wording areas that are in there. I don't
19 believe that we are asking what they have said since or
20 whatever. What we are saying is they have voiced some
21 concerns in here that will have you, in the environmental
22 assessment and in your plans, address those issues which
23 would seek to reassure the quality committee.

24 **MR. POLLOCK:** Bob Pollack, for the record.

25 When I read this I didn't actually pick up

1 on anything that leaped out of the page at me as an issue.
2 We are referring to their written submission I presume.
3 At a quick glance I see the -- we are familiar with the
4 open pit mining concept and the draw down of groundwater
5 that is required to accommodate it. For now, we will
6 trust that normal groundwater flows will resume. That is
7 certainly the case.

8 Ultimately, when the site is decommissioned
9 and one is no longer pumping water to maintain a drawn
10 down level in the pit, the original groundwater regime
11 will re-establish.

12 **MEMBER DOSMAN:** Madam Chair, if I might.

13 Mr. Pollack, I think what I would like is a
14 recognition of and a commitment to the satisfactory
15 remediation of the site when the mining is complete that
16 is also satisfactory to the views of the northern
17 residence. I think that is what I am after in the context
18 of the fourth last paragraph in that document.

19 **THE CHAIRPERSON:** Their original concern
20 was surrounding the appearance of the site once mining was
21 complete. I think what they are indicating is a concern
22 about the final state.

23 **MR. POLLOCK:** Bob Pollock, for the record.

24 There may be concerns about mined-out pits,
25 but we are certainly committed to ensuring that when a

1 water column is re-established in the pit that it is of a
2 quality that protects the natural environment and the
3 animals that use it. Certainly if there are issues about
4 sloping of slopes right around the pit, those can be
5 addressed in due course.

6 We do have \$35 million on the table to
7 guarantee that at the end of the day everybody is
8 satisfied. That must count for something.

9 **MEMBER DOSMAN:** I take it the answer is
10 yes.

11 **THE CHAIRPERSON:** Thank you.

12 Are there further questions?

13 Thank you very much. This then is the
14 finish of this hearing today.

15 With respect to this matter I propose that
16 the Commission confers with regard to the information that
17 we have considered today and then determine what further
18 information is needed or if the Commission is ready to
19 proceed with the decision, and we will advise accordingly.

20 Thank you very much for coming and have a
21 very safe trip back.

22 Thank you.

23 We will have just a very quick two-minute
24 break while we switch around for the meeting. Thank you
25 very much.

1 --- Upon adjourning at 3:40 p.m.

2