## **James Bay Lithium Mine Project**

## **Public Consultation**

Presented by Denis Couture Head of Canadian Operations

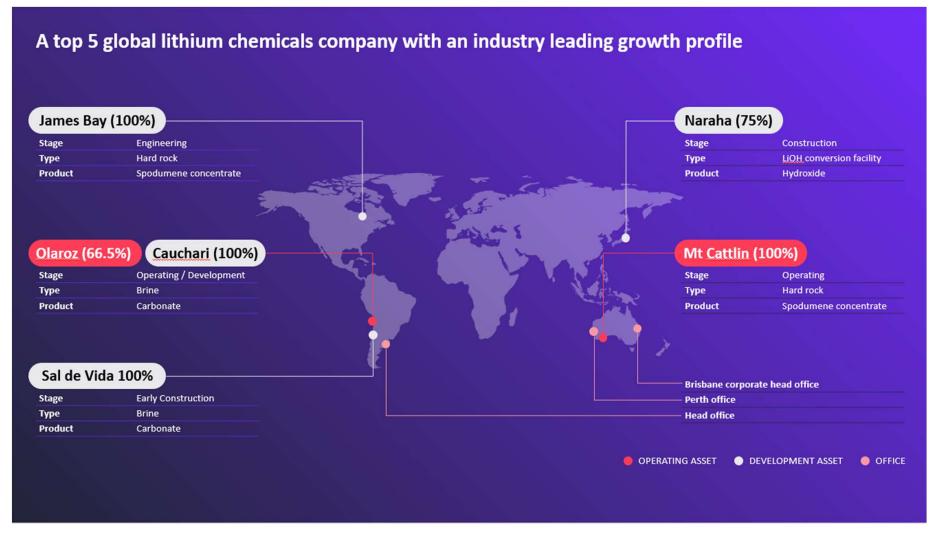
January 24, 2023





## A major global lithium chemicals company with an industry leading growth profile





## **Our Commitments**

We take a collaborative, cooperative and consultative approach to all of our projects and we maintain and value a frank and open dialogue with the Cree Nation and the communities of Eeyou Istchee / Bay James, from which we all benefit.



**Allkem** 

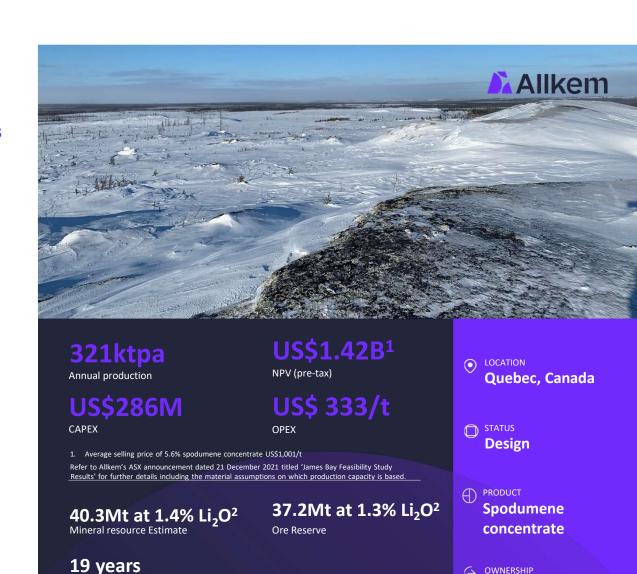
At the heart of each of our operations and decisions are the following commitments:

- Collaboration and respect for the Cree Nation and the community partners.
- Keep working with the communities and taking into account as much feedback as possible.
- Complying with all legislative, regulatory and community requirements.
- Minimizing the project footprint and protecting the land, water, air and wildlife.
- Using the highest quality, the safest products and the best systems.
- Ensuring the safety of the community and our team.
- Regularly monitoring the environment and reporting our findings to the local communities and government.

## **James Bay Project and History**

James Bay Project permitting more than 5 years of engineering, permitting, site investigation, etc.

- ESIA process was triggered in October 2017.
- Guidelines was received from COMEX in February 2018.
- ESIA report was submitted in **October 2018.**
- April 2021: completion of additional geotechnical site investigation.
- July 2021: Filing of the Revised ESIA, integrating updated design and comments received.
  - Reduction of 30-40% of footprint, transport distance, concrete and steel used, etc.
- December 2021: Completion of Feasibility Study.
- 5 rounds of questions and clarifications since October 2018 for a total of 377 questions and/or clarifications.
- November 2022: End of clarification process and call for final public consultations.



2. Refer to Appendix for Resource & Reserves Table and 'James Bay Feasibility Study Results' released on

Project Life

OWNERSHIP

100%

#### **Consultations**

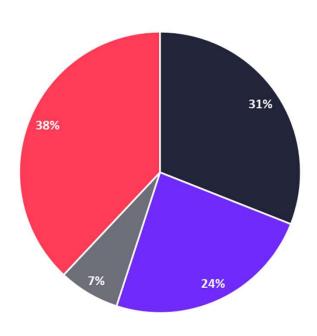


Key for getting inputs for the project for the past 5 years

#### **Consultations since 2017**

- More than 250 stakeholders consulted on all aspects of the project.
- More than 120 meetings.
- Different ways to inform, consult, collaborate:
  - Public meetings
  - Online meetings.
  - Phone calls.
  - One on one meetings.
  - Interviews.
  - Workshops.
  - Website.
  - Social media.

## Total of consultation activities by type of stakeholders since 2017



Government: MELCCFP and COMEX, Impact Assessment Agency of Canada (IAAC), Department of Fisheries and Ocean (DFO), Cree Nation Government, Eeyou Istchee James Bay Regional Government, Cree School Board and Cree Human Resources Department, SDBJ, Apatisiiwin Skills Development (ASD).

Regional Administration: Centre de formation professionnelle de la Baie-James / Commission Scolaire de la Baie-James, CCSSSBJ, Cree Women of Eeyou Istchee Association (CWEIA), Table Jamésienne de Concertation Minière, CTA

Municipal Administration: ASD, Cree First Nation of Eastmain, Cree First Nation of Waswanipi, Cree First Nation of Waskaganish, WEDC, Matagami, Local CTA

Community Members & Tallyman: Community of Eastmain, Waskaganish, Waswanipi, Tallyman and his family, elders, women, different associations.

## **James Bay - Geology and Mineralization**

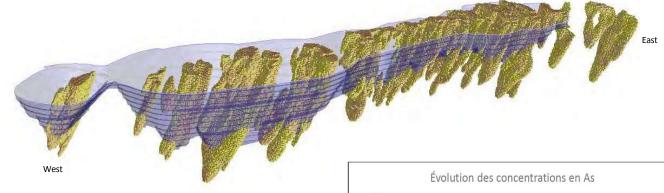


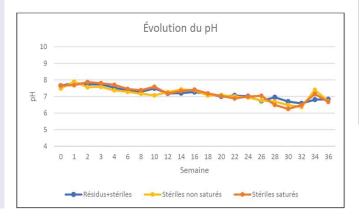
High-grade deposit with favorable characteristics to support a low-cost operation

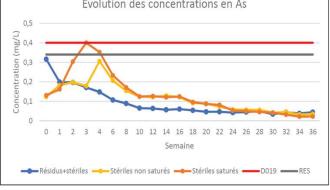
#### **Ore body / Mineralization**

- Outcropping, high-grade spodumene pegmatite deposit, supporting a low strip ratio open cut operation.
- Low strip ratio (3.5 average):
  - Significantly less waste rock has to be removed to access the ore.
- No sulfur in the ore body:
  - No acid is generated when the rock comes into contact with the air.
- Minimal metals leaching:
  - Arsenic is naturally observed in muskeg/swamp and sediment, surface and ground water samplings indicate natural occurrence.

#### 3D model of pit design







## **James Bay - Processing**

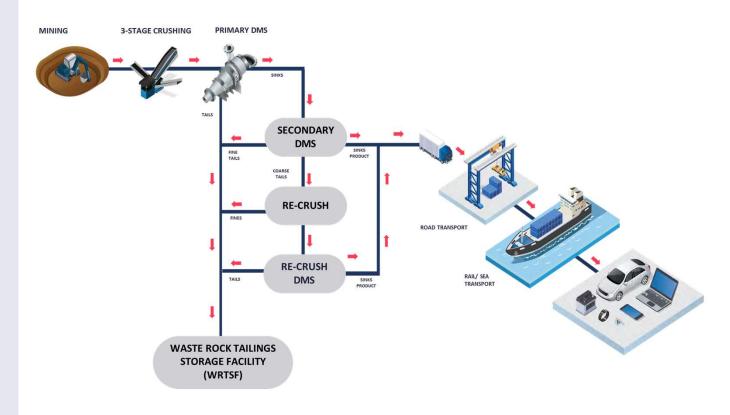


Process design and flowsheet similar to the ones successfully employed at Mt Cattlin

#### **Process Flowsheet**

- 2mtpa process plant designed to produce spodumene concentrate grading 6.0% Li<sub>2</sub>O.
- Conventional 3-stage crushing followed by dense medium separation (DMS).
- No grinding and/or flotation. Only DMS is required due to coarse crystal size.
- Physical separation only:
  - · No chemical reagent.
- Process plant reject will be transported by truck and combined with waste rock on stockpiles on site:
  - · No dam/dike.

#### **Process flowsheet schematic**



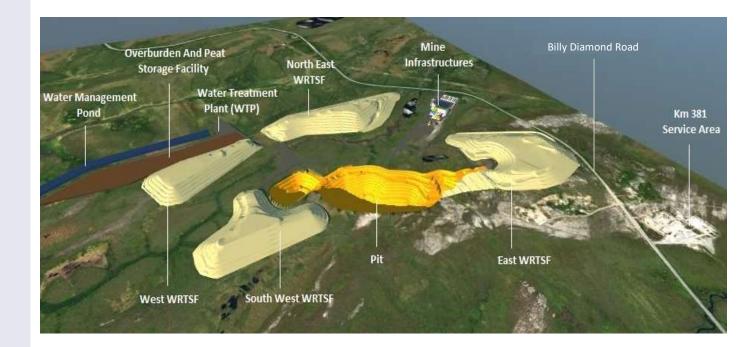
## James Bay – Site Infrastructure

**Overall Footprint** 

## Allkem

#### Site infrastructure

- Maximized in-pit filling, i.e., to put waste rock back into the pit once mining is completed, for minimal impact.
- Liner to be installed under every mine roads to protect the environment.
- All the contact water will be collected and treated before being discharged:
  - Discharge limits are regulated (Directive 019).



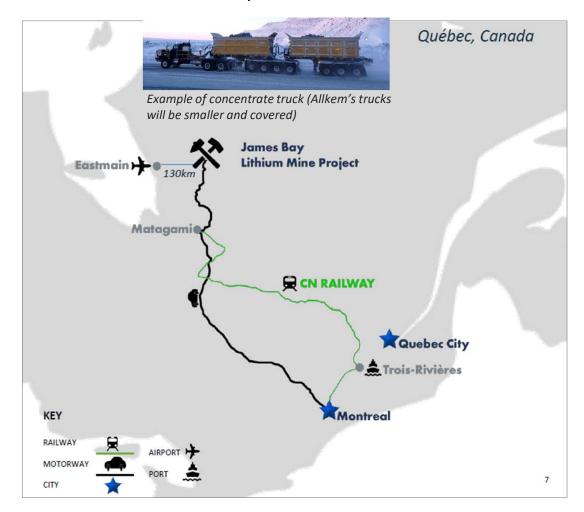
## James Bay – Disturbances during Goose and Moose Hunting Periods



Noise from Project activities will be limited to the mine site and on the Billy-Diamond Road

# Measures taken during hunting seasons (2 weeks for moose hunting and 3 weeks for goose hunting):

- Adjust break timing with Tallyman family and Cree Nation of Eastmain.
- Reduce waste rock handling on site.
- Reduce the number of blast per week during the goose hunting season (1 blast per 5 days instead of 3).
- Blasting between 1 p.m. and 3 p.m. during the goose hunting season.
- Blasting during the week, when the weather is not good for goose hunting (if technically feasible).
- Reduce the number of concentrate trucks on the Billy-Diamond Highway from 12 to 8 trucks per day.
- Transportation on the Billy-Diamond
   Highway between 9 a.m. and 7:10 p.m.

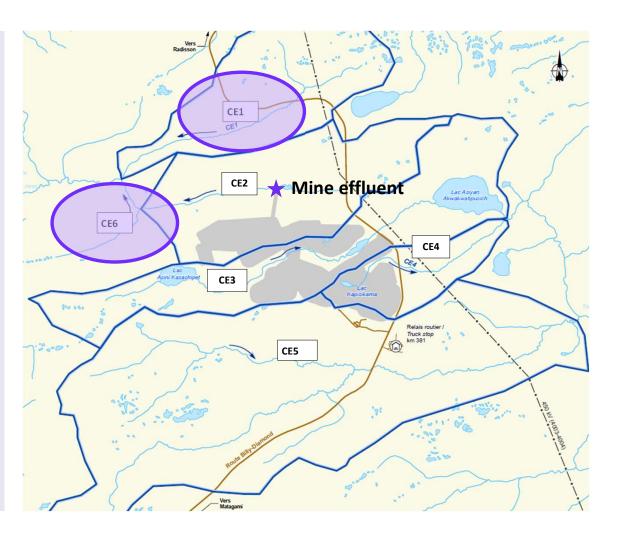


## Watercourses in the Project area



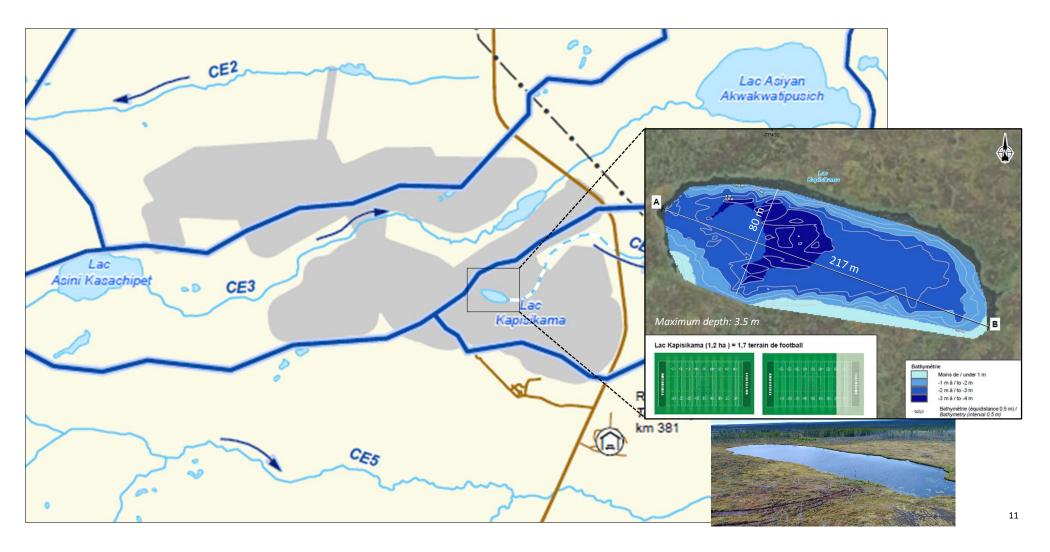
#### Water

- CE1 and CE6 will not be affected by Project activities.
- Waste rock will not be piled in the area of the CE5 after consultation with the community. No impact is anticipated on the water quality of the CE5.
- The mine effluent will be discharged after treatment in the CE2 and water quality will be monitored.
- Lake Kapisikama and the upper portion (already intermittent and stagnant) of CE4 will dry up during the 4th year of operations.
- The word 'lake' is used as this is the official designation. The body of water is in fact a small shallow pond.



## Kapisikama Lake





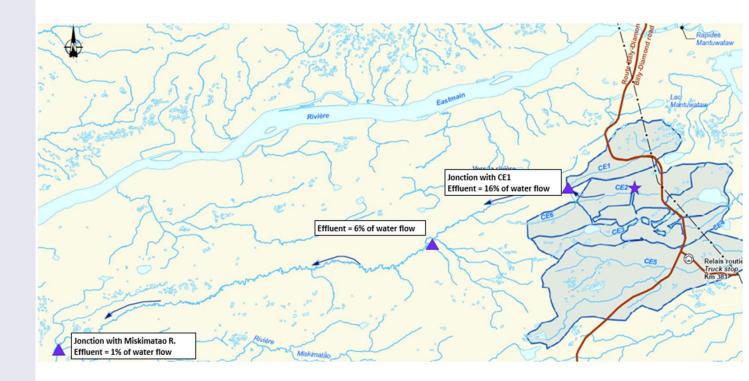
#### Watershed



Water Management

#### Water

- CE1 and CE6 will not be affected by Project activities.
- The mine effluent represents a small portion water shed (less than 1% at the junction of the Miskimatao river).
  - No connection to the Eastmain river at proximity of the site.



## **Wetland Compensation Plan and Fish Compensation Plan**



Compensation for the impact of the project on wetlands

#### **Projects identification**

- Allkem worked with members of the First Nation of Eastmain and the Tallyman and his family to identify wetland compensation projects aligned with the interests of the community.
- Selected projects are:
  - Groundwater knowledge acquisition.
  - Goose habitat enhancement projects.
  - Moose habitat enhancement.
- Wetland compensation plan ready to be submitted for approval.
- Fish compensation plan currently being developed.



## **Impact Benefit Agreement**



### **Negociation Status**

Ongoing discussion with CNE, CNG, GCC is to agree on measures to alleviate the impacts of the project and create business and employment opportunities for the Crees of Eeyou Istchee, especially Crees of Eastmain. The draft of IBA will be presented to the community members of Eastmain.

#### Main measures discussed

- Training, employment & working conditions
  - Employment officer dedicated in Eastmain
  - Programs development with Cree institution (educational, vocational and technical and preemployment program
- Business opportunities
- Social, cultural & environmental matters
- Financial matters

Economic benefit will be shared among all local community, not only few individuals.

GLCI will support development of new enterprises in the community to potentially serve multiple clients.



#### **Construction Phase (Proposal)**

- Proposal: A Cree workforce package will be created which will be managed by the WEDC.
  - All qualified Cree workers (with first priority for Eastmain workers) interested in working on the construction phase of the James Bay Project will be hired through the WEDC to work on the project.
  - Construction contracts awarded to non-Cree suppliers will include training and shadowing opportunities for Cree workers to develop new skills on the job.
- Proposal: A number of construction contracts will be awarded directly to community-based Cree Enterprises through a competitive tender amongst Cree Enterprises interested (Tree clearing, snow removal, etc.).

Allkem's goal: Maximize Cree Workers during Construction and Operation



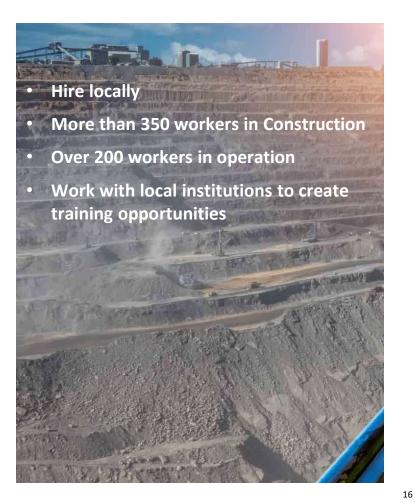
#### **Operation Phase (Proposal)**

- Agreement-in-principle between Allkem and the Cree Nation of Eastmain, through the WEDC for the community, to manage the operations and maintenance of the Permanent Camp.
  - Employment opportunities for Cree workers in the housekeeping, catering, maintenance fields.
- Agreement-in-principle between the Cree Nation of Eastmain, through the WEDC, to provide support services to the Mining Operations which will create administrative for Cree employees based out of Eastmain.
- Allkem, in coordination with the WEDC, is planning to post job position with working conditions adapted to Cree workers (rotation cycles, traditional leave, etc.) - positions like heavy equipment operators, mechanics, warehouse clerks, security agents, etc.
- Allkem will also be going out for bid for operation packages like concentrate transport, snow removal, etc. for which Cree Enterprises will have an advantage in the bid evaluation.
  - Allkem will align with the new definition of a (community based) Cree Enterprise as defined by the CNG.





Mine	Truck drivers · Heavy equipment operators  Drillers · Blasters · General Labor
Concentrator	Crushers · Other equipment operators Control room · General Labor
Workshops	General construction · Mechanic · Electric Welding · General Labor
Warehouses	Stock keeper · General Labor
Security – HSE	Security agent · Dispatch · HS Officers Environment tech · General Labor
HR + Admin	Bus drivers · Accounting · Community liaison officer HR officers · General Labor
Camp	Kitchen · Laundry · Housekeeping · Nurse General Labor · Dish washer



## **Questions / Concern mechanism**



#### Different ways to reach us:



#### Now:

By phone Community Liaison **officer Raymond Shanoush** 873 476 0145



#### **During construction:**

Office Community liaison officer



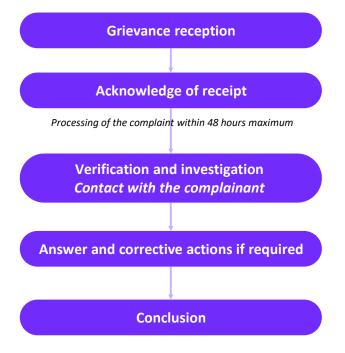
During Construction: Internet via the Allkem website jamesbayinfo@allkem.co

#### **Purpose**

A grievance & concern mechanism procedure addresses issues proactively as they arise, before they erode the local community's trust during construction and operation.

It is a way to address your concerns.

Now, we maintain a register of concerns and questions coming from the community, and actions done, with the CLO.



# Migwetch Thank you



