

Canadian Nuclear
Safety Commission

Commission canadienne de
sûreté nucléaire

Public hearing

Audience publique

October 4, 2021

Le 4 octobre 2021

Public Hearing Room
14th floor
280 Slater Street
Ottawa, Ontario

Salle des audiences publiques
14^e étage
280, rue Slater
Ottawa (Ontario)

via videoconference

par vidéoconférence

Commission Members present

Commissaires présents

Ms. Rumina Velshi
Dr. Stephen McKinnon
Mr. Randall Kahgee

M^{me} Rumina Velshi
M. Stephen McKinnon
M. Randall Kahgee

Secretary:

Secrétaire:

Mr. Marc Leblanc

M^e Marc Leblanc

Senior General Counsel:

Avocate-générale principale :

Ms. Lisa Thiele

M^e Lisa Thiele

TABLE OF CONTENTS

	PAGE
Opening remarks	1
Safety moment	3
21-H7.A. Adoption of agenda	5
CMD 21-H6.1/21-H6.1A Oral presentation by Orano Canada Inc.	10
CMD 21-H6/21-H6.A Oral presentation by CNSC staff and experts from other governmental departments	42
CMD 21-H6.7 Oral presentation by the English River First Nation	75
CMD 21-H6.3/21-H6.3A Oral presentation by the Métis Nation-Saskatchewan	103
CMD 21-H6.5 Oral presentation by the Athabasca Joint Engagement and Environmental Subcommittee	142
CMD 21-H6.6/21-H6.6A Oral presentation by Cameco Corporation	154
Final remarks by Orano Canada Inc.	209
CMD 21-H6.2 Written submission from Unifor Local 48-s	210
CMD 21-H6.4 Written submission from Denison Mines Corp.	210
Closing remarks	211

by videoconference / par vidéoconférence

--- Upon commencing on Monday, October 4, 2021
at 10:30 a.m. / L'audience débute le lundi
4 octobre 2021 à 10 h 30

Opening Remarks

THE PRESIDENT: Good morning and welcome to the public hearing of the Canadian Nuclear Safety Commission on the application by Orano Canada Inc. to amend its uranium mine operating licence for the expansion of the JEB Tailings Management Facility (TMF) at the McClean Lake Operation.

Mon nom est Rumina Velshi. Je suis la présidente de la Commission canadienne de sûreté nucléaire.

I would like to begin by recognizing that our participants today are located in many different parts of the country. I will pause for a few seconds in silence so that each of us can acknowledge the Treaty and/or traditional territory for our respective locations. Please take this time

to provide your gratitude and acknowledgment for the land. As well, I would like to acknowledge that the McClean Lake Operation is located in the traditional territories of the Dene, Cree and Métis peoples.

--- Pause

LA PRÉSIDENTE : Je vous souhaite la bienvenue. Welcome to all those joining us via Zoom or webcast.

Under my authority to do so in section 22 of the *Nuclear Safety and Control Act*, I have established a three-member Panel of the Commission to conduct this licence renewal hearing.

I will preside over the hearing, and I have with me on the Panel Dr. Stephen McKinnon and Mr. Randall Kahgee, who are, like me, present remotely for this virtual hearing.

Ms. Lisa Thiele, Senior General Counsel to the Commission, and Marc Leblanc, Commission Secretary, are also joining us remotely.

Safety Moment

THE PRESIDENT: As usual, I will begin with a safety moment on the topic of National Day for Truth and Reconciliation.

The Commission proceedings being held this week were initially scheduled to take place on September 29th and 30th. They were rescheduled following the announcement that September 30th is the National Day for Truth and Reconciliation.

Several events took place last week and I hope all of you took the opportunity to learn about the legacy of residential schools and to honour their survivors and their families.

September 30th was and is a day for all of us to reflect, to acquire deeper knowledge and understanding, and to actively engage in addressing the injustice of the residential school system and other Indigenous child apprehension programs and its lasting impact on Indigenous communities.

September 30th is now a national day of awareness and remembrance. However, we must all

work towards truth and reconciliation in our day-to-day activities. The theme of the activities last week was "Every Child Matters" and this is my safety moment for today. Every Child Matters and let us all have top of mind the safety and well-being of all children, ours and those of members of all communities.

I will now turn the floor to Mr. Leblanc for a few opening remarks.

Marc, over to you.

M. LEBLANC : Merci, Madame la Présidente.

Bonjour, Mesdames et Messieurs. Welcome to this public hearing of the Canadian Nuclear Safety Commission.

During today's business we have simultaneous interpretation. Please keep the pace of your speech relatively slow so that the interpreters have a chance to keep up.

To make the transcripts as meaningful as possible, we would ask everyone to identify themselves before speaking.

I would also like to note that this

proceeding is being video webcast live and that the proceeding is also archived on our website for a three-month period after the closure of the hearing.

As a courtesy to others, please mute yourself if you are not presenting or answering a question.

As usual, the President will be coordinating the questions to avoid having two people talking at the same time. During the question period, if you wish to provide an answer or add a comment, please use the Raise Hand function.

Madame la Présidente...?

CMD 21-H7.A

Adoption of Agenda

THE PRESIDENT: Thank you, Marc.

With this information, I would now like to call for the adoption of the agenda by the Commission Members, as outlined in Commission Member Document 21-H7.A.

Do I have concurrence?

For the record, the agenda is adopted.

Before we begin with the presentations from Orano and CNSC staff, I understand that an Elder from the Métis Nation of Saskatchewan would like to offer a prayer and opening remarks.

Elder Natomagan, the floor is yours.

Prayer / Prière

ELDER NATOMAGAN: Good morning everyone. I thank you for the invitation.

I work for our Northern community of Pinehouse as a Social Development Coordinator and an Elder of the community participating also as Elder for the Métis Nation of Saskatchewan.

So with that, I will do an opening prayer, then a brief comment. Thank you so much.

Heavenly Father, Creator, as we are here together we humbly submit ourselves to you. Let your spirit come upon us. Let there be truth, understanding and wisdom. Holy Spirit, have your way with everyone and everything that we say.

--- Indigenous language spoken /

Langue autochtone parlée

ELDER NATOMAGAN: We thank you. In Jesus' name we pray. Amen.

So with my brief opening comments, I already had a previous engagement with – a prevention meeting with my colleagues here in Pinehouse, so that's why I was going to be brief, but my comment would be that we are going forward as it was – we are obligated as all Canadians with regards to the last couple of days here celebrating and remembering the truth and reconciliation, and to us Indigenous people with section 35 the reconciliation means that going forward it was not just for that day or the week, it's 365 days to make a better living in every aspect of the Indigenous members of our country. So with industries I would suggest having Elder representation as human resources in work sites where Indigenous people can be more comfortable in engaging whether they have any issues with workplaces. So that was my main concern, to have equal opportunities with the workforce but also in managerial positions, the

promotions to be readily available for everyone.

So I thank you this morning and I am very honoured to be invited. Bless you all. Thank you.

THE PRESIDENT: Thank you very much, Elder Natomagan, for both the prayers and your remarks. I have no doubt that this has inspired us all to ensure that we have a respectful and productive proceeding today.

We will now commence the public hearing.

Marc, over to you for introductory remarks, please.

M. LEBLANC : Merci.

The first Notice of Public Hearing and Participant Funding on this matter was published on February 1st, 2021. Revised notices were posted on February 26th and July 26th to modify the date of the hearing and associated deadlines for filing of Commission Member Documents, what we call CMDs.

The public was invited to participate in writing and by making oral presentations. August

16th was the deadline set for filing by intervenors. The Commission received six requests for intervention.

September 15th was the deadline for filing of supplementary information. I note that supplementary submissions and presentations have been filed by CNSC staff, Orano Canada Inc. and intervenors.

Participant funding was available to intervenors to prepare for and participate in this public hearing. Funding was approved for three groups. One of them, the Ya'thi Néné Land and Resource Office, informed the CNSC that due to the COVID-19 public health measures in place it was not in a position to prepare for and participate in the hearing. The funding decision by the Funding Review Committee is available on the CNSC Website.

Today we will first hear the presentations by Orano and CNSC staff.

Two longer breaks have been scheduled today, taking into account the time difference for participants joining us today. The presentations from intervenors will be after the first break, which will

be lunch time for some and perhaps coffee break for others. Time allowing, we may ask some of the intervenors if they could present prior to the lunch.

Four intervenors are scheduled to present orally today. While the presentations are limited to 10 minutes, Commission Members will have the opportunity to ask questions after each presentation. There is no time limit for the question period.

The written submissions will be addressed during the final rounds of questions.

I want to note that representatives from different provincial and federal governmental departments are joining us remotely to be available for questions.

President Velshi...?

THE PRESIDENT: Thank you.

Let's begin with the presentation from Orano Canada, as outlined in CMDs 21-H6.1 and 21-H6.1A.

I will turn the floor to Mr. Jim Corman for this presentation.

Mr. Corman, the floor is yours.

CMD 21-H6.1 / 21-H6.1A

Presentation by Orano Canada Inc.

MR. CORMAN: Thank you and good morning, Madam President and Members of the Commission.

I would like to thank Elder Natomagan for his opening prayer and comments.

For the record, my name is Jim Corman. I am the President and CEO of Orano Canada Incorporated.

Today I am joined by Vincent Laniece, our Vice President of Safety, Environment and Engineering, and Tina Searcy, Manager of Regulatory and Environmental Science Department, who will be sharing in this presentation and answering questions.

Also here today is Bryce Reiter and Kebbi Hughes from Orano's Geosciences group and Glenn Lafleur from our Corporate Social Responsibility group.

From Golder Associates we have with us Greg Misfeldt and Mike Tremblay, who both have a long history with the JEB TMF as the design engineers and engineers of record.

Before we get started, I would like to acknowledge that our team is presenting from our office in Saskatoon, which is located on Treaty 6 territory and the traditional homeland of the Métis. The project we are discussing today is on Treaty 10 territory and homeland of the Métis, in the northeastern part of the province.

We are here today to present information on an expansion of the tailings management facility at our McClean Lake Operation.

I will begin with a general overview of our company and the operation, but I wanted to emphasize the importance of this expansion project to Orano and to Northern Saskatchewan. It has been in development since the mid 2000's and I am very proud of the technical and engagement work that has been done to prepare the project.

As the current tailings management

facility reaches its approved capacity, a decision on this project is essential for Orano and its joint venture partners to make decisions on future operations.

Next slide.

Before we proceed, this slide provides an overview of the presentation.

Next slide.

This errata slide is provided with the submission of the slide deck, pointing to a reference error in Orano's CMD, a minor misstatement.

Next slide.

Orano Canada is a subsidiary of Orano Group which employs over 16,000 people involved in all aspects of the nuclear fuel cycle, providing low-carbon energy to the world.

Orano Canada is part of the mining group and is a leading producer of uranium operating in Canada for 55 years in the areas of exploration, mining and milling, including the successful decommissioning of a modern uranium mine at Cluff Lake, the mill and tailings management facility, which

we are currently preparing to transfer into the Province of Saskatchewan's Institutional Control Program.

Orano Canada is the operator of the McClean Lake uranium mill and a major partner in the Cigar Lake, McArthur River and Key Lake operations. The company employs over 420 people in Saskatchewan, including about 300 at the McClean Lake operation, where over 48 percent of employees are self-declared Indigenous and over 53 percent are from Northern Saskatchewan. As a sustainable and responsible uranium producer, Orano Canada is committed to safety, environmental protection and contributing to the prosperity and well-being of neighbouring communities.

Next slide.

McClean Lake is a uranium mine and mill operation. With no mining operations occurring since the last economically viable ore body was mined in 2010, the mill has been processing high-grade ore from the Cigar Lake mine since 2014.

McClean Lake is located in northeastern Saskatchewan, 750 kilometres north of

Saskatoon, in a region referred to as the Athabasca Basin, with the closest communities of Hatchet Lake Denesuline Nation and Northern Settlement of Wollaston Lake located approximately 48 kilometres to the southeast. Other communities in the region include the Denesuline Nations of Black Lake and Fond du Lac, the northern settlements of Uranium City and Camsell Portage, and the northern hamlet of Stony Rapids, which are up to 340 kilometres from the operation.

The McClean Lake Operation's operating licence was renewed by the CNSC in 2017 for a 10-year term expiring June 30, 2027.

I will now turn the presentation over to my colleague Vincent Laniece.

MR. LANIECE: Thank you, Jim and good morning everyone.

For the record, my name is Vincent Laniece.

The McClean Lake Operation consists of three primary areas:

- the Sue site which consists of a number of mined-out open pits and related facilities;

- the JEB site which consists of the mill and related facilities, and the mined-out JEB pit which was converted to the JEB TMF and is the facility we are here today to discuss.

These two sites are separated by a 15-kilometre haul road.

The third area is the Sink/Vulture Treated Effluent Management Systems, a series of control structures through which effluent is released.

The surface lease includes the Midwest Project site, located 15 kilometres west of the McClean Lake Operation, and that is currently in care and maintenance.

The picture on this slide shows the mill in the forefront, the TMF in the top right corner and the adjacent receiving water bodies, Pat Lake and Fox Lake.

Next slide, please.

Orano has submitted a request to the CNSC to amend the existing uranium mine operating licence issued for the McClean Lake Operation.

The amendment request is to authorize

the raising of the final top of consolidated tailings from a currently approved elevation of 448 metres above sea level to an elevation of 462 metres above sea level. To facilitate this higher top of tailings, an expansion of the JEB TMF by construction of an embankment to an elevation of 468 is required.

Orano is also requesting the Commission accept the updated financial guarantee. Details will be presented in the later portion of this presentation.

Next, please.

I will now review some technical aspects of the Project, with references to the approved TMF expansion and the proposed further expansion that Orano is seeking approval for, differentiating them through change in elevation.

Tailings are the leftover waste generated from the removal of uranium from rock or slurry and must be disposed of and managed properly to protect the environment. It is a mix of solids and stabilized chemicals and liquids. It leaves the mill like a thick jello and consolidates into a solid mass,

which you can see on the bottom pictures of this slide.

The picture in the top left is from 2003. It is a good image to show the high and low elevations of the TMF and the proximity to the receiving environment, with Fox Lake in the forefront.

To provide a better idea of scale, the perimeter road that goes around the pit is about 1 kilometre long.

The TMF has a natural elevation ranging from a level of 448 – you can see the low spot immediately adjacent to Fox Lake – to 462 on the high side.

Decommissioning the TMF involves removal and treatment of pore water to consolidate the tailings, decreasing their elevation and placement of an engineered cover, leaving a consolidated and solid tailings mass, as you can see on the slide, to passively control and slow down the release of chemicals to acceptable levels into the receiving environment.

Next slide, please.

The top photo here is of the TMF in 2019. There is a pond cover on the tailings and you can see that it is reaching its capacity.

The bottom photo was taken this summer, so 2021, during construction of the embankment to expand the low side of the TMF. This expansion was approved in 2017 and will allow tailings to be placed above the natural low side during operations, consolidating at or below the natural low side during decommissioning.

Next slide, please.

The current approved TMF will reach capacity by approximately 2027. To explore options for the long-term management of tailings, Orano conducted alternatives assessments and a trade-off study between the top two ranking options, excavation of a purpose built pit and vertical expansion of the existing facility, concluding that the vertical expansion remained the preferred option for the following reasons:

- use of existing footprint and infrastructure;

- remains within the existing surface lease – the figure on this slide indicates the northern portion of the surface lease around the JEB site area; the extent of the expanded TMF is shown in orange and is well within the surface lease boundaries;

- no additional effects on the landscape or wildlife with the vertical expansion;

- surface and groundwater quality remain below guidelines;

- environmental effects are within existing environmental assessments and risk assessments.

This further expansion will provide an additional 2.3 million cubic metres of tailings capacity, extending the life of the TMF by approximately 10 to 15 years.

In order to increase the tailings elevation, an embankment and liner will be placed around the perimeter of the TMF to an elevation of 468.

During operations, allowing tailings

to be placed 17.5 metres above the natural low side of the pit, and 3.5 metres above the natural high side.

Post-decommissioning tailings will consolidate at or below the natural high side, and approximately 14 metres above the natural low side.

Before we move into the rest of our presentation we would like to take five minutes to view a video that Orano prepared to explain the expansion to stakeholders, which is also available on our YouTube channel in Dene and Cree.

Could you set up the video, please.

--- VIDEO PRESENTATION / PRÉSENTATION VIDÉO

SPEAKER: Located in Northeast Saskatchewan on Treaty 10 territory and homeland of the Métis, the McClean Lake uranium mine and mill has been safely operating for over 20 years. For the past 20 years, the tailings or waste material left behind when the uranium is processed has been managed in a mined-out pit onsite called the JEB TMF.

This tailings management facility is an environmentally sound way of managing the waste material, but it will reach its capacity in 2027.

Orano Canada is proposing an expansion of the current facility as it is the best option when all aspects are considered. The expansion will use the existing infrastructure and does not impact any new areas of the environment, including wildlife, service and groundwater.

Right now tailings are allowed to settle to the top of the pit on the lowest side. The expansion would mean that an embankment is built around the top of the pit so that the tailings would settle to a height level with the high side of the pit. The embankment has been carefully designed and will be well monitored. Studies have been conducted on its stability. The risk of a failure is unlikely to occur during operations and post-decommissioning.

The material used to construct the embankment will come from the existing clean waste rock pile, maximizing its use and minimizing its footprint. The expansion will be done in phases as more capacity is needed. When the expansion is complete we will be able to add 2.3 million cubic metres in tailings storage.

The expansion will allow Orano to make decisions on future mining projects in Northern Saskatchewan, knowing there is a long term tailings management plan. Over time the tailings will consolidate and the water will be removed. Consolidated tailings behave like a sturdy paste, they are not free-flowing, they are self-standing.

In the final stages of decommissioning, the slope of the embankment will be flattened for even greater stability and cover of waste rock will be placed on the tailings. We will then shape the area and plant grasses and trees to match the local environment.

When decommissioning is complete, the tailings management facility will be a safe and stable landform that is part of the landscape.

How to manage tailings beyond 2027 has been considered and explored since the mid-2000's and there have been many meetings, presentations and open houses on the topic. While it is the preferred option, a number of other alternatives have been explored.

Orano could use a different onsite mined-out pit for a tailings management facility, possibly in the Sue C or E areas of the site. While this is technically feasible, it is not preferred as those areas are not prepared for this type of facility. A new area of the environment would be subject to the waste and there would be a substantial cost of building the transport system and water treatment plant and managing a separate facility. Transporting tailings from the mill to any of the Sue pits located 15 kilometres away from the mill is exceptionally challenging in our cold winter months.

We also considered a purpose-built freestanding facility. This tailings facility would need to be located off the existing surface lease due to space requirements and therefore would impact a new environment and watershed. Although feasible, this option is not currently preferred due to the expanding environmental footprint and associated costs.

Orano's proposal for the expansion of the current facility was resubmitted in November 2019 and we have been advised by the Canadian Nuclear

Safety Commission that the project will require a decision by the Commission Tribunal. We are preparing for the public hearing scheduled for September 2021 and encourage interested parties to watch for opportunities to participate in the process.

For more information on the proposal, see the Orano Canada website or contact your local member of the Northern Saskatchewan Environmental Quality Committee or the Athabasca Joint Engagement and Environment Subcommittee. You can also contact Orano directly by phone or e-mail. It is our goal to continue delivering the benefits of uranium mining and milling to Northern Saskatchewan and we welcome your questions.

--- END OF VIDEO PRESENTATION /

FIN DE LA PRÉSENTATION VIDÉO

MR. LANIECE: Next slide, please.

--- Pause

MR. LANIECE: I'm on Slide 11 right now, which is the next one. Perfect.

As you have seen with the video. Orano has conducted a number of assessments and studies,

designing and constructing the first phases of liner and embankment for extreme conditions and being best prepared for decommissioning. The following slides will walk us through our main areas of attention to continue protecting people, environment, and engaging with the communities.

Over the licence term, Orano has received satisfactory ratings for all 14 SCAs from the CNSC staff for the McClean Lake Operation. The presentation will focus on the four safety control areas most applicable to this licence amendment request.

Next slide, please.

Orano manages tailings so that chemicals of concern like arsenic or uranium that may pose a risk to the environment are controlled in a way that protects the environment now and over the long term. During operations, the TMF is managed for the protection of people working near the tailings, the protection of the environment, and ensuring the tailings' physical environment is controlled.

The containment of the TMF is secured

by pumping water from a base drain, causing the surrounding groundwater to flow inwards, towards the TMF, making it impossible for migration of chemicals from the TMF to the environment.

Water from the TMF is treated to meet strict criteria before being released. Expanding the TMF does not impact the quantity or quality of effluent being released; these parameters are controlled by the water treatment plant and its robust chemical process.

In the post-closure period, the key for the long-term performance of the TMF is establishing passive physical and chemical controls to ensure that the facility will age over geological time, protecting people and the environment.

The primary physical control is ensuring tailings consolidate into a solid mass, which significantly reduces the ability of groundwater to flow through the tailings, mitigating the transfer of chemicals from the tailings into the receiving environment.

Secondly, the tailings are chemically

designed and produced to reduce the concentration of chemicals in the pore water of the tailings, slowing down and passively controlling the release of the chemicals. Next slide, please.

The performance of the TMF is regularly evaluated and validated through various means, including technical information documents on tailings management and environmental protection, updated every five years and reviewed and accepted by both the Province and the CNSC. The tailings management document includes a validation program, which demonstrates the performance of the TMF and confirms that the physical and chemical controls are developing as predicted to passively control the release of chemicals from the TMF to be protective of the environment.

The environmental performance document includes an environmental risk assessment based on current and anticipated future activities and provides an update of predictive modelling for air, water, sediment quality, ecological, and human health risks.

The most recent versions of both

documents concluded that the expanded facility, during Operation and for the long term, is performing as expected within previous assessments, and therefore risks to the environment and to people from expanding the TMF are predicted to remain negligible. Next slide, please.

One of the risks identified of the expansion is the safety and stability of the embankment, the man-made structure that we and our future generations are counting on. The following slides will provide details of what Orano has been doing to ensure the expansion is safe and protective of the environment.

Robust analysis of the slope stability was conducted by qualified engineers to ensure that the facility is stable during Operations when the level of water and tailings reaches its peak and post-decommissioning for confidence that the facility will last long into the future though geological times.

Decommissioning will involve construction of an engineered cover with material from the JEB clean waste rock pile and shaping it into a

landform that blends into the surrounding landscape. The landform must be capable and stable and self-sustaining, not requiring assistance of active controls such that it can be transferred to the Province through institutional control in an acceptable and responsible manner. Next slide, please.

A detailed engineering analysis using two methods, deterministic and probabilistic analyses, were conducted to determine safe angles for the embankment design slopes.

The upstream slope, the one in contact with the tailings, was found to have an appropriate factor of safety and reliability index. It is a gentle slope, mostly a 3:1 or 18-degree angle, allowing heavy equipment to drive on it.

Slope stability analysis of the downstream slope, the one exposed to elements, people, and wildlife for geological time, also resulted in an appropriate factor of safety and reliability index. As part of the final TMF decommissioning, the downstream slope will be flattened to a gentler slope,

4:1 or 14-degree angle, and blend with natural existing landforms, mitigate erosion potential, and remain stable for the long term.

Seismic activity in the Canadian shield is low and the embankment has been designed in accordance with the Canadian Dam Association guidelines. For monitoring and validation purpose, instrumentation is being installed in the embankment with a maintenance program during the TMF operating period. Next slide, please.

Since 1995, the starting of the mining of the JEB open pit, a legacy of knowledge characterizing the till units at the site has been compiled. Evaluation and detailed characterization of the open pit faces as well as historical borehole log reports, test pit investigations, and focused drilling programs have identified a sequence of three very dense till units.

A supplementary drilling investigation was completed in February 2021 to provide additional confidence in the geological model of the site to confirm the compactness of the till units and better

inform the previous geotechnical properties determined for the till units. The drilling investigation confirmed the continuity and the suitability of the dense till units underlying the proposed embankment foundation. Next slide, please.

Significant attention to design and construction have been performed to assess and mitigate collapse potential, including reviewing lessons learned of recent tailings dam failures. Mount Polley's failures occurred due to a foundation failure, specifically an insufficiently investigated and poorly understood thin clay layer. This clay layer was of critical importance to the foundation stability.

During mining and subsequent investigations of the JEB pit, Orano validates that no weak clay layers are present in the till.

Vale's Brumadinho 2019 failure was caused by failure of the loose saturated tailings used to construct the dam.

The embankment involves, for the JEB TMF, a continuous downstream construction using waste

rock.

Additionally, Orano is a member of the ICMM and was a contributing member as part of the creation of the standard on tailings management, published in August of 2020. The standard strives to achieve the ultimate goal of zero harm to people and the environment, providing a framework for the safe management of tailings facilities, which we are implementing. Next slide, please.

At time of decommissioning, the engineered cover will prevent the release of radiological and hazardous chemicals to the air and provide a physical barrier between the tailings and human and environmental receptors. The cover will limit infiltration to the tailings, which will slow down and contribute to controlling the transport of chemicals through the groundwater to the adjacent lakes. The conceptual design includes a multi-layered engineered cover with a thickness of four and a half metres at the perimeter of the facility and eight and a half metres in the centre. The conceptual design will be refined prior to decommissioning and informed

by test plots constructed and monitored over a number of years. Next slide, please.

Successful closure and decommissioning of the TMF will require that the site is safe for traditional use. End state will be achieved that ensures long-term stability with passive controls and no unreasonable risk to the environment.

The closure landform, involving the engineered cover placed on top of the tailings and the adjacent clean waste rock pile, has been designed to replicate key features of analogue in the surrounding environment. Its design also includes self-healing mechanisms to limit erosion and prevent exposure of the tailings.

A beyond-design scenario was modelled to test the robustness of the landform design and its ability to handle extreme precipitation, including climate change scenarios. The scenario resulted in greater infiltration through the cover, however did not result in an exceedance of the chemical concentrations reporting to Fox and Pat Lakes.

I will now pass the presentation to my

colleague Tina Searcy.

MS. SEARCY: Thank you, good morning.

MR. WEABLE: Tina, we can't hear you.

MR. LEBLANC: We still can't hear you, Ms. Searcy, so I don't know if somebody can be your backup and do your part of the presentation until you're able to fix it.

MS. SEARCY: Can you hear me from this way?

MR. LEBLANC: This works. Great, thank you.

MS. SEARCY: Okay, perfect. Something must have went wrong with my microphone since we tested. Sorry about that. I'll start from the beginning of the slide.

For the record, my name is Tina Searcy.

Orano maintains a robust environmental monitoring program which will continue to effectively monitor potential risks from the expanded TMF.

A key environmental performance aspect of the TMF is ensuring that hydraulic containment is

maintained during operations. The monitoring of groundwater quality at wells nearby the TMF is an early performance indicator for containment and movement of chemicals from the tailings into the receiving environment.

For the control of waterborne releases, the water treatment plant has the capacity to continue to treat reclaimed water from the expanded facility. As previously mentioned, the parameters regarding treated effluent is determined by the water treatment plant performance, which is not expected to change as a result of the expansion. As discussed, the facility will be decommissioned in a manner to contain the tailings, including the placement of an engineered cover to prevent exposure of the tailings. Next slide, please.

Modelling for the expanded facility concludes that predicted effects in the receiving environment remain within previous environmental assessments and risk assessments.

Tailings properties and consolidation characteristics will continue to be assessed through

the validation program to ensure that the physical and chemical controls are being achieved and will continue to do so for the long term to ensure the protection of the environment and human health.

An evaluation of the post-closure radiation exposure conditions considered potential exposure of traditional land users and concluded that exposure will be indistinguishable from natural background radiation in the area, meaning that environmental risk to the health of the general public is predicted to be negligible.

In addition to the review of environmental interactions, an assessment was conducted of the impacts to Fox Lake, Pat Lake, and other downstream water bodies should an unlikely embankment failure occur. The results of this assessment indicates that water and sediment quality and the health of aquatic biota in Fox Lake would be temporarily affected. With remediation, recovery of the lake could take months or years. However, it is expected that water bodies downstream of Fox Lake will not be negatively impacted over the short or long

term. Next slide, please.

Impacts on the surrounding environment, including long-term water quality of adjacent Fox and Pat Lakes have been assessed. Modelling conducted to predict the transport of chemicals and resulting loadings to receiving surface water bodies indicate that concentrations of chemicals will remain below federal and provincial surface water quality guidelines in the receiving environment, therefore remaining protective of aquatic life.

The key chemicals presented on this slide are arsenic, uranium, nickel, and moly. Starting at the far left is the predictions for long-term water quality in the receiving environments, followed by the bounding or worst case, then the baseline, and lastly the Provincial surface water quality guidelines are on the far right.

As you can see, the concentrations are within the guidelines in both lakes, concluding that the expanded facility will not impact the environment or human health. Next slide, please.

Orano has been engaging on the

expansion project with the Athabasca Basin leadership, community members, representatives from the region, and other interested parties since 2011. The scope of the expansion project has not substantially changed over that period. Orano has provided project information, held numerous workshops, meetings, and tours regarding the project.

The project is on an existing footprint, utilizing existing mine workings within the existing surface lease. It does not take up new lands, and the environmental effects of the projects are within those previously assessed.

Through project engagement conducted since 2011, there have not been any expressed concerns regarding the project infringing on Indigenous or treaty rights pursuant to section 35 of the Constitution.

Since the 2019 application, discussions on the project have been primarily with stakeholders such as the Athabasca Joint Engagement and Environmental Subcommittee, otherwise known as the AJES, residents of the basin including Métis locals,

the Métis Nation of Saskatchewan, the Ya'Thi Néné Lands and Resource office, Orano employees, and others upon request such as the English River First Nation.

The Ya'thi Néné collaboration agreement signed in 2016 between Orano, Cameco, and the seven Athabasca Basin communities established a process for engagement and the formation of the AJES. As such, engagement between Orano and the basin communities under the collaboration agreement primarily has occurred through this committee.

Orano has presented the project on numerous occasions to the AJES, including a tour of the facility with a full-day workshop. Although conversation has occurred regarding aspects of the project, no significant concerns have been raised. The photo on this slide includes representatives of the AJES, EQC, and Ya'Thi Néné Lands and Resource office during a project workshop and tour of the TMF in September 2020.

Oran has been engaging with the Métis people in the vicinity of the McClean Lake Operation through the collaboration agreement as well as in

direct contact with Local Presidents of Uranium City (which is Métis Local #50) and Stony Rapids (Métis Local #80). We also had a recent opportunity to present the project to the Métis Nation of Saskatchewan and their consultants.

Last month we had a virtual meeting with members of English River First Nation and their consultants on the project. It was a good opportunity to hear their questions and provide answers and continue to build our relationship.

We have also provided focused information to another important stakeholder, our employees, with more than half of our employees being residents of northern Saskatchewan. Next slide, please.

Another aspect of this proceeding is the review of the updated financial assurance. Orano is required to revise and update the McClean Lake Operation's preliminary decommissioning plan and associated financial assurance every five years. In keeping with the concept of life cycle planning, project developments are included upon completion of

construction. The updated plan was prepared considering project statuses to the end of 2025. Future revisions to the plan will reflect the expansion of the TMF.

Based on preliminary decommissioning plans for the five-year window to the end of 2025, a cost estimate of \$102,098,000 has been proposed and accepted by the Province of Saskatchewan and the CNSC staff, representing a decrease of approximately \$5 million from the currently held financial assurance. Next slide, please.

In conclusion, Orano is a responsible operator, driven to minimize impacts, addressing the tailings legacy risk through its 20 years of experience with the TMF design/construction for extreme conditions and lessons learned from other tailings facilities, relying on passive controls. Orano has a long history of engaging northern communities, with collaboration agreements in place and more than half of our workforce originating close by the location that we operate in.

We would like to close by thanking

those who have participated in the hearing. We know that it takes time and resources to review technical documents and meet with us to discuss project details. We appreciate your interest and your questions. Our team looks forward to continued engagement on this and other important projects for the McClean Lake Operation.

Thank you.

THE PRESIDENT: Thank you, Ms. Searcy and Messrs. Corman and Laniece for the presentation.

We'll now move to the presentation from CNSC staff as outlined in CMDs 21-H6 and H6.A

Ms. Murthy, over to you, please.

CMD 21-H6/21-H6.A

Presentation by CNSC staff and experts from other governmental departments

MS. MURTHY: Thank you.

Good morning, Madam President and Members of the Commission. My name is Kavita Murthy, and I am the director general of the Directorate of

Nuclear Cycle and Facilities Regulation at the CNSC.

With me today are Mr. Peter Fundarek, director of the Uranium Mines and Mills Division, and Mr. Salman Akhter, senior project officer of the same division. We are also joined by other CNSC colleagues familiar with this file who are available to answer any questions that the Commission may have.

Our presentation today will discuss Orano's application to amend the McClean Lake uranium mine operating licence to allow for the expansion of the JEB Tailings Management Facility. Our presentation, identified as CMD 21-H6.A, provides a summary as well as highlights from CNSC staff's written submission found in CMD 21-H6.

I will turn the presentation over to Mr. Peter Fundarek. Thank you.

MR. FUNDAREK: Good morning, Madam President and Members of the Commission. My name is Peter Fundarek, and I am the director of the Uranium Mines and Mills Division at the CNSC.

This presentation today will cover an overview of Orano's McClean Lake Operation and CNSC

staff's technical assessment of Orano's application for the licence amendment for the JEB TMF expansion, project description, design, and other supporting documents as it relates to the CNSC's framework of safety and control areas. Finally, we'll look at other regulatory focus areas for the remaining licence period, other matters of regulatory interest, conclusions, and recommendations.

The purpose of this public hearing is to review, discuss, and provide information on Orano's application to amend the CNSC licence for their McClean Lake Operation. Orano has submitted an application to the Commission to amend the CNSC licence for the McClean Lake Operation to authorize the JEB Tailings Management Facility expansion. No other changes are proposed to the terms or conditions of the licence.

CNSC staff recommend that the Commission take the following actions: Amend the CNSC licence issued to Orano to allow for the JEB TMF expansion at the McClean Lake Operation, and accept the proposed revised financial guarantee for Orano's

McClellan Lake Operation for decommissioning in the amount of \$102 million Canadian.

The next two slides provide an overview of the location and layout of the McClellan Lake Operation.

The McClellan Lake Operation is a uranium mine and mill facility located approximately 750 kilometres north of Saskatoon in the Athabasca Basin area of northern Saskatchewan. The nearest permanent communities are Wollaston Post and Hatched Lake Denesuline First Nation, located approximately 50 kilometres by air from the facility to the southeast on the far shore of Wollaston Lake.

While the McClellan Lake Operation is owned [sic] by Orano, ownership is comprised of Orano with 77.5 per cent and Denison Corp. with 22.5 per cent. The McClellan Lake operation includes the JEB Mill site and the TMF, The Sue Mine area and other undeveloped deposits in the McClellan Lake operational area.

This slide shows an overview of the JEB site facility. Key facilities are shown and

labelled. The JEB Tailings Management Facility is shown as No. 1 at the top centre area of this slide.

In the foreground are the McClean Lake buildings and services involved in the processing of the ore slurry from the Cigar Lake operation.

Orano's current CNSC licence was renewed by the Commission on July 1st, 2017 for a 10-year term. The licence was amended in July 2018 to update the licence name change from Areva Resources Canada Inc. to Orano Canada Inc. The licence remains valid until June 30th, 2027.

CNSC Staff recommend that the Commission amend the CNSC licence to add a new licensed activity to Section 4, licensed activities, as described below. Item B modify the outer perimeter of the JEB Tailings Management Facility for the vertical expansion up to 468 metres above sea level and to accommodate disposal of tailings up to a consolidated tailings elevation of 462 metres above sea level.

There is no change to the licence conditions, and the licence term remains the same for

the proposed amended licence, which expires on June 30th, 2027.

I will now pass the presentation over to Mr. Salman Akhter to discuss CNSC Staff's review of Orano's application for a licence amendment.

MR. LEBLANC: Mr. Akhter?

MR. AKHTER: Can you hear me?

MR. LEBLANC: Yes. Please proceed.

MR. AKHTER: Okay. Good morning, Madam President and Members of the Commission. For the record, my name is Salman Akhter, and I am a Senior Project Officer with Uranium Mines and Mills Division at the CNSC.

I will now discuss the JEB TMF expansion project history and CNSC Staff's review of Orano's application for a licence amendment to the McClean Lake Operation.

In August 2011 Orano submitted a project description to amend their CNSC licence for the JEB TMF expansion to 468 metres above sea level elevation. CNSC Staff determined that federal screening level environmental assessment (EA) was

required. With introduction of the *Canadian Environmental Assessment Act 2012*, CNSC notified Orano that an EA would no longer be required.

In 2014 Orano revised their mine development plans, which resulted in reduction of the forecasted tailings volume. This reduction was significant and the subsequent alternative assessments confirmed that expanding the JEB TMF remain the preferred option, although with a reduced scope in design. Orano eventually withdrew that application in 2014.

In June 2016, Orano submitted a new project description with reduced scope for the JEB TMF expansion to 457.5 metres above sea level elevation. After conducting a thorough technical assessment, CNSC Staff concluded that the reduced proposed expansion of the JEB TMF remained within the licensing basis and would continue to be effective in protecting the environment.

Therefore, the CNSC Staff approved the project in April 2017 and reported to the Commission in CMD 17-H9 during the CNSC licence renewal public

hearing in June 2017.

Orano started processing Cameco's Cigar Lake ore and noted that milling of Cigar Lake ore produced more tailings per ton of ore processed than initially expected. Current mining and milling plans indicate that the JEB TMF will reach its full storage capacity approximately during the year of 2027.

In order for Orano to secure future mining and milling plans, sufficient tailings capacity must be available to prevent production disruptions. Therefore, in November 2019 Orano submitted an updated project description to the CNSC describing the need for a further expansion of the JEB TMF to 468 metres above sea level elevation.

In May 2020, after conducting a detailed technical assessment, CNSC Staff concluded that the project was outside licensing basis and a licence amendment would be required.

As advised by CNSC Staff, Orano submitted a licence amendment application in June 2020 for the JEB TMF expansion at the McClean Lake

operation.

I will now discuss CNSC Staff's review of Orano's application for a licence amendment.

CNSC Staff assessed Orano's licence amendment application against the regulatory requirements, including the *Nuclear Safety and Control Act*, associated regulations, CNSC regulated documents, guides and standards for all 14 safety and control areas.

CNSC Staff assessed Orano's past performance, including records of compliance activity and environmental monitoring. CNSC Staff also assessed Orano's compliance with the CNSC's regulatory document 3.2.1, public information and disclosure, and observed community outreach and consultation activities.

CNSC Staff concluded that Orano meets CNSC regulatory licensing requirements.

In accordance with its mandate under the *Nuclear Safety and Control Act* and associated regulations, the CNSC conducts environmental protection reviews (EPRs) for all licence applications

with potential environmental interactions to ensure the protection of the environment and the health and safety of persons.

The EPR assessed the environmental and health effects for the JEB TMF expansion. CNSC Staff's assessment included a review of Orano's application for a licence amendment, project description for the JEB TMF expansion, and supporting technical documents.

CNSC Staff's assessment conclusions and documentation for the EPR are summarized in the EPR report for the McClean Lake operation, which is found in Addendum E of CNSC Staff's CMD 21-H6 for this hearing.

CNSC Staff concluded Orano will continue to adequately protect the environment and the health and safety of persons.

CNSC Staff use a rating system to describe licensee compliance. Regulatory oversight is performed in accordance with a standard set of safety and control areas (SCAs). SCAs are technical topics used across all CNSC regulated facilities and

activities to assess, evaluate, review, verify and report on licensee regulatory requirements and performance.

CNSC Staff have evaluated Orano's performance as being satisfactory for each SCA as shown in the table on this slide for the McClean Lake operation during the current licence period, July 2017 to May 2021. CNSC uses a risk-informed and performance-based approach for its regulatory oversight.

I will now summarize CNSC Staff's technical assessment of Orano's JEB TMF expansion application as it relates to the CNSC's framework of the SCAs.

While the assessment of all 14 safety and control areas are discussed in CNSC Staff's written CMD 21-H6, five SCAs are further highlighted in this presentation in relation to the JEB TMF expansion project description, design and other supporting documents.

The five SCAs are: operating performance; safety analysis; physical design;

environmental protection; and, waste management.

The waste management SCA is mainly regarding the preliminary decommissioning plan and financial guarantee which are discussed under other matters of interest later in the presentation.

The current approved elevation of the JEB TMF is 457.5 metres above sea level elevation with the consolidated tailings elevation at 448 metres above sea level.

The proposed expansion will increase the JEB TMF height to 468 metres above sea level elevation, an increase of 10.5 metres. And the consolidated tailings to 462 metres above sea level elevation, an increase of 14 metres.

For the JEB TMF expansion proposal CNSC Staff conducted detailed technical assessments on matters such as slope stability, till collapse potential, groundwater flow and solute transport, soil liner design, decommissioning approach, radiological assessment, and a hypothetical beyond-design basis erosion event that could result in partial erosion of the cover.

CNSC Staff completed the technical assessment in March 2021 and accepted that Orano's application was complete.

CNSC Staff concluded the proposed JEB TMF expansion will continue to ensure protection of the environment.

CNSC Staff reviewed and assessed Orano's safety analysis case for the JEB TMF expansion and verified that the safety analysis was carried out in accordance with the regulatory requirements, and the Canadian best practices represented by the Dam Safety Guidelines of the Canadian Dam Association.

Hazards associated with the expansion are identified and the risk to their environment and human health are assessed. The primary hazards associated with the JEB TMF expansion include the increase of the embankment height of 10.5 metres, the extra loading resulting from the expanded embankment, and an increase of the consolidated tailings elevation up to 14 metres above the ground elevation on the low side of the JEB TMF.

CNSC Staff assessed impacts of the

identified hazards through a review of Orano's slope stability analysis of the proposed embankment structure, the foundation collapse potential analysis, and the severe accidental failure of the embankment structure.

CNSC Staff assessed the safety of the proposed embankment containment structure using both the deterministic and the probabilistic analysis of the embankment slope stability, as well as the till collapse potential analysis.

The Dam Safety Guidelines 2007, revised in 2013, of the Canadian Dam Association was used as the main reference for this evaluation.

The deterministic stability analysis used soil parameters, such as unit weight, effective friction angle and effective cohesion, which have a single unique value. The analysis result is a single factor of safety well within the minimum factor of safety criteria under both static and seismic loading of the Dam Safety Guidelines.

A probabilistic slope stability analysis was also performed to demonstrate the

stability of the proposed embankment structure by considering the variability of input parameters. The criterion for probabilistic stability analysis is reliability index. The recommended minimum reliability index is equal to or greater than 2.5, which corresponds to a probability of failure of 6×10^{-3} .

The proposed structure achieves the minimum reliability index of 3.89 under static loadings, higher than the minimum, reducing the probability of embankment slope failure to approximately 3×10^{-5} .

The figure in this slide shows an aerial view of JEB TMF, Pat Lake and Fox Lake. Fox Lake is the closest water body to the JEB TMF completely within the licensed site and it's not used for fishing during operation.

Two hypothetical embankment failure scenarios were analyzed: release of JEB TMF water to the environment when the JEB TMF is at maximum capacity; release of JEB TMF water and tailings solids to the environment when JEB TMF is at the maximum

capacity.

CNSC Staff concluded that the embankment failure would not have significant effects on the Collins Creek watershed, which starts approximately 5 kilometres down stream of the facility. Water and sediment quality and the health of aquatic biota in Fox Lake and Pat Lake would be affected, and the recovery could take some time.

However, it is not expected that affected life in water bodies downstream of Fox Lake would be negatively impacted over the short or long term.

CNSC Staff concluded the JEB TMF expansion can be constructed and operated safely throughout the facility lifecycle.

CNSC Staff's technical assessment of the JEB TMF expansion physical design focused on site characterization that was comprised of site investigation and material characterization, structure design comprising of the embankment and land form design, and component design consisting of the liner and TMF cover design.

The drawing in this slide shows the JEB TMF expansion embankment and the locations of two cross-sections for slope stability analysis. The JEB TMF site was characterized with several geological and geotechnical investigations and material characterizations.

The general stratigraphy encountered in the JEB TMF area, in descending order, includes organics or organic soils of 0 to 4 metres, till of 10 to 28 metres, sandstone of approximately 6 metres to 200 metres, basement regolith of about 50 metres, and crystalline basement rock which are shown in the figure in this slide.

CNSC Staff verified that Orano has conducted the necessary material characterization of the site and bentonite liner both on site and also in the laboratory, confirming the necessary geotechnical properties for the JEB TMF expansion.

CNSC Staff is satisfied that the test results confirm that bentonite-amended crushed sandstone or bentonite-amended till can be used as a liner material from the JEB TMF expansion.

CNSC Staff concluded the site investigation and material characterization conducted to date shows that there are no weak clay layers in the till and the site soil conditions are appropriate for the JEB TMF expansion.

The embankment is designed with rock fill and a bentonite-amended crushed sandstone liner on the upstream slope which is supported with slope stability analysis.

CNSC Staff verified through technical analysis that there will be sufficient capacity below the embankment crest to manage stormwater from a probable maximum precipitation event during the operation.

During the decommissioning the downstream slopes would be flattened to mitigate erosion potential, which will further improve the long-term slope stability.

CNSC Staff continue to apply the lessons learned from the Mount Polley tailings dam breach in 2014 to ensure the safety of the embankment design. CNSC Staff conclude that the JEB TMF

expansion embankment is designed to ensure both short and long-term stability and safety.

During the assessment of this project, CNSC Staff considered the full lifecycle of the facility and also reviewed the post-operational and decommissioning phases. Orano developed the preliminary landform design using a geomorphic approach for landform configuration design and a structural approach to design the drainage channel and define the specifications of riprap size for channel reinforcement.

Although the current landform design is preliminary, Orano will provide the final detailed closure landform design prior to the decommissioning of the JEB TMF which will incorporate the final corporate cover design, climatologic and hydrologic conditions, environmental features of the site, and best science available at the time of decommissioning

CNSC Staff will review the final landform design and provide recommendations to the Commission for approval as part of an overall licensing decision by the Commission prior to the

start of decommissioning activities.

The drawing in this slide illustrates a preliminary landform design that would provide a sustainable landform configuration and drainage system for the decommissioned JEB TMF.

CNSC Staff concluded that the landform can be designed to ensure the long-term integrity and the environmental performance of the decommissioned JEB TMF.

The liner is designed with 5 per cent bentonite-amended materials, which can achieve the targeted design value of hydraulic conductivity of 1.0×10^{-9} m/s or less for the liner, and provide pond water containment for the expanded JEB TMF during operation.

The liner design is supported with numerical analysis of the liner hydraulic performance that is the location of a wetting front in the liner during operation and the flux of tailings water through the liner during operation.

CNSC Staff accepted the liner design for the previous JEB TMF expansion to 457.5 metres

above sea level elevation. Results of laboratory and in situ testing of the liner constructed to date has validated that the design objective, for example hydraulic conductivity, is met or exceeded.

CNSC Staff also assessed TMF cover design as part of the lifecycle assessment. Although the current cover design is preliminary in nature, Orano proposes that the expanded JEB TMF will be capped with a low hydraulic conductivity soil cover system comprised of a surface layer, a barrier layer and filtered layers.

Orano will refine the cover design requirements through the detailed design process considering the results of a field cover test plot program and the analysis of overall JEB TMF performance through the tailings optimization and validation plan (TOVP), which is an ongoing sampling, monitoring and research program focused on the JEB TMF performance.

Orano reports every five years on the operation and performance of the JEB TMF through the TOVP.

CNSC Staff accepted the preliminary soil cover design, as shown in the drawing in this slide, for the purpose of demonstrating the feasibility of the construction of soil cover to ensure the overall performance of the decommissioned JEB TMF.

Orano maintains a comprehensive environmental protection program through ongoing compliance verification. CNSC Staff will confirm that Orano continues to implement and maintain an environmental monitoring program and a groundwater protection program, control and monitor releases to the environment, periodically review and update their environmental risk assessment to ensure people and the environment around the McClean Lake operation continue to be protected.

Orano meets all requirements in CNSC Regulatory Document 2.9.1, Environmental Protection: Environmental Principles, Assessments and Protection Measures.

CNSC staff evaluated Orano's measures for potential interactions with the environment during

the JEB TMF expansion.

This includes the potential for airborne emissions to be generated as a result of construction activities and road dust.

CNSC staff will verify mitigation measures are in place to reduce any potential impacts to the environment.

Treated effluent from the JEB Water Treatment Plant is not expected to change as a result of this expansion.

The existing JEB Water Treatment Plant has the capacity to treat any additional reclaimed water resulting from the proposed JEB TMF expansion.

CNSC staff will continue to monitor releases to the environment and ensure such discharges remain below licensed release limits.

CNSC staff concluded that Orano's releases to the environment from the proposed JEB TMF expansion are not expected to impact the environment.

CNSC staff evaluated Orano's long-term assessment for the post-decommissioning phase.

Following post-closure, the engineered

cover will prevent contaminants from migrating to the atmosphere.

Modelling results demonstrate that surface water quality in Fox Lake and Pat Lake is expected to remain within water quality guidelines or within natural background levels for the protection of aquatic life.

Predicted exposures to radiation for people using the site post-closure will also be the same as exposures from natural background.

CNSC staff will ensure that Orano conducts a long-term assessment of contaminants accumulated in sediments in Fox Lake and Pat Lake to assess any potential risk to aquatic receptors. In the event that the sediment concentration predictions will result in a potential unreasonable risk to the aquatic receptors over the long term, CNSC staff will review the additional mitigation measures that Orano proposes to reduce the risk.

At the request of CNSC staff, Orano also considered a disruptive event scenario in their long-term assessment. This scenario provides a

bounding assessment of the potential long-term impacts to the environment if a portion of the cover was eroded, resulting in increased infiltration into the TMF and higher contaminant migration into Fox and Pat Lakes via groundwater. Although highly unlikely, the results of this scenario demonstrated that it would not result in additional risks to aquatic receptors beyond those that have already been evaluated by Orano.

CNSC staff concluded that the risk to the environment and people from the proposed JEB TMF expansion is predicted to be negligible.

CNSC staff will ensure that Orano continues to evaluate and adjust the environmental monitoring program as needed during the construction, operation and decommissioning phases of the project.

CNSC staff will evaluate Orano's ongoing groundwater monitoring results to confirm that hydraulic containment is maintained throughout the operation of the expanded TMF.

At the request of CNSC staff, Orano has committed to implement a post-decommissioning

environmental monitoring program which will focus on the surrounding and downstream receiving environments from the JEB TMF in order to confirm that human health and the environment will remain protected.

CNSC staff concluded that following decommissioning the JEB TMF will continue to contain and isolate the waste.

CNSC staff will continue to:

- evaluate licensee performance across all 14 SCAs;

- conduct inspections according to CNSC's compliance verification program;

- review and assess compliance and event reports, licensee programs and facility changes to verify safe operations;

- verify and monitor licensee's implementation of CNSC regulatory documents in accordance with implementation plans; and

- report annually to the Commission, in the form of a Regulatory Oversight Report, on Orano's compliance performance.

Recently, in August 2021, CNSC staff

conducted a focused geotechnical onsite inspection to verify and observe foundation work for the embankment construction for the previously approved JEB TMF expansion to 457.5 meters above sea level elevation. Inspection results confirmed that Orano is constructing according to the design and following their Quality Assurance and Quality Control Plan.

CNSC staff will continue to provide regulatory oversight through compliance activities.

I will now discuss other matters of regulatory interest.

Orano continues to maintain a Preliminary Decommissioning Plan, or PDP, throughout the facility lifecycle. The PDP is a regulatory requirement and must be developed following CSA Group standards and regulatory guide documents. The PDP must be kept current to reflect any changes in the facility or operations and must be reassessed every five years. Orano will provide the next updated PDP in 2026, following the five-year review cycle.

Based on current mineral reserves, Orano has indicated that McClean Lake can continue

operation until 2050, which is well beyond the remaining licence period.

Orano's Preliminary Decommissioning Plan meets CNSC regulatory requirements.

This slide displays a preliminary schedule of the proposed decommissioning phases. Decommissioning is expected to occur over a period of approximately 19 years post-operation.

Initial decommissioning would commence two years after the end of operations at site. Following three years of initial decommissioning, eight years of interim monitoring have been proposed. Assuming the results of the interim monitoring are in line with CNSC staff and Orano's expectations, one year of final decommissioning would take place. Following the final decommissioning, five years of post-closure monitoring have been proposed.

Under the *Nuclear Safety and Control Act*, Orano is required to provide a financial guarantee, or FG, in a form that is acceptable to the Commission. Orano maintains a consolidated financial guarantee for its McClean Lake Operation.

In November 2020, Orano submitted a revised PDP and reduced the FG from \$107 million to \$102 million, a reduction of approximately \$5.1 million. The financial guarantee was reduced primarily because as the tailings volume in the TMF increases, the volume of waste rock which would be required to decommission the TMF decreases, thereby lowering decommissioning costs. The camp and operational costs are also reduced.

The PDP and financial guarantee includes all existing facilities as well as planned facilities to the end of 2025.

The Saskatchewan Ministry of Environment, or SMOE, is the beneficiary of the financial guarantee. Orano continues to use surety bonds and letters of credit as the financial guarantee instrument.

CNSC staff and SMOE officials have reviewed the revised FG and verified that the PDP and proposed FG meets regulatory requirements.

CNSC staff concluded Orano's proposed financial guarantee is sufficient to complete future

decommissioning activities.

CNSC staff regularly engage with First Nations and Métis groups and organizations through community meetings and workshops.

CNSC staff identified 11 First Nation and Métis groups and organizations who may have an interest in the proposed licence amendment to expand the JEB TMF.

Letters of notification were sent to the identified groups in February 2021. In March 2021, follow-up emails were sent to ensure they had received notification letters. CNSC staff also sent follow-up emails to the identified groups in May offering to set up virtual meetings and answer any questions they may have with respect to Orano's licence amendment application.

In June 2021, First Nation and Métis groups were provided a copy of CNSC staff's CMD 21-H6 and were offered virtual meetings. CNSC staff met virtually with the Ya'thi Néné leadership, board and staff in July 2021. CNSC staff provided an overview of Orano's licence amendment application and answered

questions regarding the JEB TMF expansion project.

CNSC staff monitored Orano's engagement with Indigenous groups and are satisfied with their engagement to date and compliance with CNSC's Regulatory Document 3.2.2, Indigenous Engagement.

CNSC staff continues to engage and consult with Indigenous peoples to build trust and foster relationships.

In September 2019, as a result of recommendations from the Commission, CNSC staff met with Indigenous groups and northern communities to provide information on the uranium mines and mills in Northern Saskatchewan, including the McClean Lake Operation and proposed JEB TMF expansion project, and also to seek opportunities for improvement on the CNSC's 2018 Regulatory Oversight Report.

Due to the COVID-19 pandemic restrictions, a virtual Zoom meeting with northern community leadership was conducted on September 28, 2020, in which the CNSC staff provided information on the application by Orano to expand the

JEB TMF expansion and also provided information related to the 2019 Regulatory Oversight Report.

On February 1, 2021, CNSC staff informed the public about the application for a licence amendment through the CNSC's website, email subscription lists, social media channels, and specifically radio and print advertisements in Northern Saskatchewan communities.

The photo shown displays a February 2018 outreach session of CNSC staff presenting to members of the Northern Saskatchewan Environmental Quality Committee in La Ronge.

The Participant Funding Program provides funding to assist members of the public and Indigenous groups in providing valuable information directly to the Commission.

In April 2021, based on the recommendations from the Funding Review Committee, independent from CNSC staff, the CNSC approved and awarded funding in the amount of just over \$100,000 to the groups listed on the right-hand side of this slide.

Following receipt of funding approval, Ya'thi Néné indicated they could no longer participate in this hearing.

There were six interventions received on Orano's licence amendment application.

The main themes of these interventions included:

- support from local businesses and Indigenous persons and groups;
- Indigenous engagement and consultation;
- TMF facility integrity and human health; and
- the potential environmental risks.

I will now pass the presentation back to Mr. Fundarek.

MR. FUNDAREK: For the record, my name is Peter Fundarek.

I will now present CNSC staff's conclusions and recommendations regarding Orano's application for a licence amendment for the JEB TMF expansion.

CNSC staff conclusions and recommendations considered an assessment of Orano's licence amendment application and supporting documentation for the JEB TMF expansion.

Orano has sufficient programs, resources and measures in place at the McClean Lake Operation. CNSC staff determined that Orano's proposed JEB TMF expansion is safe and will continue to protect the health and safety of persons and to protect the environment.

CNSC staff concluded that Orano meets CNSC's regulatory obligations.

CNSC staff recommend that the Commission:

- conclude that Orano, pursuant to subsection 24(4) of the *Nuclear Safety and Control Act*, is qualified to carry out the activities authorized by the uranium mine and mill licence;
- amend the CNSC-issued McClean Lake Licence as put forward in CMD 21-H6; and
- accept the proposed revised financial guarantee amount for Orano's McClean Lake

Operation for decommissioning.

This concludes the CNSC staff presentation. We are available to answer any questions that the Commission Members may have.

Thank you.

THE PRESIDENT: Thank you, CNSC staff, for the presentation.

We will now take a break before the presentations by intervenors and we will reconvene at 12:50 Eastern Daylight Time. We will see you then. Thank you.

--- Upon recessing at 12:04 a.m. /

Suspension à 12 h 04

--- Upon resuming at 12:50 p.m. /

Reprise à 12 h 50

THE PRESIDENT: Welcome back.

Marc, over to you for a few remarks, please.

M. LEBLANC : Merci.

We will now move to the interventions. Before we start I would like to remind intervenors appearing before the Commission today that we have

allocated 10 minutes for each oral presentation and it would be appreciated if you could help us to maintain that schedule. Your more detailed written submission has already been read by the Commission Members and will be duly considered. There will be time for questions from the Commission after each presentation and there is no time limit ascribed for the question period.

I will ask that once your presentation and the associated question period are over that you leave the Zoom session. You will be able to continue following the hearing via the live webcast on the CNSC website.

Madame la Présidente...?

THE PRESIDENT: Thank you.

The first presentation is by the English River First Nation, as outlined in CMD 21-H6.7.

I understand that Elder Campbell will offer a prayer before the presentation.

Elder Campbell, the floor is yours.

CMD 21-H6.7

Presentation by the English River First Nation

ELDER CAMPBELL: Thank you.

MS. CAMPBELL: Thank you, Madam
Welshi.

I would ask that you please stand.

ELDER CAMPBELL: Good morning everyone
and good morning to my colleagues. It's good to see
you back here. I hope everybody had a safe trip, a
good weekend, and I will ask for guidance today.

--- Indigenous language spoken /

Langue autochtone parlée

ELDER CAMPBELL: Thank you.

MS. CAMPBELL: Thank you, Elder
Campbell. You can be seated.

This is Cheyenna Campbell, for the
record. I'm just going to turn the floor now to our
chief, Jerry Bernard.

CHIEF BERNARD: For the record, my
name is Chief Jerry Bernard. I am the Chief of
English River First Nation.

I would like to thank President Velshi for this invite.

I would like to acknowledge our Elders who are present in the room with me and those that are connected to us virtually.

Secondly, I would like to acknowledge today is Treaty 6 – we are in Treaty 6 territory, the traditional territory of the Cree, Dene, Dakota, Lakota, Nakota and Sauteaux people.

I would like to thank President Velshi and the Canadian Nuclear Safety Commission for allowing us to speak on behalf of our English First Nations regarding the tailings expansion at the McClean Lake Operation.

The English River First Nation is a strong Cree and Dene community. We are guardians of our ancestral territory, we are stewards of the land. Our people have been living off the land for generations. The land sustains us and we will continue to protect these lands for as long as we are here.

With that, I would like to hand it off

to Cheyenna Campbell, the Lands and Resources Manager for English River First Nation.

Thank you.

MS. CAMPBELL: Thank you, Chief.

For the record, this is Cheyenna Campbell. I am the Lands and Resources Manager for English River First Nation and before I begin I would like to acknowledge our Elders that are gathered with us here in this room as well as those that are with us virtually.

I am here today at the English River First Nation Grasswood Reserve with our Elder Norman Wolverine, our Elder Isidore Campbell, our Chief Jerry Bernard, our Councillor for the Lands and Resources portfolio, Irene Apeisis, and our Scientific Consultant, the lovely Ms. Robin Kusch.

So I guess I will just do a quick history of English River First Nation.

Our Nation is made up of 19 different reserves. Our main settlements are Patuanak and La Plonge. However, those are not our ancestral settlements. Patuanak was settled by the

Northwest/Hudson Bay Company along with the Catholic church. A residential school was established at La Plonge Reserve by the federal government and the Catholic Church. These settlements became the reserve and the people of ERFN, English River, were directed to settle there. We were not allowed to leave this reserve without permission from the Indian Agent.

Now, long before colonization we were a nomadic people. We moved from one settlement to the other following the seasons, the migration of the animals we hunted, the fishing sites and the seasonal berry and medicine harvesting areas. Now, the heart of this migration area for the English River First Nation people, our ancestral territory, is Cree Lake. Cree Lake is approximately 100 kilometres from Orano's McClean Lake Operation.

Treaty 10 was signed by our Chief William Apesis on August 28, 1906. As per that treaty, the Canadian government allocated land to the English River people. This land was at Patuanak and La Plonge. However, ERFM was shorted the amount of land we were entitled to under the *Indian Act*.

In 1992, English River, under the TLE process, began to purchase lands along our traditional migration routes and settlements.

My point in providing this information to you is that ERFN reserve lands are now more reflective of our historic as well as our modern traditional usage.

Now, turning to the McClean Lake intervention specifically, Orano has submitted an application to the CNSC to amend its uranium operating licence to encompass the JEB tailing management facility expansion project at the McClean Lake Operation located in the Athabasca Basin of Northern Saskatchewan.

This topic is of importance to the people of ERFN as the McClean Lake Operation is located within English River First Nation ancestral territory. The people of ERFN have subsisted on this land for generations, fishing, hunting, gathering and living, as my Chief has said.

ERFN has enlisted Robin Kusch to help ERFN review and understand the technical information

contained within Orano's submission document.

Ms. Kusch has outlined six questions that have arisen as a result of her review and these questions were posed to Orano.

ERFN has engaged with Orano prior to this hearing and they have answered our questions and provided the clarification that we requested. ERFN is wholly satisfied with their answers and the level of engagement provided.

After a review of all relevant documentation and in consultation with Ms. Kusch, ERFN supports Orano's MLO licence amendment.

And that is our submission.

THE PRESIDENT: Thank you very much for the prayers, Elder Campbell, and for the presentation.

My compliments and congratulations to both you and for Orano to have had the consultation before the hearing and have had your questions answered.

With that, let me open it up to Commission Members for their questions.

We will start with Mr. Kahgee.

Mr. Kahgee...?

MEMBER KAHGEE: I would first like to acknowledge your Elders – chi-miigwech, marsi cho – for sharing with us in a good way and opening us in a good way.

Thank you very much for your submission.

The one question I had was with respect to the six questions that were raised in your written submission. I am very pleased to hear that those have been addressed and you have been able to resolve those issues with Orano. So chi-miigwech for that.

I do have a couple of questions just for clarification.

In your submission, I believe it's at pages 2 and 3 of your technical memorandum, you speak about the First Nations shifting focus to stewardship and looking ahead for future generations. In particular you talk about operations and closure of the Key Lake operations and overall concern regarding

the management of tailings and linkages to the Wheeler River system and potential cumulative effects from operations and closure of the McArthur River Operation and Key Lake Operation on the Wheeler River system.

My question is has the First Nation expressed concerns regarding cumulative effects to the industry in general, including with respect to Orano's operations at McClean Lake?

MS. CAMPBELL: This is Cheyenna Campbell, for the record.

Sorry, can you just repeat the – I lost you on that second part of your question there. You mentioned that in 2017 we had brought up the standard – or, sorry, the stewardship of the Nation looking forward to passing our land off to our generations to come.

MEMBER KAHGEE: Yes, and you had talked about in your submissions about the linkage between Key Lake operations and the Wheeler River system and the potential for cumulative effects with respect to operations and closure of McArthur River Operation.

My question was has the First Nation expressed concerns regarding cumulative effects in general to the industry including with respect to Orano's operations at McClean Lake?

MS. CAMPBELL: It's Cheyenna Campbell, for the record.

I think that it's always in the forefront of English River First Nation's mind, the closures and decommissioning of any of the mines that are in our traditional territory within the Athabasca Basin itself.

We do understand, as we're getting familiar and more comfortable with the processes of the Canadian Nuclear Safety Commission that each of the – and to his credit, Mr. Peter Fundarek has made stuff a lot easier for me to understand.

I understand now that every five years, I believe it is, the decommissioning process is reviewed by the CNSC and provided to them by each of those proponents. So that does now give us as a nation itself more familiarity and a degree of comfort in understanding that we can rely upon the safety

standards that the CNSC has given to us as people in the community.

As I always like to joke with Peter, it always comes down to what would my grandpa understand. So he's helped us to put down some plain language documentation, and that certainly has helped. And I believe it's directly a result of our engagement specifically with the CNSC and English River First Nation.

So yes, it is in the forefront of our mind. Yes, we are now starting to understand and accept the CNSC's information and trust the process because of the openness of the consultation process and free-flowing information that has come to us as Indigenous people.

And I have to say, within the last five years, I must commend the process and the CNSC specifically. And I'm sad to see Peter will be retiring. But I hope that we can continue on with that.

So I hope that answers your question.

MEMBER KAHGEE: No, it does. Thank

you very much.

Just a follow-up question, then. At page 3 of the technical memorandum, I thought you raised a very interesting point about the focus of consultation and engagement being, in your words, on the spatial extent of a First Nation's traditional and current land use. Can you expand on this and perhaps give us a sense of where the focus needs to be regarding consultation and engagement with your nation?

MS. CAMPBELL: I think, consultation specifically – oh, sorry, this is Cheyenna Campbell, for the record.

Consultation specifically for us does not mean putting a pinpoint – I think I've said this before – a pinpoint onto a map and then drawing a radius with a string tied around it, and then calling that the consultation area as far as space goes.

What I do believe is looking to the nations themselves and finding out where their traditional territory exists, not only English River, but the other nations that are affected within the

Athabasca Basin, and talking to the people and saying, Where does your historical and current-day use expand? And that way you're able to get a better view of usage of the territory and what areas concern us. It's not always just a measurement in distance. It's more about where we have travelled and where we continue to travel.

So even though McClean Lake may be on the outside perimeter of our traditional territory, we're sincerely grateful that the CNSC acknowledges that we do have a right to be consulted on that area itself because we way so. And I think that's where it should come down to: The nation should be able to say, We believe that you need to consult us. And I must commend the process that it is getting better.

MEMBER KAHGEE: Excellent. That's helpful. You've clarified that for me.

And I think you've also clarified – I had a question with respect to your engagement with Orano and CNSC, and I think what I heard you to be saying is that you've been satisfied with the engagement. You've seen improvements over the last

few years.

Are there areas where you think there needs to be improvement?

MS. CAMPBELL: I think there's always room for improvement with everything. At this point, I do see that there have been leaps and bounds. We are getting direct consultation now, not only with the proponents, but specifically with the CNSC, which I think is extremely helpful, because we're not only being engaged by the proponent themselves, where they're asking, How are we affecting you? — which is the right question to be asking — but we're also able to talk directly to the regulator and say, You are making — you are the final say as far as issuing licences are. We want to be part of that final say.

And for us to be able to engage directly with the regulator, that gives us the ability to speak to the farmer as opposed to just the — oh geez, I'm way off on my (laughs) on my analogy this morning. But it's being able to speak to Dad, right, about what the son is doing as opposed to just speaking to the son. So it makes us feel a lot more

trusting of the process, I believe.

And also that acknowledgement that English River is important. This is our land, and we are important. And for you to acknowledge – the CNSC to acknowledge that importance and engage in dialogue with us shows us our – the acknowledgement of how important we actually are.

MEMBER KAHGEE: I think and I heard – I think I got clarification on the question I had with respect to the six questions.

I guess just in a follow-up that I thought someone of those technical questions were very important and I think it would go a long way to help informing the Commission in its decision. Would you be willing to share the answers to those questions with us?

MS. CAMPBELL: I think that we have them recorded, do we not?

MS. KUSCH: We have the recording but we didn't – we can summarize what we – well, Orano could provide the direct response to the question --

MS. CAMPBELL: Yeah, we did do it via

Teams, so I think that Orano may have recorded it and could give you the video, if they did record it. I believe they did. But I think they actually had written out their responses as well as recording the additional questions that came out of those. So I would think that you'd be better served to get it directly from them.

THE PRESIDENT: Okay, I see Ms. Searcy's got her hand up. Over to you.

MS. SEARCY: Oh, hopefully my microphone works. Does it work this time? Sorry.

Tina Searcy, for the record, yeah.

Orano provided English River with responses written, so we can definitely provide those to the Commission. And I'm not sure if we recorded our – we had a meeting via Zoom or Webex, but I don't believe it was recorded other than some written minutes. But we can provide you both of those resources.

MEMBER KAHGEE: Excellent. Thank you.

THE PRESIDENT: That would be very helpful, thank you.

And maybe in a follow-up to Mr. Kahgee's question on cumulative effects, I'll start with Orano first and then maybe staff.

So you know, the whole uranium mining/milling industry is volatile, as we see with this request for an amendment to your licence. Can you share with us, you know, the long-term picture for this site, and how are you addressing in a more holistic way the cumulative potential effects of the operation over time? And then I'll ask staff to comment on that as well. So Orano?

MS. SEARCY: Hi, Tina Searcy, for the record.

Specifically to the McClean Lake operation, we conduct regularly environmental risk assessments on the site that have continued to show that the operations has no impact off of our surface lease. As far as cumulative effects in the north from all the activities happening, I believe the Province of Saskatchewan is tasked with conducting some cumulative effects assessments and possibly the federal government.

THE PRESIDENT: Thank you. And I know we do have someone from the Province, from the Saskatchewan Ministry of Environment. Mr. Moulding, if you're here, can you comment on that? Or I think Ms. Carlberg is here too.

MR. MOULDING: Hi folks. It's Tim Moulding, for the record. Can you hear me?

THE PRESIDENT: Yes, we can.

MR. MOULDING: Hi, yeah.

The Province in conjunction with the CNSC and the Cameco and Orano, the two major mining companies in northern Saskatchewan, still administer the Eastern Athabasca Regional Monitoring Program, which looks after monitoring communities in and around the basin to look specifically at cumulative effects from uranium mining and other operations in the area as well. So that's an ongoing program.

You can access the information and annual reports on the Eastern Athabasca Regional Monitoring Program website as well. And yeah, any information that is available through that program is communicated to the communities as well as an ongoing

thing.

And as Tina Searcy mentioned there as well, the companies are responsible for ensuring that the monitoring and their effects are back to basic regional baseline at their surface lease boundaries. And at the current uranium mines, that still is the case, so.

Thank you very much.

THE PRESIDENT: Thank you.

Staff, do you have anything you would like to add to this? And I'll — it wasn't so much on the monitoring as much on the assessment that I wanted to get a sense of what's happening.

MS. MURTHY: Thank you. Kavita Murthy, for the record.

We have Dr. Elias Dagher, Environmental Risk Assessment specialist, ready to respond to this question.

Please go ahead, Elias.

DR. DAGHER: Thank you very much for the question. So Dr. Elias Dagher, Environmental Risk Assessment specialist with the CNSC.

So all of our licensed uranium mines and mills are required to conduct - to develop and implement environmental risk assessments that's in accordance with the Canadian National Standard CSA N288.6. And as part of that, they do have to assess cumulative effects in the environment. Monitoring is a key component as well, so there is the assessment, then there's also the monitoring that supplements that to essentially confirm and verify that levels within the receiving environments, the concentrations of nuclear and hazardous substances are within background values and to just assess what those are at the lease boundary.

In addition to what Mr. Moulding said, there is the Eastern Athabasca Regional Monitoring Program which does look at cumulative effects in the long term around communities within northern Saskatchewan. And to date, that program has provided strong supporting evidence that there is no long-range transport of contaminants in the downstream environment, and that it is protected and that communities are protected.

THE PRESIDENT: Thank you very much for that response.

Dr. McKinnon?

MEMBER McKINNON: Yes, thank you for the intervention. And I also appreciated reading the inclusion of the very informative document by the consultant Robin Kusch. And that actually formed the basis of many of my questions, which apparently have been adequately answered.

But the questions I had weren't exactly the same, so maybe it would still be worthwhile that I ask them anyway. So my first question is for Orano, and it's in connection with the water treatment plant, because it seems the focus is actually on the tailings facility, but in terms of releases to the environment, the water treatment plant is certainly an integral part of that. But there was very little description of it in any of the documentation.

So my first question is really just if you could describe how it works. And I think I sensed from a few of the interventions there is some

confusion or concern about if you're increasing the volume of tailings on the one hand, what does that do to the effluent. And it was clearly stated in the presentations this morning that the treatment effluent was not expected to change. So could you explain that aspect to as well, please.

MR. LANIECE: Good morning. Vincent — or good afternoon right now for you, sorry. Vincent Laniece, for the record.

Yes. There is effectively some interlinkage between the TMF and the water treatment plant for the quantity of effluents that are being pumped from the TMF to the water treatment plant before it's being released to the environment. But right now what we do have is a balance with the current TMF, and then we will have the same balance with the expanded TMF, but the one that got approved already. And for the one that is the further expansion, we're not anticipating any change in the volume of water that we will need to treat in the long run.

To explain that, we've got two kind of

waters that we're pumping out from the TMF. The first one is the raised water. That's fairly pristine water that is pumped at the bottom of the TMF through the raised wells. And this water, we're making use of it inside the mining process for cooling down the leaching system or using it as process water for the entire uranium mining process.

And because of that, we're not using any water that we used to use from the adjacent lakes, and mostly at the time we are using that from Pat Lake. So since we have introduced the use of the raised water into our over process water, then we're minimizing our footprint on the environment by not pumping out from adjacent lakes as we used to doing. Then that's for the raised water.

We've got the reclaimed water. The reclaimed water source comes from the TMF pond, so the pond there, the water that covers the tailings. And we're using that, the cover of the tailings is important for radiation exposure. It's important for preventing tailings to freeze in the winter and all this kind of stuff.

This water is not pristine; it's fairly contaminated. And then it's being pumped to the water treatment plant right away. So by adjusting the volume between the raised water and the reclaimed water, we are able to feed to the water treatment plant in the range of right now we're pumping about 3,000 cubic metres per day, which represents about 80 per cent of the nameplate of this water treatment plant.

And then we've got the regular chemical process at the water treatment plant consisting of three stage, very robust acid or basic type of kind of chemical precipitation in order to ensure that the quality of the treated effluent is always respected and are in agreement with the discharge limits that we've got.

So I hope that my answer provides you with some explanation on your question.

MEMBER McKINNON: Yes, it was very helpful. I have a number of other questions related to that, but it was certainly very helpful in understanding, you know, where the water comes from

and the balances and the treatment that occurs.

I had a question related to the chemical composition of the water that is treated because the input is clearly the ore from the Cigar Lake Mine, and there will be some variability in that. And so there will be chemical variation in what needs to be treated and therefore what comes out of the plant.

There's probably variations in that, but do you monitor those variations? And on what basis? And have you had any exceedances from, you know, your limits that you imposed on those variations?

MR. LANIECE: Yes, Vincent Laniece, for the record.

Yes, we're monitoring very closely the fluctuations of the feedwater to the water treatment plant. Then we're monitoring as well the treated effluent in some other ponds prior to being released, just to ensure that effectively they are conforming with the different discharge limits.

And the one thing that we've been

doing in the past, again at the time that we made some changes to the mining process in order to make use of the raised water for the overall process water for the mine, then we made a change as well of floating some tailing naturalization (phonetic) water, so that that would be the overflow of the tailings naturalization sink there. We're putting that back into the water that is above the tailings, giving us a much greater buffer in order to somewhat smooth out the variation of this - what comes out from the tailings naturalization circuit on a daily basis.

So thanks to that change, we've been able to feed the water treatment plant with something that is with a water quality that is somewhat adjusted with the buffer effect and that is less prone to significant changes on a day-to-day basis.

And with that in mind, as every process likes any steady state type of feed to it in order to achieve at the end of the day the specifications of the end product, then we are in good standing. We've been experiencing some actionable accidents, but not by much, and these have been

occurring mostly at a time that we needed to shut down the mine for the COVID reason, unfortunately, so.

MEMBER McKINNON: Okay, thank you.

And your point about systems liking steady state leads into my final questions in this area.

Number one is, you know, the fluctuations caused by any extreme rainfall events which would create a larger input into the system.

And secondly related to the steady state is this is a critical facility, so could you describe, you know, any – you know, the backup contingency methods that you have to maintain it if there's any power failure or other event that might bring it offline?

MR. LANIECE: Vincent Laniece, for the record.

Yes, with regards to steady state, so your first question is on high precipitation events. And for that, we do have in place making sure that we always keep in the pond itself, in the TMF type of facility, a water level that is low enough that it can absorb a maximum precipitation event. So then from

that standpoint, it would not overwhelm the water treatment feed. So that's one of the questions.

Your second question was related to how do we ...

MEMBER McKINNON: If the water treatment plant were to go offline for any reason, including a power failure or a component failure of any kind.

MR. LANIECE: Component failure of any kind.

So with the water treatment plant that we've got at site, power failure is effectively a regular unfortunate type of event occurring to site. And we've got a full backup power generation working on this or we're connected to the Saks Power grid. So on a regular basis we're dependent on how Saks Power is providing its electricity to us. And when they cannot provide it to us, then we're firing up this backup power that we've got at site. It takes about one minute to get them up.

And then as a third contingency, I would say that we still have about site some mobile

backup generators that we can provide especially for the TMF because the pumping right now it very critical to our operations in order to make sure that we've maintaining the hydro containment.

Then on the more mechanical type of side, we've got a number of pumps that we've got both for the raised water and for the reclaimed water. We've got three sets of pumps for the raised well, and we've got two sets of pumps for the reclaimed water, so that then we can effectively make sure that if one of these pumps falls down, then we've got enough capacity to pump them.

Then the third kind of contingency is the fact that we've got a number of spare parts in the warehouse and we've got certified maintenance trades in order to fix these pumps if required. But at the same time, we've got some preventative maintenance which is done on both sets of pumps on a regular basis.

MEMBER McKINNON: Okay. That's backups for backups and lots of things to ensure steady state. Thank you very much.

MR. LANIECE: Welcome.

THE PRESIDENT: Thank you very much.

And to English River First Nation, thank you for your excellent submission and your presentation and for confirming to the Commission your satisfaction with the level of engagement by both Orano and the CNSC staff and the improvement that you've seen over the years. As you know, this is of extreme importance to the Commission, and it's very reassuring to hear from you on that. So again, thank you very much for your participation today.

We will now move to our next presentation, which is by the Métis Nation of Saskatchewan, as outlined in CMDs 21-H6.3 and 6.3A.

Mr. Calette, over to you, please.

CMD 21-H6.3/21-H6.3A

Presentation by the Métis Nation-Saskatchewan

MR. CALETTE: Thank you. For the record, my name is Mark Calette. I'm the senior director for Lands and Consultation with Métis Nation

of Saskatchewan. [Aboriginal language spoken / langue autochtone parlée] I'd like to say good day to everybody.

I'd like to first do a couple things here. I'm presenting from Treaty 6 territory here in Saskatoon. It's also right smack dab in the heart of the Métis homeland. One hour north of here is Batoche where is the site of the second Métis provisional government.

I'd like to also quickly pass along greetings from President Glen McCallum, our vice-president Michelle LeClair, and our chief executive officer Richard Quintal.

I'd also like to thank Elder Frank Natomagan for his good words to get the hearing off in a good way this morning first thing. I'd also like to thank Elder Campbell for his good words as well. I'd like to thank President Velshi for the opportunity to speak to the Commission today.

And with that, I'd like to also introduce someone on our team, Heidi Klein from Two Worlds Consulting.

Are you there Heidi? Can you introduce yourself? Yes/no? Okay.

Anyway, we'll move on with the presentation and --

MS. KLEIN: Sorry, Mark, can you hear me?

MR. CALETTE: Yeah, go ahead.

MS. KLEIN: Good morning. Sorry, I can't see anything, but good morning, Mark. I'm on the line.

MR. CALETTE: Okay. For the record, Mark Calette. Heidi Klein from Two Worlds Consulting will be assisting me in case there's any technical questions I'm unable to answer.

With that, I'd like to move forward with our presentation. All right, we'll go to the next page, please.

So this is just an overview of our presentation. Who are the Métis? Obviously we're going to talk a little bit about s. 35 rights, reconciliation, and of course the Métis here in Saskatchewan. We have some concerns with contracting

which we'll get into, consultation and engagement, and recommendations for Orano and for the process. So next slide.

So who are the Métis? Well, there's a lot of different views on that. But in terms of our rights as Métis people, we fall under s. 35 of the *Constitution Act*, 1982. And like the other Indigenous peoples in Canada, we have the same rights in terms of hunting, gathering, and rights to self-government and those kinds of things.

One of our concerns – and the Commission has heard this before – is that we feel at times – many times our rights are treated as lower priority as compared to First Nations and Inuit, which is, you know, obviously not appropriate and it's not defensible under Canadian law. In particular, Saskatchewan seems to be a really awful place for that to happen. And hopefully, you know, in the months and years to come, that will maybe change. But certainly that is an issue we've noticed and we're very concerned about.

In terms of reconciliation, through

this process and the mining industry in general, we're looking to really work on the fundamental purposes that we see found in the calls to action of the Truth and Reconciliation Commission of Canada, and you know, in specific for the ones that were made towards the mining industry.

And obviously, you know, we're not very far away from, you know, the Truth and Reconciliation Day. I think it's on a lot of people's minds and in their hearts too. And obviously these are very important things to us. Because one of the best ways of working with us and identifying obviously the many wrongs that have happened is to continue to find ways to collaboratively work together, especially within the industry but also in our – right down in the grassroots with our communities. I'll go on to the next slide.

So a lot of people think that, you know, the Métis have just hopped out of nowhere and, you know, where were we all this time? However, this slide shows that, you know, even since 1935, we've been organized. We've been trying to assert our s. 35

rights even before there was such a thing. And you know, we're actively trying to, you know, be a part of the mosaic here in Canada, but especially in Saskatchewan. All right, next slide.

Okay, so Métis Nation Saskatchewan, we're a little newer to the process. And in all fairness to Orano and to the other industry players for, you know, quite a number of years, we know it might've been more difficult to collaboratively, you know, work with us and to find a way to consult and engage.

And so we're a little newer to this process. We may not be quite as up to date on everything as, you know, some of the other Indigenous nations that are, you know, obviously involved in this process as well.

But we really look forward to working with Orano further on this. And you know, I can say that the relationship with Orano is trending in a positive manner. And so we look forward to working with them, you know, into the future and finding a good way to work together.

So some of our concerns with the contracting are that, you know, we're quite concerned that a lot of the different ways and opportunities to be involved in this project, you know, they're going south and they're not staying up north. And we know we have a lot of contracting companies. We have communities that have good resources for workers. And yet we see that these things are going south and not staying in the north like we'd like to see.

I think there's a way to fix that. I think working together and finding ways to have our contractors given, you know, be given the first chance at these things, you know, all the Indigenous contracting communities, but specifically I'm talking about our Métis contractors. You know, we'd like to see that be taken more seriously. And we definitely can help with that.

We want to have the capacity to grow into the future. And one of the big problems, and I've been involved in the uranium industry now coming on I guess 12 years or so. And when I worked on the remedial side of the uranium industry, you know, the

end of life cycle where, you know, this facility is kind of, you know, heading that direction, you know, it's going to get more environmental in scope. And so what is Orano doing to help mentor and get our communities ready for, you know, the changes as those opportunities come up?

So I know when I used to write the procurement documents, you know, for these kinds of opportunities when I was on the industry side, you know, there's lots of ways and there's lots of things we can do to help get our communities and our contracting communities ready for how this is going to change and morph as it goes into the future.

And I'm a little bit surprised that I don't see that kind of stuff already. I mean, the wheel has already been invented, so I think there's, you know, some good best practice out there. But again, through our relationship-building and through what we can do, maybe those are conversations where — we're happy to have with Orano and maybe share some of that information.

We also want to make sure that we

don't forget about what's happening currently. And again, as I mentioned earlier, we want to see, you know, opportunities be more available for our communities, not just in the future but also, you know, in the – you know, in the very immediate future rather. Let's go on to the next slide.

So I talked a little bit about this already. Consultation and engagement, I mean like again, we're a little newer to this than maybe others. But we did have a good look at this. We had our consultants go over it. And we're a little concerns about how much MN-S has been involved previously to this point. I mean, I think it's getting better now, and that's a good sign. But you know, really we haven't had much conversations with Orano until just recently. So obviously, we want to see a more fulsome process. We want to see, you know, our team be more involved as long – as well as our communities and our regions and locals so that we can, you know, be actively and meaningfully involved, you know, as this thing moves forward.

And I'm not going to go over the

bullets and read every one of them. You guys - everyone can read those. But I think the last one is good. It says:

"Overall, from Orano's records, limited or no special consideration is given to Métis engagement including that of involving MN-S until this expansion ..."

We did notice that Métis locals are captured in the three of the four municipalities, and we know that some of our locals have been working with Orano. We're glad about that. But we'd like to see that obviously be expanded to be more fulsome. Next slide.

Again, I'm not going to go through every recommendation here. We wanted to come to this particular hearing mentioning that, you know, we're reasonably happy with the information that has been presented, but we have lots of recommendations. And we think these are doable. We don't think that these are crazy and things that can't happen. I think our

team, with our consultants team, as well as myself, having been involved in this industry in a long time can understand that there are some opportunities for us to work together, and here's some of our suggestions.

So we wanted to make sure that rather than, you know, just coming and mentioning a few of our concerns, we also wanted to make sure we had some good ideas to pass along as well. And these are some of our recommendations that we'd like to really put forward to Orano and to the Commission.

That's it from me, President Velshi. So we will turn it over back over to you.

THE PRESIDENT: All right, thank you very much, Mr. Calette, for the submission and the presentation.

Let's start with Dr. McKinnon for questions, please.

MEMBER McKINNON: Yes, thank you for your intervention. As with the last time, my questions mainly revolve around technical points which were raised by the consultant report included in the

intervention.

And the first one I have is there was some concern or attention placed on having confidence in the dewatering infrastructure that would maintain flow of water in the tailings dam towards the base drain.

And in connection with that, it occurred to me that the water which is kept on the surface is a very important part of that. And so there's probably some balances required between pumping water out at the bottom and maintaining that water level on the top.

So the question for Orano, how is that balance maintained? Is that something difficult to manage so that the cover does not dry-up at all?

MR. LANIECE: Vincent Laniece, for the record. No, this balance is fairly easily achieved. Right now, just speaking numbers, we're currently pumping about 2,000 cubic metres per day from the bottom drain, which then ensures that effectively the hydraulic containment of the tailings. So this groundwater around the tailings are flowing towards

the TMF in order to not contaminate the environment.

And we've been testing that portion a couple years ago and we're able to pump even more than 3,000 cubic metres a day, so we can increase by a good 50 per cent how much we're pumping from the raised water. On the reclaimed water, we're making sure that we've got enough weather cover on the tailings so that there is good radiation protection for the people having to work close by the tailings.

Mostly our operators checking that the tailings disposal systems are working fine, that we've got the proper amount of weather (phonetic) in order for the tailings not to freeze during the winter, and then that the tailings effectively are not airborne and getting dusty at the time of the summer and then potentially spreading some radioactive dust around the facility.

So the balance is very well achieved, has been tested in many different ways. And right now, we're confident, especially with all the different mitigations that we've got for equipment and the quality of [indiscernible] coming out from the

water treatment plant that we've got a good system. And we've got 20 years of operations as well.

MEMBER McKINNON: Yeah. In connection with the base filter, most of the diagrams in the report show the very simple cartoons of, you know, cross-sections of the tailings management facility. And it looked like, you know, apart from the till on the surface, everything was rock below that.

But there was one diagram that showed a fairly substantial layer of regolith going right, you know, at the location where the base filter is. And, just for the record, regolith is an unconsolidated rock material, so it would be porous.

So my question then is how is water which is pumped down to that zone where the base filter is into the regolith, how do you ensure that that isn't a migratory path for any contaminants. And, related to that, has there been any grouting done? And do your monitoring wells extend down into that zone?

MR. LANIECE: Vincent Laniece, for the record. I was not there at the time, but part of the

commissioning of the TMF was done with making sure that effectively the base drain was being input into the regolith, which is effectively altered basement rock. And this has been done very carefully and in accordance with all the specifications that we had at the time.

I've got a lot of records, if we need, on that because Jim Corman at the time was in charge of the operations and the mining and [indiscernible] to that.

Then we are making sure that effectively we've got good drainage from the drain to the dewatering pumps, and the pumps are effectively — we've got these three pumps that are there that are pumping at different times to different pumping degrees. And they are working quite well as well. With all that, we've got a system that is pretty secure.

How the water is getting to the base drain, it's mostly through the fractures of all the sandstone that we've got around the tailings management area. And these fractures are creating a

potential path in fact from the pond water at the top and the water inside the tailings to come down through the filter that we've got at the bottom, and then being pumped to the raised well.

The quality of the water though is not very much affected, it's still very pristine water coming from groundwater around. But we've got to be careful, if we're pumping too much water on an instantaneous base, that effectively we're not getting the high migrating contaminants like chloride, sulfates that we've got in the pond water and then potentially altering the [indiscernible] process based on that.

So we've been testing all these types of systems in the last I would say 10-15 year. We've got a system that works very well for us and we're confident that effectively it will continue pumping, as required, with the TMF expansion.

MEMBER McKINNON: Thank you very much. Could I continue with a question, Madam Velshi?

THE PRESIDENT: One more.

MEMBER McKINNON: Okay. There was

concern, a point raised in the intervention was related to the 10-metre distance at the final decommissioning stage between the toe of the dam and the lake.

So I was wondering if – maybe this should be directed at the Saskatchewan Ministry of the Environment because my question is related to what is the current thinking about long-term water level changes that might take place and how might that affect Fox Lake, and especially in relation to this very short offset distance between the high water level and the final proposed toe of the slope?

MR. MOULDING: For the record, Tim Moulding with Saskatchewan Ministry of Environment.

The construction information we have to date suggests that the containment should be stable. Long-term water monitoring of both water levels and water quality will continue in Pat lake and Fox Lake for the foreseeable future as well. If there's any fluctuations that are expected, we'll make sure that steps are taken to manage that.

And the long-term modelling for the

site is going to continue into the future as well.

As part of verifying the assessment predications Orano/McClearn Lake is responsible for providing an environmental performance report on a five-year rotation to the Ministry of Environment, and the modelling for the site is updated at that time and we'll continue to review that information and make sure that there aren't any changes that aren't expected.

MEMBER MCKINNON: Okay, thank you.

THE PRESIDENT: Thank you.

Mr. Kahgee. Oh sorry, Mr. Kahgee, before we go to you, I see Ms. Searcy's got her hand up.

MS. SEARCY: Hi, Tina Searcy, for the record. I just wanted to add to Mr. Moulding's response. That, as he mentioned, Orano is responsible for conducting environmental performance reports on a regular basis, and we have looked at the water levels in Fox Lake due to climate change and extreme precipitation events. And the modelling indicates that Fox Lake won't rise significantly in water level.

THE PRESIDENT: Thank you for that.

Mr. Kahgee.

MEMBER KAHGEE: Chi meegwetch for your presentation and chi meegwetch to the Elder for opening us in a good way this morning.

I just have a couple of follow-up questions with respect to the engagement. First off, in your written submissions you talked briefly about the Northwest Land Claim.

Can you specifically comment on whether or not the McClean Lake operations fall within the claim area?

MR. CALETTE: Mark Calette, for the record. And [indiscernible], if you want to chime in, go ahead. But I don't have my map exactly in front of me. I don't want to give an answer that may be incorrect. So we can definitely have a look at that and follow-up whether it falls in the claim area or not. I don't want to say something and have it wrong.

MEMBER KAHGEE: Okay, thank you. Would you be able to provide – briefly advise as to what the status of the claim is right now?

MR. CALETTE: Mark Calette, for the

record. We're in very deep discussions with the Government of Canada on that claim. There's a side table that has been set aside to have those conversations, and those are proceeding quite well. So as far as an update, that's what I can tell you.

MEMBER KAHGEE: So Canada's aware of the claim?

MR. CALETTE: Yes, and a side table has been set-up specifically to discuss that claim.

MEMBER KAHGEE: Okay. Perfect.

THE PRESIDENT: Mr. Kahgee, before you proceed, I see Ms. Murthy's got her hand up. Maybe she wants to add something.

MS. MURTHY: Thank you, Ms. Velshi. It's not me, I would like to ask Adam Levine from Team Leader, Indigenous Relations and Participant Funding program to perhaps provide the answer that Mr. Kahgee asked about the land claim.

MR. LEVINE: Thank you. Adam Levine, from Indigenous Relations and Participant Funding.

So, specifically for the Northwest Land Claim we'll let Mark and his team follow-up just

to provide more clarity of exactly the location of the land claim versus McClean Lake.

From my understanding from previous maps and information, McClean Lake itself was outside of that specific territory, but I don't have necessarily the latest information as part of the ongoing negotiations and discussions, as Mark was discussing.

But the CNSC, we're quite aware of the land claim and we're consulting and engaging the Métis Nation of Saskatchewan on a number of different facilities and activities we regulate throughout their traditional territory and within the land claim territory.

So something we're keeping abreast of and taking very seriously. So happy to provide more information from our perspective, if needed. Thank you.

MEMBER KAHGEE: Thank you for that, Mark.

Then on the heels of that I have a follow-up question then I guess with respect to CNSC.

Could CNSC clarify what specific efforts have been made to engage directly with Métis Nation of Saskatchewan regarding application beyond the notices of the hearings?

MR. LEVINE: Would you like me to continue?

MEMBER KAHGEE: Yes.

MR. LEVINE: Okay, thanks. Adam Levine, Team Lead, Indigenous Relations, for the record.

So beyond the notifications that went out in February this year, we've conducted a number of different follow-ups with the MNS with Mark and his team, and we offered on a number of occasions to meet to discuss the licence amendment application and to see if there's any concerns or questions and ensure that MNS received all the documentation/information they needed as part of their review.

Of course, MNS did apply for participant funding and received that. And so we ensured that that was well in order and that they were able to conduct their review and submit their

intervention to the Commission in a timely way.

MNS indicated that for this particular file that they did not need to meet and discuss any specific concerns or issues. But we always remain available to meet with MNS, and we do meet with Mark and his team I would say every two, three weeks, because we're working on many different files together on major environmental assessments and other licensing actions.

So we do offer lots of opportunities to discuss these things. And also next week, or at the end of this week actually, we do have an engagement forum where we're inviting all Indigenous leaders from Northern Saskatchewan with interest in the mines and mills to have a general update on performance of the uranium mines and mills facilities from this past year. So it's in relation to our regulatory oversight report.

And Mark and his team will be participating in this, as they have in the last three years we have done this engagement forum. And so we'll be able to talk about all the files, including

McClellan Lake and give updates and answer questions as well.

So another opportunity for us to engage with the MNS on this file and others. Thank you.

MEMBER KAHGEE: Thank you. Just two more quick questions, Madam Velshi. Just a follow-up then with the Métis Nation of Saskatchewan. In your CMD I highlighted a number of areas where you want to see meaningful engagement take place with respect to McClellan Lake site.

Obviously all of these are important. Where do you think the starting point is for the conversation?

MR. CALETTE: Mark Calette, for the record. Could you just repeat part of that question again? I just didn't catch the last little bit.

MEMBER KAHGEE: Yes, no problem.

So I was referring to your CMD where you highlight a number of, and I think briefly in your oral presentation as well, you highlight a number of important areas where you want to see meaningful

engagement take place with respect to McClean Lake site.

Obviously all of these are important. Where do you think the conversation starts for the Métis Nation of Saskatchewan?

MR. CALETTE: Mark Calette, for the record here. So I'll give a couple of answers to your questions here. So firstly, I'd like to say that the Canadian Nuclear Safety Commission has been excellent to work with in terms of consultation and engagement.

As Adam has already mentioned, we meet regularly on a number of files. There's an awful lot going on in Northern Saskatchewan, but we've been very happy with how they've been working with us.

Obviously we'd like to see things improve with Orano and, you know, I'm hoping they will. But in terms of where we're at for the Métis Nation of Saskatchewan, I think the big thing for us is we don't want to stand on the sidelines, we want to be actively and meaningfully involved. And, at times, we're kind of the forgotten folks.

And like I mentioned earlier, some of

that was our own doing but we – you know, MNS was, you know, not in a position, you know, in previous – many previous years ago to be actively involved. But, you know, I've been here since 2019 and we've been ready and willing and able to talk with whoever would like to talk with us and work with them collaboratively as much as we can.

So in terms of where we would like to see it go, we'd just like to see ourselves be involved as much as everybody else and we'd like to be able to participate in a good way and provide meaningful feedback.

And we find at times that the systems in Saskatchewan are designed to, you know, push through very quickly and those opportunities either have very very short timelines or impossible timelines and we're not able, you know, to keep up with the pace of things.

So what we'd really like is just a system where we're able to work with everybody and be able to provide the level of information, feedback, direction that's required to make these projects

successful and, you know, to keep our citizens safe from any impacts.

So that's where we're at. We're building capacity as we go and we're looking for bigger and better things moving forward.

MEMBER KAHGEE: Thank you.

Finally, just a follow-up question with Oran, if I can, to give them an opportunity to respond.

Could Orano just clarify what efforts are being made to better improve engagement efforts with the Métis Nation of Saskatchewan going forward with respect to your operations at the McClean site?

MS. SEARCY: Tina Searcy, for the record. I just wanted to start by saying that Orano is very proud of the relationships that we've established in the north and within the basin with all of our stakeholders. We acknowledge that our relationship with the Métis Nation of Saskatchewan is a little bit more in its infancy.

However, with respect to this particular application, which was made – the project

description was made late 2019 with the licence amendment request made a little bit early 2020. We have had numerous follow-ups with the Métis Nation of Saskatchewan, providing emails. We have had a meeting with themselves and their consultants to specifically talk about the project.

We've provided their consultants with a variety of other documents to support the expansion upon their request in advance of meeting with them virtually to discuss the project. We've had fact sheets that have went out to Métis Nation various representatives along with the project description and as well as Métis residents and local presidents that reside in Northern Saskatchewan.

So we do – we appreciate their intervention and we hear their recommendations and we do look forward to continuing to foster our relationship with the Métis Nation of Saskatchewan moving forward on our operations and on this project.

MEMBER KAHGEE: Thank you.

THE PRESIDENT: Maybe I can ask Orano a couple of follow-up questions to that.

What's your reaction to the statement made by Mr. Calette that the MNS is getting a lower priority than say First Nations, for instance?

MS. SEARCY: Tina Searcy, for the record. I guess like I said, and Mr. Calette acknowledged earlier, that the organization in its current formation is a little bit new. Probably right around the time that we submitted this application was when we started to try and foster a relationship with the Métis Nation of Saskatchewan.

However, as I mentioned a second ago, we are very proud with the long standing relationship we've had with Métis locals, and we're trying to foster a path forward with continuing to engage with local residents and local presidents, as we have done historically while developing a path forward with the Métis Nation of Saskatchewan.

THE PRESIDENT: Okay, thank you.

And then of the 11 recommendations in the submission by the MNS, are there any you want to comment on, Orano? I just want to give you an opportunity to respond.

MS. SEARCY: Tina Searcy, for the record. We've had the opportunity to review the recommendations and we would like to provide written responses and meet with the Métis Nation of Saskatchewan to talk about those moving forward.

There are some technical aspects that we can definitely address and a suite of engagement recommendations that I think we can sort out as we establish our relationship and engagement protocol moving forward.

THE PRESIDENT: Okay. Thank you, I'm happy to hear that.

And while we have the MNS here, we heard from Marc Leblanc early on that the [indiscernible] could not participate and make a submission. And a big reason for that was the pandemic and the restrictions it has posed in doing in-person engagement.

So I'll start with MNS just to get your thoughts on your ability to meet with members of MN-S, and then maybe ask Orano and CNS how the virtual engagement has maybe undermined or what the impact of

that has been on the ability to establish meaningful engagements and relationships.

So let me start with MN-S first, please. Your thoughts on that?

MR. CALETTE: Mark Calette, for the record.

That's an excellent question. COVID has made responding unbelievably difficult. It presents logistical challenges for all of us, but, you know, even for us internally, our communities are scattered from one corner of the province right to the other, east, north, south, west, everywhere and so it has made it really hard for us to be able to talk with them and to have the kind of conversations we need to have. It makes it really difficult for us to have conversations with industry proponents like Orano. I'm sure they would share those feelings.

But one of the things that I think really bothers us is there are projects and things moving forward, you know, rather quickly and with COVID it makes it much, much more difficult to respond in a timely manner. And it doesn't surprise me that

others, you know, weren't able to submit anything for this because it's a big undertaking.

And one other point I would really like to make, and I think we have told this to the Commission before, a lot of our Métis locals, most of them are volunteers and they are looking at this kind of information on the corners of their supper table. They don't have an office, they don't have staff, they are just doing this in their volunteer hours, you know, when they are not working full-time to support themselves. So we have to help them as well with these processes and COVID has made all of that difficult.

And here in Saskatchewan when everything gets pushed down to the locals, it puts them in a position of failure because there is just no way they can – many of them can even get back and respond to these kinds of interventions or for different things going on in their backyard that are regarding the uranium industry. So it has been quite difficult.

And the other thing to remember, too,

is we are an oral people, we like getting together, we like sitting together and talking with each other, and not being able to do that has been extremely hard for us right across the entire province.

THE PRESIDENT: Thank you for that.

So other than, you know, trying to see if we can give more time, do you have any other recommendations?

MR. CALETTE: Mark Calette, for the record.

I think more time and realistic expectations are important. I think if these things are going to move forward in an environment where the whole world is in chaos, I think we have to give a little thought to, you know, all of what we are trying to do and get done during this incredibly difficult period, and understanding, too, that a lot of our people, especially in Northern Saskatchewan where a lot of these mines are, they don't have access to technology and if they do, it's really, really poor bandwidth. So even that makes it hard. So I think having those realistic expectations about what we can

do and how we go about doing it, especially during a pandemic when you have to rely on technology, is an important factor to consider.

THE PRESIDENT: Thank you very much for sharing that.

Orano...?

MS. SEARCY: Hi. Tina Searcy, for the record.

I think before I pass it over to my colleague Glenn Lafleur, I would acknowledge that COVID and having to go virtual has imposed some challenges across the board to everybody involved and we are just over the last 18 months trying to find new and inventive ways to meet and share information. Some of it has been successful, some of it hasn't, and we are just working with each other to try and determine the best path forward. I don't foresee this changing anytime soon.

But Glenn Lafleur works in our CSR Department and I think he misses his boots on the ground opportunity quite a bit, so I will pass it over to him.

MR. LAFLEUR: Glenn Lafleur, for the record.

Yes, COVID has been a real challenge for us to do some of the community engagement stuff. A lot of times we use media like the radio stations and we send out fact sheets of what's happening to the communities. For the Athabasca Basin we have the AJES group that we rely on and we also communicate with the Chief and Council on what's happening. So with that, I feel that we have maximized the opportunities that we have communicating with people.

And one thing that has to be understood, too, like with this project we started in 2012, so there has been lots of engaging that happened prior to COVID, especially in the Athabasca Basin because that was our main concern. That's where we really focused on. So there was lots of information that was given to the Athabasca Basin prior to COVID.

And what we were doing after that was just following up from the information we had in the past, updating it and passing it on to the AJES Committee and then they would pass it on to the

leadership and to the community.

So yes, it was – as Tina alluded to, I miss all the meetings that we had in the communities. Unfortunately we weren't able to do that, but I think I feel comfortable that we maximized all opportunities to make sure that the Athabasca folks and Northern Saskatchewan know what was happening with this project and a lot of them knew it already from the previous information that we gave prior to COVID.

So thank you.

THE PRESIDENT: Thank you.

Mr. Kahgee...?

MEMBER KAHGEE: Thank you. Thank you, Madam Velshi.

I had a similar question with respect to how things were being done during COVID and it reminded me of a follow-up question I had on the heels of that.

I say chi-miigwech to Mr. Calette for reminding us of the importance of how Indigenous communities relate to one another and how that oral interior action is so important to Indigenous people.

Thank you for that.

In light of that, I had a follow-up question from earlier. I appreciate the response CNSC gave with respect to cumulative effects analysis. To some extent it's touched on in the Métis Nation - Saskatchewan CMD with respect to human health risks.

My question is: How was Indigenous knowledge incorporated into that analysis?

That would be for the CNSC.

MS. MURTHY: Thank you.

Kavita Murthy, for the record.

I have Dr. Elias Dagher ready to respond to the question and, if needed, we will get Adam Levine to add to it.

I do want to acknowledge the sentiments that have been expressed about COVID and the lack of ability to have face-to-face conversations with the communities that are important when these activities are contemplated and we are looking forward to resuming those activities as soon as we can safely do that.

Over to you, Elias.

DR. DAGHER: Thank you very much,
Ms. Murthy.

Thanks for the question.

Dr. Elias Dagher with the CNSC,
Environmental Risk Assessment Specialist.

Orano's 2016 Environmental Risk
Assessment – so that was the last or the most recent
large site-wide ERA – was completed in accordance with
the requirements of CSA N288.6 and the human health
component of that does consider multiple receptors
that consume a traditional diet and were based on, at
the time, the Hatchet Lake dietary survey. So the ERA
does consider Indigenous receptors and based on the
different lifestyle and dietary habits.

Now, it should be stressed that there
is a high level of conservatism that is built within
the ERA and the receptor diet and lifestyle habits on
top of this. So as a result, within the ERA, all
human health is expected to remain protected and safe
during continued operation of the facility. So that
is regardless of what the specific receptor
characteristics may be, because there is inherent

conservatism built in with that.

Where Indigenous knowledge studies do exist, CNSC staff have begun ourselves using that information in those studies to support our reviews of licensees' ERAs. So this could include confirming that traditional food are consumed – the consumption rates that are applied in the models, the receptor locations and other environmental features which may exist on the sites.

I may pass the remainder of the question on to Mr. Levine to support on future engagements.

MR. LEVINE: Great. Thank you.

Adam Levine, for the record.

So beyond environmental risk assessments, the CNSC just recently published our Indigenous Knowledge Policy Framework which sets out the principles of how we work with Indigenous knowledge and knowledge holders throughout the lifecycle of our regulatory oversight work and we are looking at a number of different ways of how to support the gathering and inclusion and consideration

of Indigenous knowledge and perspectives in many of the assessments and work we do, including our Independent Environmental Monitoring Program as well as our licensing reviews, environmental assessments, et cetera. We are working with the MN-S in this area on a number of different ongoing environmental assessments.

We are also looking at the Eastern Athabasca Regional Monitoring Program, which includes human health risk assessments that does take that data and information directly from communities and has a community-based monitoring aspect to it that includes local knowledge and information and data from community members directly to input into that. So there is a lot of work being done on this throughout the Athabasca Basin where McClean Lake is situated and we are definitely looking at ways to strengthen that work moving forward in partnership with Indigenous communities throughout the Basin.

THE PRESIDENT: Thank you.

Ms. Murthy...?

MS. MURTHY: Thank you, Ms. Velshi.

I would like to ask Kiza Sauvé from the Health Sciences and Environmental Compliance Division if she can speak to how Indigenous groups – how we have consulted with Indigenous groups to determine our sites and products that we want to sample as part of our sampling program for IEMP.

Kiza, please go ahead.

MS. SAUVÉ: Thanks, Kavita.

Kiza Sauvé, for the record. I am the Director of Health Sciences and Environmental Compliance Division.

During our Independent Environmental Monitoring Program we are trying to get out as early on as possible to meet with the Indigenous communities. We know that with the Métis Nation – however we were able to include some information from the Métis Nation of Saskatchewan, as we have talked about a few times, the timing has often been a challenge. We have had meetings. We haven't been as successful in including a lot of information from the Métis Nation – Saskatchewan on our Cigar Lake campaign. We're a little bit more engaged moving

forward and we will keep the lines of communication open.

But one of our good news stories this year was with the English River First Nation. Something we heard was how important moose was to the community and so we had a really good conversation about what part of the moose. English River First Nation will be providing moose, parts of the moose for us to get out and analyze the labs so we can include that in the information that will go up on our website. So it is a very important piece of IEMP and we continue to expand what we are able to do as we meet with the Indigenous communities.

THE PRESIDENT: Thank you very much.

And thank you again to MN-S for your submission, Mr. Calette for the presentation, and we very much appreciate your appearance today.

With that, we will move to our next presentation, which is from the Athabasca Joint Engagement and Environmental Subcommittee as outlined in CMD 21-H6.5.

And I will turn to Elder McDonald for

his remarks.

CMD 21-H6.5

**Presentation by the Athabasca Joint Engagement and
Environmental Subcommittee**

ELDER McDONALD: Good afternoon.

Georgie McDonald from Fond du Lac Denesuline community
of Fond du Lac Denesuline First Nation.

I will do the introduction and prayer
in my language, in Dene.

--- Indigenous language spoken /

Langue autochtone parlée

ELDER McDONALD: Thank you.

I am the past leader of my community
of Fond du Lac Denesuline First Nation. I have served
at Band Council for many years. I have been a member
of several boards representing my community and
Athabasca Basin community. I am the site Elder at
Orano McClean Lake Operations and I represent Fond du
Lac Denesuline First Nation on the AJES committee.

I have been a member of the AJES

committee for several years, usually meeting in person several times in a year and by teleconference a couple of times a year. Orano engages with the community on a number of different topics, including McClean Lake operations, exploration and upcoming projects. I share that information with the community members and the leadership as needed and bring any questions from the leaders and the community to the AJES committee.

For the TMF expansion there was a community meeting held before COVID and the information presented to the community and shared with the leaders. Since COVID all information from the AJES meeting was shared with the leadership as we had no other community meetings due to lockdowns. Any questions from community members or the leadership have been brought to the AJES committee members.

Last year Orano shared TMF expansion project information with AJES at their regular meetings, had a site tour of the AJES TMF and held TMF workshops to provide information on the TMF expansion project and asked about any community questions.

I am a land user. Harvesting is what

I practise in my tradition and culture. I grew up on a trapline with my parents and I have done some commercial fishing on Lake Athabasca. My favourite time of the year is winter, which allows me to go trapping and hunting caribou. I recently built a cabin on Lake Athabasca where I spend lots of time fishing and hunting.

Thank you for the opportunity to speak with you today.

Marsi cho.

THE PRESIDENT: Thank you very much, Elder McDonald.

Let's open the floor for questions and we will start with Mr. Kahgee.

MEMBER KAHGEE: Miigwech to the Elder for opening us in a good way and sharing this morning – or this afternoon.

Just one question I have. I'm just trying to wrap my head around AJES and how it functions and maybe you can help me with that.

Can you explain to me briefly how the body functions in terms of Indigenous engagement? So

how often does it meet? How are issues brought forward from the communities? How are decisions made? How is information ultimately shared with the communities? And, finally, what is Orano's role in AJES? I'm just trying to get a sense of how it functions for the Indigenous engagement.

ELDER McDONALD: AJES, yes, we meet like in a teleconference every three months and share the information back to the communities and to Orano. And what it's about? Environment and the community, what they need, and I would present it to the leadership.

THE PRESIDENT: We can maybe ask Orano or CNSC staff if they wanted to complement that answer.

Orano...?

MR. LAFLEUR: Glenn Lafleur, for the record.

With the AJES committee, it's one of the pillars in our Collaboration Agreement and it's the environmental and stewardship piece. We have – in the AJES committee we have representation from Orano

and Cameco, the Ya'thi Néné Lands and Resource Office, the CEO is on our committee. Then we have a representative from Fond du Lac, we have a representative from Black Lake, we have a representative from Hatchet Lake, and we have a representative that represents all the small communities, they call them a PRO group. There are four little communities, Camsell Portage, Wollaston Post, Stony Rapids and Uranium City. So they have one rep.

So what happens is we as a company – companies I should say, meet with the AJES committee and let them know what's happening in the operations, exploration of each of the companies of Cameco and Orano. Then they give us feedback if there are any concerns or comments about what's happening and what we are planning.

We try to have one meeting a year in one of the mine sites, either Cigar Lake, McClean Lake or Rabbit Lake, but the past two years we haven't had any meetings in those communities, except for the tour that we had in September of 2019 I think – yes. So at

that time we took the AJES committee, along with members from the provincial government and members of the Northern Saskatchewan Environmental Quality Committee, which encompasses the whole North, and we took the representatives from the Athabasca Basin to that meeting.

Once the information is given to the leadership and to the community, if there are any concerns, then the AJES Committee members bring that information to the meeting, the next meeting and then we discuss it and that's how we function as a group. And then we utilize the AJES committee as a support for the projects that we have, because we make sure that we give them all the information required and answers for all the questions that they may have regarding the projects that we are proposing at the mine sites. Thank you.

MEMBER KAHGEE: One question, a follow-up question, Madam Velshi.

That's very helpful. Thank you for that.

So in terms of decisions then, are

those made by way of recommendation to participating communities? Is that how that works? If there is a discussion on specific issues at the committee, then ultimately their decisions are reflected by recommendations back, is that how that works?

MR. LAFLEUR: Yes. That's how it would work, yes.

MEMBER KAHGEE: And so is there a conflict resolution process in place if there is ever a situation where perhaps communities don't agree on specific issues?

MR. LAFLEUR: Yes, there is. Within the Collaboration Agreement there is a process in place for the AJES and the leadership.

MEMBER KAHGEE: And would that process be independent of Orano?

MR. LAFLEUR: I think it would be a process that would be worked with all parties involved in the agreement.

MEMBER KAHGEE: Okay. That's good. That's helpful.

And so far, from my understanding,

Orano's written submissions and then the oral presentation this morning, there's no specific concerns regarding the application but for to AJES; correct?

MR. LAFLEUR: That's correct, yes. We had an opportunity to do an enviro scan with the leadership about the project, and there was really no concerns coming from them. In fact, they supported us with the project because they see mining and exploration as a real good economic development boost for them up in that area.

MEMBER KAHGEE: Okay, that's all.

And in terms of individual communities, I believe in the CMD – the engagement documents, CNSC identified and Orano identified three kind of principal communities. I believe they're Black Lake, Fond Du Lac, and Hatchet Lake. Were there opportunities for Orano to engage directly with those communities outside the AJES with respect to the application?

MR. LAFLEUR: Yeah. Prior to COVID, we used to have meetings in the communities and we

used to have northern tours, we used to call them, prior to COVID, where we would go and meet with leadership and then have community meetings and explain to them what the project was about. And even at that time, there was really – there was a few questions, but more technical.

Like it's really important, as Cheyenna alluded to in her presentation, that the people have to be comfortable with the information that we're providing, and they have to understand it fully. And so we as the technical team for Orano always want to find either visual or have a translation done, just so people understand exactly what we're doing.

And then we also have community liaison officers in the communities, and we utilize them to do translation. We utilize them to talk to traditional land users and explain to them what's happening, especially in the field of exploration, because they have to understand what the companies are doing. And they really do a good job for us in that area, because they can talk to them in their own

language; right?

MEMBER KAHGEE: Thank you.

THE PRESIDENT: Ms. Searcy, you wanted to add something?

MS. SEARCY: Thank you. Tina Searcy, for the record.

I just wanted to add to Glenn's response that prior to the signing of the collaboration agreement in 2016, one of the primary methods for us to disseminate information and meet with community members was through, as Glenn said, conducting community open houses through the Athabasca Basin.

However, with the signing and negotiation of the collaboration agreement with leadership, they indicated that their preferred method of engagement would be through the AJES. And when we do meet and provide information to the AJES, we do ask them to go back to their communities and determine if any of the projects we're meeting about is of interest to the community members for us to come and do another open house there. To date, we haven't received that

request on the TMF expansion.

THE PRESIDENT: Thank you.

Dr. McKinnon?

MEMBER McKINNON: Yes. Thank you for speaking with us.

My question is for Elder McDonald. And it's based on your experience as part of this group representing, you know, diverse communities. What in your opinion – what methods of information sharing and communication work best? Because this is often an issue that comes up at hearings, and I'd be very interested to hear based on your experience what you would recommend. And as part of that, are these messages – is that information shared with Orano and CNSC?

ELDER McDONALD: Yeah. Okay, like the community visit was the best part. They'd share information to the leaders and to the community, like a showcase, stuff like that, what's going on at the mine site, environment, people working. I think that was – I think that's part of the question --

MEMBER McKINNON: Yes.

ELDER McDONALD: - that I'm answering;
right?

MEMBER McKINNON: Yes.

ELDER McDONALD: Yeah. And that was
the best, before the COVID. And due to this COVID, so
a couple years there's no visit like the community due
to COVID. So that was the best information, the
community visit. That was people about that pass it
to me like that.

MEMBER McKINNON: What works now?
What in your opinion works best now that it's more
difficult to meet directly with the communities?

ELDER McDONALD: Well, due to the
COVID, all the small communities, everybody isolated
themselves and the information I pass on with the
leadership and some of the leadership, the
councillors, like that, and some of the community
members and workers too.

MEMBER McKINNON: Okay, thank you very
much.

ELDER McDONALD: Thank you.

THE PRESIDENT: Thank you very much,

Elder McDonald, for coming today and sharing your perspectives with us. Much appreciated. Thank you.

We'll now move to our next presentation, which is by Cameco Corporation as outlined in CMDs H6.6 and 21-H6.6A.

And Mr. Mooney, I'll turn the floor over to you.

CMD 21-H6.6/21-H6.6A

Presentation by Cameco Corporation

MR. MOONEY: Good afternoon, President Velshi and Members of the Commission Tribunal.

For the record, my name is Liam Mooney, and I'm Cameco's vice-president of Safety, Health, Environment, Quality, and Regulatory Relations.

With me today is Kevin Nagy, who is the director of Compliance and Licensing for Cameco's Saskatchewan operations, as well as Kristin Cuddington, Cameco's manager of Community and Indigenous Engagement.

We are here today in support of Orano's request for a licence amendment for expansion of the JEB Tailings Management Facility. Next slide.

Cameco is a qualified operator with over 30 years of uranium mining and milling experience in northern Saskatchewan at our Rabbit Lake, Key Lake, McArthur River, and Cigar Lake facilities.

These proceedings are of specific interest to Cameco because of our agreement to mill all ore produced at our Cigar Lake operation at the McClean Lake mill. Orano is also a joint venture partner in the Cigar Lake operation, and the two companies have worked together closely for nearly 40 years. The tandem of the Cigar Lake mine and the McClean Lake mill is one of the world's largest uranium producers. Together, these operations provide uranium that generates power in safe, reliable, carbon-free nuclear reactors around the globe aligning with our vision to energize a clean-air world. Next slide.

Some brief background on our Cigar Lake operation.

Cigar Lake is located approximately 660 kilometres north of Saskatoon within the eastern portion of Saskatchewan's Athabasca Basin. Cameco is the operator of Cigar Lake on behalf of our joint venture partners, Orano, Idemitsu, and TEPCO.

The Cigar Lake orebody is one of the highest-grade ore deposits in the world. Since commissioning in 2014, Cigar Lake has produced over 90 million pounds of uranium and at full production employs approximately 600 workers, of which approximately half are residents of Saskatchewan's north.

Cigar Lake was the subject of a CNSC public proceeding in April of this year and received a 10-year licence renewal for continued safe production of uranium ore.

The ore mined at Cigar Lake is hauled approximately 70 kilometres to the northeast over an all-weather road and is processed at Orano's McClean Lake mill. The tailings resulting from milling of the Cigar Lake ore are deposited in the JEB Tailings Management Facility – the subject of the proposed

Orano licence amendment. Next slide.

Cameco has a well-informed view of Orano's competence as an operator of the McClean Lake operation as a result of our ongoing partnership in a number of uranium mining and milling projects in northern Saskatchewan. Based on this insight, we support Orano's position that they are a qualified operator, and we support their requested licence amendment for the JEB TMF expansion.

Similar to Cameco, Orano has mature management systems in place to ensure the health and safety of workers and the public as well as protecting the environment. Cameco and Orano also collaborate on stakeholder engagement activities which are focused on the needs and interests of local communities in Saskatchewan's Northern Administration District. Next slide.

We also support Orano's position that they are an experienced and competent operator of uranium tailings management facilities in northern Saskatchewan. Orano successfully operated the Cluff Lake uranium site for over 20 years and recently

conducted successful decommissioning and reclamation of that facility, including the associated tailings management area, upon cessation of operations.

The JEB TMF has been safely operated at the McClean Lake site for more than 20 years. Cameco supports Orano's conclusion that the expansion of the JEB TMF can be constructed, operated, and decommissioned in a manner that does not present an unreasonable level of risk, taking into account the mitigation and design controls detailed in their submission. Next slide.

Stakeholder engagement is at the heart of Cameco's northern Saskatchewan strategy. Cameco and Orano work together to keep our target audience in the Athabasca Basin communities informed in accordance with our approved public information programs and public disclosure protocols. We do this formally through committees and meetings with local communities or their elected representatives.

Engagement between Cameco, Orano, and the communities occurs primarily by maintaining two-way channels of communication to address questions and

concerns in a timely manner. In that regard, we have consulted with northern leaders and developed a set of principles to use when engaging northern communities. Cameco and Orano are committed to continuing to meet with northern communities to build relationships, provide updates, and address concerns.

The relationship between the McClean Lake mill and the Cigar Lake mine has a significant socio-economic impact on northern Saskatchewan. The licence amendment for the expansion of the JEB TMF will provide operational certainty for these operations and for northern Saskatchewan to continue to realize these benefits.

For over 30 years, Cameco and Orano have been working to develop long-term relationships with northern communities. We have a collaboration agreement in place with the rights-bearing First Nations and Métis communities of the Athabasca Basin which are located in the vicinity of the sites. This agreement formalizes our partnership with these communities and allows us to collaboratively determine the focus areas based on a community's

unique needs.

Together, Cameco and Orano have developed a process for engagement under these agreements. Representatives appointed by the community and industry meet throughout the year to discuss the operations and matters of importance to the respective communities and on traditional lands, from exploration activities to decommissioning.

Cameco and Orano actively encourage local communities to participate in ongoing community-based environmental monitoring activities and meet with local land and resource users and community members. In northern Saskatchewan, programs are in place that support our environmental stewardship goals.

The Eastern Athabasca Regional Monitoring Program and the Community-Based Environmental Monitoring Program focus on country foods within individual communities. Residents provide input to steer the direction of these programs in their community and are directly involved in collecting samples. Samples tested in both programs

continue to show that country foods and water are safe to eat and drink and part of a healthy diet.

Cameco agrees with Orano's submission that they are a qualified operator of the McClean Lake mill, including the JEB TMF, and are fully supportive of the requested licence amendment for the expansion of the facility.

Cameco also agrees that Orano has the management systems and programs in place for the health and safety of workers, the public and protection of the environment.

We conclude our presentation today with this picture of our first shipment of ore slurry to McClean Lake from Cigar Lake in 2014, which was an historic day for both our companies.

Thank you for your time, and we are available to answer any questions that you may have.

THE PRESIDENT: Thank you for the presentation and the submission, Mr. Mooney.

Dr. McKinnon, we'll start with you.
Any questions?

MEMBER MCKINNON: Yes, a very

straight-forward one. It's for Cameco.

And in the presentation you mentioned that traditional foods are sampled to assess if they're safe through the Community-Based Environmental Monitoring Program and also the Athabasca Working Group Environmental Monitoring Program. And I was just wondering, what is the difference and the relationship between these two programs and what types of contaminants do you analyze for?

MR. MOONEY: Thank you. It's Liam Mooney, for the record.

I'm going to ask Kevin Nagy to provide a bit of an overview in distinguishing between the Eastern Athabasca Regional Monitoring Program and the Community-Based Environmental Monitoring Program.

MR. NAGY: Good afternoon. Kevin Nagy, for the record.

The Community-Based Environmental Monitoring Program, formerly the Athabasca Working Group Program, was initiated in 2000 and has been collecting data for over 20 years. The Eastern Athabasca Regional Monitoring Program is managed by

the Government of Saskatchewan, the CNSC, and industry partners including Cameco and Orano. The Eastern Athabasca Regional Monitoring Program, or EARMP, was initiated as part of the Boreal Watershed Initiative of the Province of Saskatchewan in 2011.

So both programs are focused on collecting environmental monitoring data in the Athabaskan Basin communities and do involve community members in sample collection.

In 2019, CBEMP focused on the community of Fond Du Lac and collected and tested water, fish, and wildlife samples from areas identified by community members.

So both programs will focus on what people are hunting in a particular year, be it moose, caribou. Samples are provided. Fish samples are provided as well. And in addition, any vegetation that people are harvesting around the community, so blueberries, cranberries, bog berries. They also collect water samples from the bodies of water near the communities as well.

So these programs are managed by a

hundred-per-cent-Aboriginal-owned environmental services company in Saskatchewan. And the samples are submitted to the SRC analytical laboratory here in Saskatoon. And they're analyzed for a suite of parameters such as metals and radionuclides. And then they're then compared to Health Canada guidelines for food, previous studies on supermarket foods, and also regional background concentrations that have been collected in previous studies.

And continually the results of these programs show that the levels of parameters in the country foods and the water in the communities are comparable to those background and guideline levels and concludes year after year that the food and water is safe to eat and safe to drink.

MEMBER McKINNON: Okay, thank you very much.

THE PRESIDENT: Dr. Irvine, if you're on the line, do you wish to add anything to what Mr. Nagy has said around country foods and drinking water and safety?

DR. IRVINE: Thank you very much,

President Velshi.

So for the record, I'm James Irvine. I'm a public health physician in northern Saskatchewan, and I work with the Saskatchewan Health Authority.

I think there's a good complement of various systems in place to look at country foods, each with their own strengths and areas of coverage.

So there is the Eastern Athabasca Regional Monitoring Program along with the community-based program. And we watch those closely each time that a report is provided. And sometimes we're asked to provide input during draft stages.

We also watch closely the independent environmental monitoring program done through CNSC, because that often looks at similar types of country foods but at other locations that are closer to mine sites. So we watch them as well. And they have a complement of the same types of chemicals of concern, minerals, metals, radionuclides as well.

We often end up then complementing that with information that's gained on country food

surveys in terms of what are some of the amounts of foods that are consumed by populations within northern Saskatchewan. So there's the Hatchet Lake survey that was done some years ago, but there may be other times in which we'd use other surveys that have been done such as in Uranium City or, more recently, through the First Nations food, nutrition, and environment surveys that have been done across the Canadian provinces including Saskatchewan which will give you mean levels of consumption of various types of country foods within various geographic areas within the province and the high consumer amounts, which gives you perhaps those that may be more vulnerable to the impacts of environmental change. So we can use various amounts of country foods that are used there. And so you can get the average consumption amounts as well as high consumer amounts in boreal shield, boreal plain, or the taiga area of the province. So and you can compare that with other provinces.

So there's a good complement of programs that are available that we watch as consumers of information as well as sometimes we provide some of

that information as well.

So thank you.

THE PRESIDENT: Thank you very much for that.

Mr. Kahgee, any questions?

MEMBER KAHGEE: No, just a follow-up with respect to what was shared.

My only question might be in terms of the monitoring programs, what role do communities have in shaping the focus of those programs and ultimately how are results or the findings of those monitoring programs shared or transmitted to the communities?

MR. MOONEY: Good afternoon. It's Liam Mooney, for the record.

I'm going to ask Kevin Nagy to talk a little bit about the direction the program takes. But then as far as communicating, I would like Kristin Cuddington to provide you with a bit of context in how the results of the monitoring programs are communicated to the communities.

MR. NAGY: Thanks, Liam.

Kevin Nagy, for the record.

When the Eastern Athabasca Regional Monitoring Program was first formed back in 2011, the consultant did work with all seven of the Athabasca Basin First Nations and communities, spoke to the land users and resource users to come up with what mammals, what species of fish, what berries were people collecting and harvesting, where was this occurring. And then the sampling program was put into place based on that information. And that's the program with some nuances again to reflect where people are catching large mammals, but remains in place today. And as well, the consultant who manages the program will involve local community members, youth, and Elders in collecting the samples.

The CBEMP program is based in a specific community annually. And again, that monitoring program is based upon community interviews that are conducted with residents of the local communities, and that's what's monitored in that particular year.

As far as how that information is communicated back to the communities, I'll pass it

along to Kristin to respond to that.

MS. CUDDINGTON: Kristin Cuddington,
for the record.

So before we start the Community-Based Environmental Monitoring Programs, we take an opportunity to reach out to the communities themselves. We meet with leadership in conjunction with the third party consultant to really just have an opportunity to roll out the program, answer questions, hear feedback, potentially tailor their specific program to meet the community needs.

So once that begins, and we do receive support from chief, council, or leadership, you know, our community liaison, the Cameco-Orano liaison based in the First Nation communities really steps in. The program – the intent is for involvement from community members. The liaison is a member of their community and lead the program. They conduct the interviews, they coordinate the sample collection, they review the report and attend the community meetings. So throughout the process, the community is involved.

We take an opportunity to go back to

the community once we have the results and communicate that with the chief, council, the community. We really leave that or take direction from the community themselves on how they want the results communicated.

For the Black Lake study in 2019, it was – or 2018, I apologize – there was a really interesting workshop that was hosted by CanNorth, who was the consultant, in with the support from the community liaison, to do a fish dissection lab, so really tried to build some capacity and understanding around the program itself, how – what is actually being monitored or sampled, and then submit it for results. So really an interactive, engaging activity.

So what's left behind is a community report, which is their report. It's theirs to share.

We would then also have a brochure, which is more something that anyone could pick up and really get those high notes from.

So that would really be how the study is communicated with the community. So yeah. The community report, mapping product, as well as a brochure. And that would be, you know, in the

communities themselves.

So in for Black Lake in Stony Rapids, we were in the community to share those results. In Fond Du Lac as well, even with COVID, we were able to go in and share the results with the community 2020. And then currently the program that we are just – we wrapped up for Hatchet and Wollaston Lake, you know, we're still looking to hopefully get into the community, but again, COVID-dependent.

MR. MOONEY: Sorry, I was just going to add one more thing on that, and I know it's a long answer to a short question.

But the results from the Eastern Athabasca Regional Monitoring Program are available on the program's website. And the CBEMP document that Kristin talked about is available on our Cameco Northern website. That provides an overview of the program. But again, there's a more confidential document that's shared with the communities when we have those outreach activities that Kristin outlined.

MEMBER KAHGEE: Thank you.

THE PRESIDENT: Thank you very much,

Cameco, for your intervention and for your presentation and your appearance today. Very much appreciated.

This concludes the oral presentations by intervenors. We will now take a break and reconvene at 3:35 p.m. Eastern Daylight Time, so for the round of questions. So we'll see you shortly. Thank you.

--- Upon recessing at 2:51 p.m. /

Suspension à 14 h 51

--- Upon resuming at 3:35 p.m. /

Reprise à 15 h 35

THE PRESIDENT: Welcome back. We will now have general rounds of questions and we will start with Mr. Kahgee.

Members, you may also use this opportunity to ask questions stemming from the two written interventions that we have received.

So, Mr. Kahgee, over to you, please.

MEMBER KAHGEE: Thank you.

I have some questions, small questions for — I will start with Orano and then I will come

back to CNSC perhaps as we go around.

So thank you very much for your presentation this morning. I just have a couple of follow-up questions.

I'm trying to get my head around - I understand from your submissions, written submissions you specified what the need is for the project. In particular there is specific reference to potential expansions or future decisions with respect to Caribou, McClean, Sue D and the Midwest deposits and these are all pending decisions.

Do you have a sense of timing of those decisions?

MR. LANIECE: Vincent Laniece, for the record.

Yes, we have a sense of timing for these projects, because right now with Cigar Lake, the Cigar Lake mine is running and it has some unfortunate limited reserves and we would like to be able to get continuity into being able to continue feeding the mill with good uranium ore.

So we have - on the books right now of

course there is another phase of the Cigar Lake project which is called the Cigar Lake Phase 2 that may become one of the main sources feeding the mill. We have as well the McClean deposits like the Caribou and the Sue D that you mentioned. We have Midwest of course, which is not very far from the McClean mill, and we would like to get going with these projects.

Right now the uranium market is improving. We are seeing some increase in the spot price, which is great and we would like if it could lead to sustain our production for the long run.

At the time that joint ventures are making decisions in order to get going with our developments, either the Cigar Lake Phase 2 or the Midwest projects, it takes usually a number of years before we can get the engineering done. We have the consultation guide, we have the regulations addressed so that then we can effectively fully develop and get to production.

It usually takes between 5 and 10 years before we can effectively make sure that we are feeding the mill and getting into production. So that

is when the timing of our proposal right now is important so that the partners can make informed decisions of yes, we do have enough tailings facility or enough tailings capacity in order to process these ore bodies in the future.

MEMBER KAHGEE: Okay. That's helpful.

Now, in terms of timing - I may have missed this - clarify for me in terms of what the project schedule is, when you propose construction and completion of construction and then operations.

MR. LANIECE: Yes. Vincent Laniece, for the record.

It's dependent on the project of course, dependent on the methodology, if we need effectively an underground mine versus an open pit or some different kind of mining technology, but all of that to say with the experience that we have it takes usually in the range of 5 to 10 years before we can make a decision and then the time that it turns into operation and being able to feed the mill.

MEMBER KAHGEE: Thank you.

Just one more technical question. I

am sure we will come back to some process-related questions later, but in terms of the – in your submission you talked about kind of your role with ICMM and talked about there is obviously a great bit of focus on tailings. Orano has indicated it is working to identify gaps between current operation and the tailings standard. Do you have an anticipated timeframe for completion of this work and are there expectations or plans that the CNSC would be involved in that work?

MR. LANIECE: Vincent Laniece, for the record.

Yes, that is a great – that is a great mention, that if Orano were a member of the ICMM and we contributed to sitting at the global tailings management standard that got published in 2020. It's driven so that the goal of the standard is ultimately to achieve zero harm to people and the environment.

So right now, yes, the standard right now is in place. We have been reviewing it very diligently. We have Golder, who is part of this hearing, who is very knowledgeable about the tailings

management facility. Golder has accepted to be our engineer of record and based on our current assessment, the embankment is not fully built yet. So with regards to the implementation of the entire standard, we need to have the embankment fully built so that then we can go ahead on the failure mode analysis and a number of additional technical reports that we need to do.

But our first anticipation is that we need to be in compliance with the standard and the standard is saying that we need to be there by 2023 at the earliest. It depends on the overall assessment of the facility itself. We need to have risk evaluated on our expansion and depending on the severity of the risk, then either we need to be in compliance by 2023 for the higher risk and it could be 2025 for the lower risk. So we still have potentially a bit of time, but our goal is to be fully in compliance by 2023.

MEMBER KAHGEE: Thank you.

I don't know if CNSC has anything to comment in terms of expectations or what your role might be in that. That would be helpful.

MS. MURTHY: Kavita Murthy, for the record.

Just a minute, Mr. Kahgee, I will - I am waiting to see who is ready to respond to this question.

Yes, so Mr. Peter Fundarek will respond to the question. Thank you.

MR. FUNDAREK: Peter Fundarek, for the record.

For any application for uranium mining, CNSC staff will use the resources that we have internally available to us. We have a number of specialists in different areas, including environmental assessments, conducting environmental risk assessments and radiation protection management systems. There's a whole range of staff specialties available to CNSC staff.

Our role is to assess what comes in from the applicant whenever an application is made. We will meet with any potential applicant. We are doing that process right now in a couple of cases for some new projects that are being proposed for the

Saskatchewan area. We will meet with them to discuss our expectations, go over our regulatory requirements and the information that is provided in our regulatory document series to help guide them in their preparation of their application.

But it is the applicant's application. We can't write it for them, we can only provide them with an overview of what our expectations are where the information that should be in that application and how much of that information has to be and what sections of it. So that's our role, is to help guide applicants when necessary.

And then as part of that we conduct our outreach, we conduct our engagement and consultation with different Indigenous groups as necessary and other members of the public to ensure that they are well informed of new mines that are coming online so that everybody is aware and can fully participate in the whole process for a new licence application, wherever it may be, whether it is an existing licensee that is expanding their operations or it's a wholly new operation that is coming into

being.

MEMBER KAHGEE: Okay. Thank you.

THE PRESIDENT: Maybe, Mr. Fundarek, I can ask a follow-up to that, because I think what Mr. Kahgee perhaps may have been getting at is: Will the CNSC make it a requirement of the licensee to be in compliance with this new international standard? Does that become part of the licensing basis?

MR. FUNDAREK: Peter Fundarek, for the record.

Documents such as that become part of the licensing basis after review by CNSC staff to ensure that they are fully applicable and how they can be applied to the Canadian situation. For many international standards and guides, they don't have the — no other mines in the world have the high grade ore that we have in Canada, so we have to factor that into the consideration. So we have to apply it to the Canadian experience. But in most cases the Canadian regulations, the Canadian regulatory requirements for uranium mining far surpass anything in the world, so we are leaders in this area, as we are in many areas

of nuclear safety.

THE PRESIDENT: Okay. Well, Mr. Laniece, you are doing the GAP analysis. Tell us, are there more stringent requirements in here than what the Canadian regulatory requirements are?

MR. LANIECE: Sorry for that. Vincent Laniece, for the record.

Yes, at this point in time when we are comparing the standard from the ICMM and the request from CNSC and all the standards that we have, no, we are not seeing any difference.

I believe for the Orano group it is important because we are an international group, we are mining in different locations in the world and the regulatory types of request in the different countries are not the same as what we are currently experiencing in Canada.

So for us in Canada right now, being part of the ICMM, from a regulatory standpoint it doesn't make much difference, but it is still a very good type of feature, kind of endeavour for the entire Orano group that we need to be in order to be

represented as a responsible miner, which is ultimately what we want to achieve.

THE PRESIDENT: Excellent. Thank you. Mr. Kahgee, back to you.

MEMBER KAHGEE: Thank you, Madam Velshi, for that clarification. That's helpful.

I just want to shift gears again, if I can, so thank you for that. I just want to come back to there was a lot of discussion earlier about Indigenous engagement. There's a couple of pieces I just want to hone in on if I can with Orano and then perhaps later with CNSC.

In your submissions you emphasize that Orano looked at various options and ultimately arrived at the expansion at the JEB facility as the preferred means for future mine plans. Were Indigenous communities provided with an opportunity to provide input and consider those options and, if so, how did this factor into your decision?

MS. SEARCY: Tina Searcy, for the record.

Yes, over the years we have met

extensively on alternatives assessment conducted. I believe we have conducted that alternatives assessment about three times since we started looking at the long-term management of tailings at the McClean Lake Operation. They have been discussed with our stakeholders at numerous opportunities, community open houses and focused workshops, and the feedback to date largely is that they appreciate that the expansion remains on an existing footprint with no new impacts to wildlife or the receiving environment.

MEMBER KAHGEE: Thank you.

THE PRESIDENT: Okay, thank you.

Dr. McKinnon, over to you.

MEMBER McKINNON: Yes, thanks.

I would like to ask a couple of questions about the financial guarantee and my questions will be directed to CNSC staff.

I understand there is a request made to make an adjustment to the financial guarantee in this case and it is based on various assumptions which were listed very clearly in the application, but a couple of them caught my eye because, as an example,

it was assumed that inflation would go down and fuel costs would go down, and, you know, fluctuations in various factors will occur, especially nowadays. So my question, my general question is how are cost fluctuations accounted for in the financial guarantee? Is there a contingency factor for example included?

MS. MURTHY: Kavita Murthy, for the record.

I will ask the Director of the Waste and Decommissioning Division, Mr. Patrick Burton, to respond to the question and then call upon others as he needs. Thank you.

MR. BURTON: Good afternoon, everyone. For the record, my name is Patrick Burton, I am the Acting Director of the Waste and Decommissioning Division at the CNSC.

So, Member McKinnon, you have essentially answered your own question. Absolutely yes, there is a contingency in financial guarantee. So in the financial guarantee that was supplied for Orano, it was anywhere between 15 and 25 percent of the various different aspects of that plan.

I might ask whether Jocelyn Truong has anything further to add from a CNSC staff point of view. Thank you.

MS. TRUONG: Hello. Jocelyn Truong, Project Officer in the Waste and Decommissioning Division, for the record.

What Mr. Burton described is correct. In the preliminary decommissioning plan cost estimate, each of the lines of a cost estimate includes a contingency, so it is about 15 or 25 percent and, according to our regulatory guide G-206, which is the regulatory guide that applies to McClean Lake currently, those are appropriate contingencies for this level of preliminary decommissioning planning.

MEMBER McKINNON: Okay.

MS. MURTHY: Kavita Murthy, for the record.

If I may just add, Dr. McKinnon, that financial guarantees are reviewed every five years and so we do take into account the situation at the time of the review. So there isn't - it isn't a static thing, it evolves. Thank you.

MEMBER McKINNON: Yes. Yes.

And my final question in connection with the financial guarantee. In the documentation there was discussion of severe accident analysis and these, although they are unlikely scenarios, you know, they may occur, so I was curious as to whether the costs of — you know, how far into these scenarios does the financial guarantee extend? Does it include severe accident analysis likelihood?

MR. BURTON: Patrick Burton, for the record.

The intention of the financial guarantee is to cover events such as a licensee bankruptcy. So the contingency might cover to a certain extent the kind of scenarios that you are describing, but in most cases, in the case of a severe accident it's not like a licensee has gone bankrupt and is no longer financially able to take care of their commitments.

I will just ask again if Jocelyn Truong has anything to add to that response.

MS. TRUONG: Jocelyn Truong, for the

record.

As Mr. Burton mentioned, a preliminary decommissioning plan with the cost estimate is based on a decommissioned tomorrow approach, so it is based on the operation shutting down the next day and then planning for decommissioning immediately. This also accounts for a worst-case-scenario scenario. So contingencies and the inflation rates accounting for the five-year planning is included in that.

MEMBER McKINNON: All right. Thank you very much for that clarification.

THE PRESIDENT: Thank you.

And while we are talking about financial guarantee maybe I can ask a question of Orano and staff to confirm. I didn't see anything in the written submissions from either Orano or staff on the form of financial guarantee, though I heard it in the presentation today from staff that it would be the same vehicles, the surety bonds and the letters of credit, and I just wanted to get confirmation on that.

Maybe I will start with Orano. Is that correct?

MS. SEARCY: Tina Searcy, for the record.

That's correct. We don't intend on changing the forms of our guarantees at this time.

THE PRESIDENT: Perfect. Thank you. Okay, back to you, Mr. Kahgee.

MEMBER KAHGEE: I'm sorry, my mute button was playing tricks on me. Apologies. It is getting along in the day.

So I just want to follow up on some questions with CNSC, if I can. In particular I want to talk a bit about the – ask a couple of questions about the waterborne effluent issue.

Now, in your submissions you conclude that waterborne effluent release to an environment are not expected to impact the environment and further that modelling results demonstrated that surface water quality at Fox Lake and Pat Lake in particular is expected to remain below surface water quality guidelines after the site is decommissioned and, as such, impacts to the aquatic environment according to your conclusions would be negligible.

My question is have there been any aquatic studies done that have looked at the potential impact on fish and fish habitat in relation to the historic and ongoing operations at McClean Lake?

MS. MURTHY: Kavita Murthy, for the record.

And once again, I would like to ask Dr. Elias Dagher to respond to this question, please.

DR. DAGHER: Thank you for the question.

And yes, absolutely. So aquatic species, both aquatic, terrestrial, semiaquatic ecological receptors, they are all assessed as part of the environmental risk assessment, the last one being conducted in 2016 for the site-wide assessment, and those consider releases from the JEB water treatment plant. You know, it is going through the Sink/Vulture Treated Effluent Management System down into McClean Lake East Basin and down the Collins Creek watershed. So that is all standard ecological considerations that are conducted within the risk assessment.

In the 2016 risk assessment there were

essentially no impacts to negligible impacts to the environment, whether to all essential ecological receptors and human health, with the exception of selenium in some aquatic and semiaquatic species. And essentially in response to that – so the results of that 2016 year I did identify that potential risk and it is a future potential risk as a result of releases from the JEB water treatment plant to aquatic and semiaquatic species. Now, this was primarily due to high forecasted selenium concentrations that were coming out of Cigar Lake ore.

In response to the 2016 ERA results, Orano proactively developed a selenium adaptive management plan – and that is the expectation of the CNSC – and they implemented a number of mitigation measures to better quantify and reduce that potential risk. As part of that, there was a future update to the ERA which demonstrated a significant reduction in future selenium impacts to both aquatic and terrestrial species and the particular impacts I'm considering, the JEB TMF expansion. So that aspect of it, which is not related to the releases from the

water treatment plant, that is related to water that may infiltrate long term once there is a cover and may infiltrate into the waste and that groundwater will migrate over many, many years and release essentially contaminants to Pat and Fox Lakes. The long-term assessments of those have demonstrated that there is negligible impact to surface water quality and to aquatic species.

MEMBER KAHGEE: Thank you for that clarification. And I raise two additional questions I had with respect to that issue.

Now, specifically in terms of the long-term release you talked about, obviously there is talk in the submissions about developing future mitigation measures. Is there an expectation that Indigenous communities will be part of developing those mitigation measures with Orano and CNSC?

DR. DAGHER: Dr. Elias Dagher, for the record.

I may pass that portion of the question on to Orano to answer.

From CNSC's perspective, engagement is

something that is of utmost importance and we do have expectations at the CNSC for essentially conducting those long-term assessments and ensuring that any mitigation measures that are commensurate with any potential risk that does come out of long-term assessments is considered and implemented commensurate with the risk.

MS. SEARCY: Hi. Tina Searcy, for the record.

Yes, I would just second what Elias said here. Orano may take the opportunity pending the level of risk identified from trends analysis and risk assessments to engage with our Indigenous stakeholders to identify and develop mitigation plans if necessary.

MEMBER KAHGEE: And that would assumably be informed by Indigenous knowledge as well?

MS. SEARCY: Yes.

MEMBER KAHGEE: Okay, perfect. Thank you.

And just one other piece that I wanted to pick up on and it was referenced earlier with respect to selenium. I had a question earlier with

respect to MN-S, Métis Nation - Saskatchewan submissions. They talked about concerns with that issue generally. I believe it was at page 15 of the CMD. They talked about exceedance of selenium concentration action level from McClean Lake effluent occurring in March 2020.

Can you clarify for me what this is in reference to and what steps have and will be taken to monitor selenium in McClean Lake going forward?

DR. DAGHER: It's Dr. Elias Dagher, for the record. And I may also pass part of this question on to our Environmental Program Compliance officer at the CNSC if needed, if additional information is needed.

Essentially, so when it comes to effluent and regulating effluent, CNSC has an expectation of two essentially tiered levels. The first is an action level. It is performance-based, and it essentially ensures that - it's like a yellow light. It's essentially ensuring that the licensee is operating within their operating design basis. It indicates - an exceedance of which indicates a level

that may indicate a potential loss of control, so not that there is one, but that the licensee may be operating kind of at the upper bound of their normal operation.

As part of the selenium adaptive management plan that came into force back in 2017, Orano established a selenium action level for releases of selenium, and that is - it's very tight, and it's essentially to make sure that there's increased oversight on their part, increased oversight by the CNSC to ensure that any exceedances are monitored, are being captured, and any reasons for that are being dealt with.

An exceedance of an action level is not a non-compliance, but it does require that a licensee take specific action. One of those actions are notifying the Commission and then taking - conducting an investigation to determine the cause.

It could be that it's just normal, that it's just operating at a high level. Or it could mean that there is something that's being triggered. And in that situation, the licensee is required to

take mitigation measures or preventative measures to ensure that the environmental protection program is restored back to the way it is supposed to be.

So we have seen action level exceedances of selenium in the past. They are being monitored quite closely by Orano and also by CNSC staff. We get routine periodic updates of what those are, of what the effluent monitoring data is in quarterly reports.

And to date, as part of the selenium adapted management plan, so Orano is still in a state of adapted management, they have – there is an expectation that they implement a long-term treatment solution for selenium. And they have committed to doing so. So this is a ferrous sulfate additional treatment phase that they're incorporating within the existing waste water treatment plant. And they will be – they've committed to doing that in Q1 of next year, of 2022.

MEMBER KAHGEE: Thank you. That's very helpful.

And finally, just a follow-up question

for CNSC to clarify with respect to the Indigenous engagement record and CNSC efforts in particular.

Looking at the submissions – thank you to Orano for providing kind of the history of the engagement. I thought that was very helpful. And you highlight how far this engagement has gone back with respect to the proposal.

My questions are specific to CNSC. In looking at the record, I had a couple questions and I just want to clarify some potential gaps there and what transpired there, if anything transpired there. In particular, I'm looking at the period between 2013 and 2016. I didn't see anything in Orano's submissions or CNSC's submissions about any direct engagement with CNSC with Indigenous groups within the region about the proposal. Could you clarify for me if there was any engagement that took place during that period?

MS. MURTHY: Adam Levine, can you please go ahead. Thank you.

MR. LEVINE: Thank you.

Adam Levine, for the record.

Yes, happy to clarify that for the record. So in that time period, yes, absolutely, there was ongoing engagement with all the interested Indigenous communities and organizations with regards to the McClean Lake operation and what's going on with the JEB TMF facility.

As Orano had indicated in their presentation as well as ours, this project and proposal has been considered for a number of years now, close to a decade, and has gone through a number of different iterations and processes.

So originally, it was part of a *Canadian Environmental Assessment Act* environmental assessment process. And when the *Canadian Environmental Assessment Act, 2012*, came into force, the EA for that was no longer required. So CNSC staff reached out to all the interested Indigenous communities to explain the coming into force of that new legislation and that this project would now be looked at still under the *Nuclear Safety and Control Act* and would continue under that.

And we've continued providing updates

with regards to that as well as the decision that was made for the previous expansion. And this was also discussed as part of the 2017 McClean Lake operating licence renewal. And so all the Indigenous communities involved were engaged, and we did a community tour with Orano and the Ya'Thi Néné Lands and Resource Office among others to explain to each community the operations at McClean Lake, including the JEB TMF facility and its current status.

And we continue to do annual outreach and updates as well over the last number of years. So engagement has continued over the years with regards to this facility and have amplified in the last year and a bit now that Orano's come back for a licence amendment to increase the height and expand the TMF facility.

So happy to provide more info if you want more details on that. Thank you.

MEMBER KAHGEE: That's helpful.

Just to clarify, then, so specific to the project itself, I'm hearing that there was kind of general engagement. But was there very specific

engagement about the project during those kind of information sessions or community sessions you referenced specific to the project

MR. LEVINE: Okay, thank you.

Adam Levine, for the record.

So yes, absolutely. So there was specific discussions with communities, like I said, during the community tours in 2017 with regards to the operating licence renewal. The JEB TMF facility expansion was discussed, and Orano representatives and ourselves were there to answer questions about it along with the operating licence as well. And so yes, there was ongoing dialogue with regards to this project.

And in more recent times more specifically the expansion to the current height, because that wasn't the project and wasn't the proposal during those years. So obviously, the conversations have changed recently since we received the licence amendment application. So but it has evolved over time with the proposals brought forward by Orano.

MEMBER KAHGEE: Yeah. Thank you.

That's very helpful.

Now, in that period, were there any specific concerns raised about the project or proposal by communities?

MR. LEVINE: Adam Levine, for the record.

The concerns that we heard – I was on those tours in 2017 and involved in a lot of the conversations back and forth around McClean Lake. And a lot of the concerns we heard were around cumulative effects, around decommissioning, how this would affect the decommissioning plans for the McClean Lake site as well as what the involvement of Indigenous communities would be in the eventual decommissioning, the detailed decommissioning plans when Orano got to that point, as well as potential failure scenarios if the embankments failed, and especially in light of the Mount Polley incidence a number of years ago, and also impacts on water quality and things like that.

So we were there to answer all those questions as well as Orano to describe the different

scenarios and what was being done to assess the stability of the proposal and mitigations put in place to avoid those issues.

But and those are the same kind of concerns that we've heard in the interventions that proceeded from English River First Nation and the Métis Nation Saskatchewan today.

MEMBER KAHGEE: And how do those concerns factor into your engagement efforts in the future and going forward on that?

MR. LEVINE: Yeah, Adam Levine, for the record.

So what we did for this particular licence amendment application with the Ya'Thi Néné Lands and Resource Office and their communities who — they did accept our invitation to have a specific engagement session with their board and community members and leaders on this application. We took all those concerns down and the key questions that we've heard over the years and more recently and made sure we had the proper experts there to answer questions. So we went through each of those questions, provided

information.

And we've also done a lot of oversight of what Orano has been doing in terms of their communications and engagement to ensure that they're also addressing those concerns in their engagement and communications.

So the feedback we received from Ya'Thi Néné Lands and Resource Office was that the engagement session was really helpful, it did answer a lot of their questions and concerns. And unfortunately they weren't able to participate in the hearing today, but it's a commitment that we're going to continue following up on, especially around the broader issues, around cumulative effects, monitoring caribou and some of those larger issues that we've heard over the years. And so those are ongoing dialogues with each nation and community.

MEMBER KAHGEE: And just finally, I think this was addressed in an earlier question this morning during – specific to the period when the application was filed to where we are now, there was reference to I think some notices and letters that

went out notifying Indigenous communities about the hearings. And I believe if I heard correctly that in September of 2020 there was a virtual meeting – am I correct on that? – that was offered or that took place.

MR. LEVINE: Adam Levine, for the record.

So I believe that is the – there was two different virtual activities. One was the one I just talked about, specific to Ya'Thi Néné Lands and Resource Office, which was done virtually with their members and leadership. And then there was also our annual engagement session with Indigenous leadership for northern Saskatchewan, which was held in September 2020 last year. And we're doing it again this week, October 8th. So there's those two different engagement sessions. One had a broader focus on the regulatory oversight report where the one with Ya'thi Néné was specific to McClean Lake.

MEMBER KAHGEE: Okay. And was there direct engagement with the three communities that were identified as priority during this period?

MR. LEVINE: Yes. Adam Levine, for the record.

So yeah, the key priority communities, which are represented by Ya'Thi Néné Lands and Resource Office, so they're the main consultative and coordinating body for the Athabasca Basin communities, including Fond Du Lac, Black Lake, and Hatchet Lake First Nations. And so we usually work through Ya'thi Néné, and they then coordinate with their leadership and their board to get feedback and input. So that was part of the engagement sessions we did and the plans that we had. And part of the funding that was awarded to them as well was to conduct those activities. So they did a lot of that work. Unfortunately, they weren't able to participate in the hearings, but a lot of that consultation and engagement work was done with regards to this hearing.

MEMBER KAHGEE: Thank you very much.
Thank you, Adam.

MR. LEVINE: Yeah, thank you.

MEMBER KAHGEE: Those are my questions, Madam Velshi. [Aboriginal language spoken

/ langue autochtone parlée]

THE PRESIDENT: Thank you, Mr. Kahgee.
Dr. McKinnon?

MEMBER McKINNON: Yeah, thank you.

I'd like to ask a question of Orano in connection with emergency preparedness. And in the CNSC CMD, there was a statement:

"Orano has an emergency preparedness program ready to deal with any unexpected severe accidents and can immediately mitigate and remediate any potential events that arise during operation."

So Orano, could you describe how potential emergency scenarios have been identified and prepared for, especially in the context of that wording, "unexpected severe accidents."

MR. LANIECE: Vincent Laniece, for the record.

Yeah. We've got an emergency response team at site at McClean Lake, trained --mostly we're

surface operations. So we've got the - we're not training to being able to respond to underground mining type of emergencies. I'm just referring to the recent event that was on the newspaper with the --

MEMBER McKINNON: Sudbury.

MR. LANIECE: - Totten mine, Sudbury, when I'm so glad that everybody kind of came up to surface in health and - or in good health and safe. So.

Our emergency response team at site is very familiar with intervening with scenarios like fires, like confined space, full arrest or people falling from height, vehicle collision. We had - it's not that we had many vehicle collision, but we're in the north, so we are usually helping our neighbours as well. And our emergency response team had to respond to a couple kind of truck issues on the road outside of our surface lease. And they did that very graciously, very carefully, and everybody was very kind of recognizing the support that we provided.

So the emergency response team is getting trained on a very regular basis. They are

getting trained – I believe they are getting trained every shift right now, and they've got a number of different training that they are going through, which is either desktop training or in-class training or mock scenarios. With our regulations, we've got to conduct a mock scenario each and every year that we're reporting to in our annual report.

And in addition to that, our emergency response team is participating to the Saskatchewan Mining Association mine rescue. And they've been participating to it since many, many years and they are doing well. They're doing great. And they've been winning a number of awards. And I've been – as I was the general manager a couple years ago at McClean Lake and I was really proud of their achievement, and I was feeling absolutely safe when I was up at the mine site, so.

MEMBER McKINNON: Thank you. But in terms of very like significant or rare events, and you know, we have discussed the potential breach incidents that has been described in the reports, how is your preparation for that? And obviously, probably you

can't have resources for every scenario on site for some very, very rare incident. But you probably have, you know, discussed those issues. And so in what way - how do you prepare for that internally in terms of how you would respond?

MR. LANIECE: Vincent Laniece, for the record.

Yeah, that's a very good question. At this point in time, we just built the first layer of the embankment this year, so for right now there was no real kind of possibilities to conduct mock scenarios around the TMF perimeter.

But right now that the embankment is getting built, we have started in making sure that our work instruction for emergency preparedness is in place. So we've been engaging our emergency response team in putting that document together. And then as part of the regulatory compliance as well as the ICMM requirements, I'm sure that we will conduct some emergency type of mock scenario very soon on the embankment and the tailings and potentially breach of the embankment into the environment. So it's for the

years to come, but we are getting pretty ready for that.

MEMBER McKINNON: Okay. Thank you very much.

THE PRESIDENT: Okay. Mr. Kahgee, did you have any additional questions?

MEMBER KAHGEE: No additional questions at this time, Madam Velshi.

THE PRESIDENT: Thank you.

Dr. McKinnon? Anything else from you?

MEMBER McKINNON: No further questions.

THE PRESIDENT: Excellent. Thank you.

Maybe I'll take this opportunity to ask our experts from other government departments who are with us if they have any concerns or any feedback they would want to share with the Commission as we deliberate on this renewal application.

And maybe I'll start with the Saskatchewan Ministry of Labour Relations and Workplace Safety, if you're still online. Anything you would like to share with us?

MR. KASKIW: Len Kaskiw, chief mines inspector, for the record.

Actually not. I don't have anything to share. Orano's doing a very good job on the safety front.

THE PRESIDENT: Thank you very much for that reassurance.

Mr. Moulding, anything else you'd like to share with us?

MR. MOULDING: Just for the record, Tim Moulding, Saskatchewan Ministry of Environment.

I don't have anything in addition to what's already been discussed and concur that Orano was operating within our approvals, conditions, and we expect that they will continue to do so.

THE PRESIDENT: Very good. And from the Ministry of Government Relations, Mr. Boyes?

MR. BOYES: Thank you, Madam Chair.

For the record, Scott Boyes, with Northern Engagement.

We have no concerns with the application. Orano continues to I think take a very

mature approach to engagement, which is our particular concern. And it was heartening to see some of the presentations from northerners today as well.

THE PRESIDENT: Very good. Thank you. Thanks for your participation.

And Dr. Irvine, anything else you'd like to add?

DR. IRVINE: Thank you very much. James Irvine, for the record.

No, I feel quite comfortable with the presentation from Orano and CNSC staff.

Just for information, we did do a review based on Métis Nation Saskatchewan's submission as it relates to selenium and fish, and we feel very comfortable with the CNSC's response to that and what's been happening at the mine site. So we have no concerns about that as well, so. Thanks very much.

THE PRESIDENT: Thank you.

So before concluding the hearing, I'll turn the floor to Orano Canada Inc. for any final remarks that you may wish to make. So Mr. Corman, over to you, please.

Final remarks by Orano Canada Inc.

MR. LANIECE: Thanks, Madam Chair.

Vincent Laniece, for the record.

So yeah, thanks to everybody for your time, for your efforts and support that has led us where we are today. We were discussing that with the team here, and especially [indiscernible] We've been working on this project since at least 12 years, maybe 13, maybe 14. I'm getting older right now, so maybe I got to stop there. And I believe that we've got a very good project. It's a very good compromise securing our business for the future and making sure that we've got a very limited footprint of what we all know, being our legacy for the tailings and the environment. So thanks again. And I'm completing here.

THE PRESIDENT: Thank you very much, Mr. Laniece, and thank you to your team at Orano. Thank you to the CNSC staff and all the intervenors for your submissions, your presentations, and sharing

your perspectives with the Commission today and for your participation.

CMD 21-H6.2

Written submission from Unifor Local 48-s

CMD 21-H6.4

Written submission from Denison Mines Corp.

With that, Marc, let me turn it over to you for the closing remarks on this hearing.

Closing remarks

MR. LEBLANC: Merci, Madame Velshi.

And also let me also thank the people who made this hearing happen, so our technical specialists, the secretariat staff, our legal services crew, the transcription service, our interpreters, and the webcasting team. So a lot of people also have to work in different environments throughout the official hearing so I thought I forgot to thank them last time,

so I wanted to make it up today. So thank you for this.

So this brings to a close the public hearing on Orano Canada Inc.'s application. With respect to this matter, the Commission will confer with regards to the information under its consideration and then determine if further information is needed or if the Commission is ready to proceed with a decision. We will advise accordingly.

Merci beaucoup. Au revoir.

--- Whereupon the hearing adjourned

at 4:23 p.m. /

L'audience est ajournée à 16 h 23