

A close-up photograph of a bumblebee on a pink clover flower. A large, semi-transparent water drop graphic is overlaid on the image, centered on the left side. The background is a soft-focus field of green plants and yellow stalks.

# Transformation

2019 Annual Sustainability Review



orano

# 2019 Key Figures

Total exploration diamond drilling by Orano and its partners

## 67,083m

(50,393m Orano operated and 16,690m partners operated)

### Safety Incident Pyramid



\*HiPo: High Potential Incidents

Donations **\$598,000**

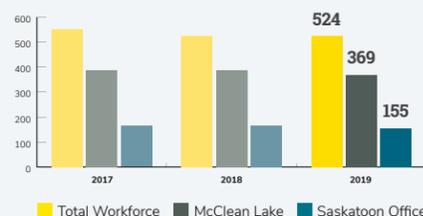
Scholarships **\$39,000**

For northern SK students



On November 13, 2019, the members of Unifor Local 48-S at the McClean Lake Operation ratified the new collective bargaining agreement for a 3-year term.

### Workforce



Revenue in 2019 in \$CAD

## \$313.2M

Total salaries and benefits paid to employees

## \$66,871,248

Annual Expenditures

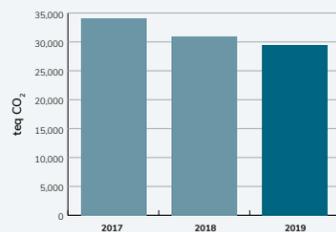
## \$128M

\$80M from SK businesses

\$51M from northern SK businesses

\$43M from SK Indigenous owned businesses

### Greenhouse Gas Emissions at McClean Lake



Uranium Concentrate Production

## 6.7M lbs.

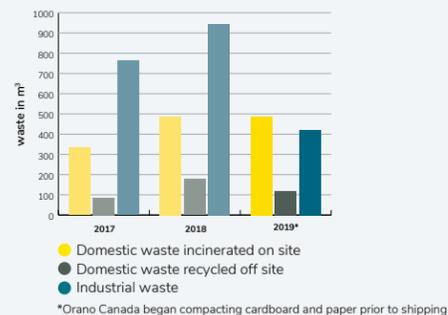
\*Orano Share (Total McClean Lake Production: 18M lbs.)



## \$25.64USD

USD Average Uranium Spot Price (\*the average spot price was \$55.98 in 2011 and dropped to a low of \$21.15 in 2017 – Source: UX Consulting)

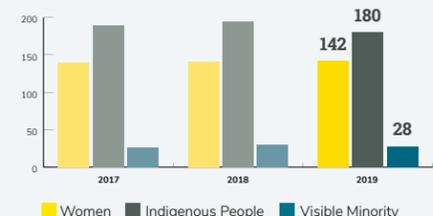
### Waste Generated at McClean Lake



\*Orano Canada began compacting cardboard and paper prior to shipping

Investment in training and apprenticeships in 2019 for residents of northern SK **\$38,402**

### Diversity



\*These designated groups are as defined by the Canadian Employment Equity Act and pursuant to employees' self-declaration upon hiring.



Message from **Jim Corman**  
President & CEO

**Stop. Think. Act.** It's a simple philosophy and part of the safety system adopted by Orano Canada in 2019 to promote hazard awareness and risk assessment in the workplace. You can read more about our safety measures and performance in the safety section of this report, and to be clear, safety is always our first priority. While I am proud of our safety performance to date there are always improvements that can be made, and it requires constant vigilance.

In many ways, 2019 was a year of transformation for Orano Canada. Building on the legacy of past leaders, we evolved and changed. While my role as President and CEO was announced in September 2019, I have a 27 year history with Orano most recently spending three years at Orano Mining's head office in France, and before that working many years at our McClean Lake site and in Saskatoon as our Vice President of Operations and Projects.

Orano Canada is a great company and I was so proud and pleased to return home to Saskatchewan last year to continue to build on the great foundation laid by our previous President & CEO, Vincent Martin.

Since our last Sustainability Review, there have been a number of other executive changes, reflecting the career progression of our leaders and the changes in our company. Our executive team works to drive improved safe performance, while carefully managing costs to ensure our operations remain competitive in a continuing difficult uranium market.

As a result of these market challenges we made the difficult decision with our joint venture partner Cameco to indefinitely suspend the Key Lake and McArthur River operations in 2018, while continuing to run the Cigar Lake mine and McClean Lake mill. 2018 and 2019 were both strong production years for the McClean Lake mill, with the operation meeting its target of 18 million pounds annually, positioning it as the highest grade operating plant in the world. Our work to advance operational excellence and outstanding safety performance continued throughout the teams at the mill, in exploration and in our Saskatoon office.

While this report deals with the 2018 and 2019 performance of Orano Canada, I would be remiss if I did not mention the impact that the COVID-19 pandemic had on our operations in early 2020. I am immensely proud of our team and the actions taken to ensure that our workplaces remained healthy and safe, and that our employees and contractors felt confident coming to work each day. We made many changes to address the threat of the pandemic, including the temporary suspension of production at the mill and the preparation for its safe re-start. I thank all of our people for how they have responded to this challenge.

**Jim Corman, President & CEO**

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## About our Company

**A** subsidiary of the multinational Orano group's Mining Business Unit, named Orano Mining, Orano Canada, headquartered in Saskatoon, Saskatchewan, has been exploring for uranium, mining and producing uranium concentrate in Canada for more than 55 years. Our company operates the McClean Lake uranium mill and is a major partner in the Cigar Lake, McArthur River and Key Lake operations in northern Saskatchewan. Orano Canada is focused on providing a reliable and responsible supply of natural uranium to nuclear electricity producers around the world to generate low-carbon electricity. We are committed to being a responsible uranium miner in terms of health, occupational safety, community involvement and dialogue, environmental protection and business ethics.

## Our Leadership: Committed to Our Transformation



**JIM CORMAN**  
PRESIDENT & CEO

"Our executive team works to drive improved safe performance, while carefully managing costs to ensure our operations remain competitive in a continuing difficult uranium market."



**TAMMY VAN LAMBALGEN**  
VICE PRESIDENT, CHIEF CORPORATE OFFICER

"One of Orano's core values is continuous improvement and this has never been more apparent than in the last two years. I am proud to be a part of the teams that have led or contributed to the many transformations that will equip the company for long-term success."



**DALE HUFFMAN**  
VICE PRESIDENT, OPERATIONS  
MCCLEAN LAKE

"Continual improvement requires continual transformation. Our operations are in a continual state of transformation as we meet each challenge, pursue excellence, and keep our people and the environment healthy and safe."



**JOHN ROBBINS**  
VICE PRESIDENT, EXPLORATION

"Our exploration team continues to strive with ongoing reviews of technology and methodology that evolves in our space."



**VINCENT LANIECE**  
VICE PRESIDENT, SAFETY, ENVIRONMENT  
AND ENGINEERING

"I am fully committed to the continued growth of Orano's core values and in particular our health and safety principles. Having the privilege of leading the Safety, Environment, Regulatory and Engineering groups, I am proud of their ideas, drive, and dedication, working in full cooperation with our operations every day in the pursuit of our sustainable development."



**PIERRE HARDOUIN**  
VICE PRESIDENT, FINANCE & CHIEF FINANCIAL  
OFFICER

"The Finance & Accounting team is constantly adapting to an ever-changing environment, while striving to the highest standards and gaining efficiencies by using modern technology to our advantage."

\* All the members of Orano Canada's senior management team are Canadians residing in Saskatoon, Saskatchewan's local community, although two of them also carry French nationality.



# Demonstrating Accountability

## Our Ambition

- To discover, develop and operate profitable uranium deposits to ensure our customers' security of supply.
- Be a responsible player in terms of health, occupational safety, community involvement, environmental protection and business ethics.

## Our Values

### Customer satisfaction

- being attentive, responsive, pragmatic and proactive as well as planning ahead

### Continuous improvement

- responsibility, right to make mistakes, taking initiative, being creative and open-minded, striving for results, taking on challenges

### Respect and people development

- being attentive and kind, setting high standards, accepting differences, supporting personal and professional development

### Cohesion and team spirit

- cooperation, transparency, problem solving, teamwork

### Exemplarity, integrity and responsibility

- managerial courage, presence in the field, compliance with standards, priority for personal and occupational safety compliance with the law and company rules, and recognition of employee rights

## Our Policies

### Management System

Orano Canada Inc. is committed to being the best in class uranium producer by achieving objectives that continually improve the performance and effectiveness of its Integrated Management System (IMS) related to health and safety, environment, security, economics, and quality. Through procedural discipline and adherence to internationally recognized standards, Orano has established an IMS that applies to the entire organization and its employees.

### Health and Safety

Orano Canada Inc. is committed to providing a healthy and safe work environment for all of its employees and contractors, and to ensuring that all work is performed in a safe and responsible manner that meets regulatory and company standards.

### Environmental

Orano Canada Inc. recognizes that continued economic and social development depend on a healthy environment and incorporates environmental protection considerations into all company activities to ensure sustainable development. Orano is committed to continually improve approaches and technology to minimize the effects of its activities on the environment.

### Corporate Social Responsibility

Orano Canada Inc. recognizes a responsibility to the Indigenous communities and stakeholders in areas in which we have activities and is committed to their meaningful involvement in those activities.

## Our Accountability

A private corporation registered in Canada, Orano Canada has a board of directors composed of members of its leadership team. Our corporate governance complies with Canadian and Saskatchewan laws, including corporate, labour, environmental, and health and safety regulations. In compliance with the United Nations Convention against Corruption adopted in New York on October 31, 2003, anti-corruption and bribery laws in Canada, and as a subsidiary of a French group, France's SAPIN II Law No. 2016-1691 on corruption prevention and detection aiming to prevent and detect acts of corruption or influence peddling dated December 9, 2016, our company has established a third-party compliance review for the prevention of corruption, and whistleblower and complaints systems. We also have a code of ethics, which each employee must respect, review and sign-off at least annually.

We have established internal committees in compliance with regulations and to focus on specific projects or programs as required. In addition, we actively participate in several regulatory, industry and community organizations and forums to inform our stakeholders of our activities, projects, and significant changes and provide timely reporting. The following are some of the committees and groups we have formed or in which we take part:

### Internally

- Occupational Health and Safety Committees at the McClean Lake operation, in the Saskatoon main office and within the exploration team.
- Mental Health Management Committee
- Benefits Committee
- And, many operational cross-functional teams such as the Tailings Management Expansion committee, the Cluff Lake Decommissioning Committee, and many more

### Regulatory

- Regular international, federal and provincial reporting as required, such as through our operations' annual reports and annual Extractive Industries Transparency Initiative (EITI) reporting. We participate in regulatory hearings and meetings with representatives of federal and provincial bodies such as the Canadian Nuclear Safety Commission, Natural Resources Canada, the Saskatchewan Ministry of Environment, Saskatchewan Labour and others. Regulators also inspect our sites at their discretion.
- We maintain our ISO 14001 and OHSAS 18001 standards certification.

### Industry

- We are members and contributors of the Saskatchewan Mining Association (SMA), advocating for our industry and collaborating to share best practices.
- Tammy Van Lambalgen, Orano's Vice President, Chief Corporate Officer, is the Chair of the SMA board of directors since 2019.
- We are members of, contribute to and are occasionally audited by industry organizations such as the International Atomic Energy Agency (IAEA), International Council on Mining and Metals (ICMM), Canadian Institute of Mining (CIM), Canadian Radiation Protection Association, Canadian Standards Association, Chartered Professionals in Human Resources Saskatchewan, Supply Chain Canada – Saskatchewan Institute, Saskatchewan Safety Council and Saskatchewan Environmental Industry And Managers Association to name a few.

### Community

- We helped establish and have continued to be active participants in the Northern Saskatchewan Environment Quality Committees (NSEQC), the Northern Career Quest (NCQ), and the Community Vitality Monitoring Partnership (CVMP).
- Orano is also represented in committees related to its collaboration agreements such as the seven Athabasca Basin Communities' Ya'thi Néné Collaboration Agreement's Joint Implementation Committee (JIC). The Athabasca Joint Engagement and Environmental Sub-committee's (AJES) focuses on the community engagement and environmental stewardship pillars and the Business Advisory Committee (BAC) ensures that the business development pillar is enacted. And we continue to contribute to the funding of the 20-year-old Community-Based Environmental Monitoring Program now administered by the Ya'thi Néné Land and Resource Office with help from CanNorth, an independent third-party provider.





**Katie Morin**  
Mill Operator

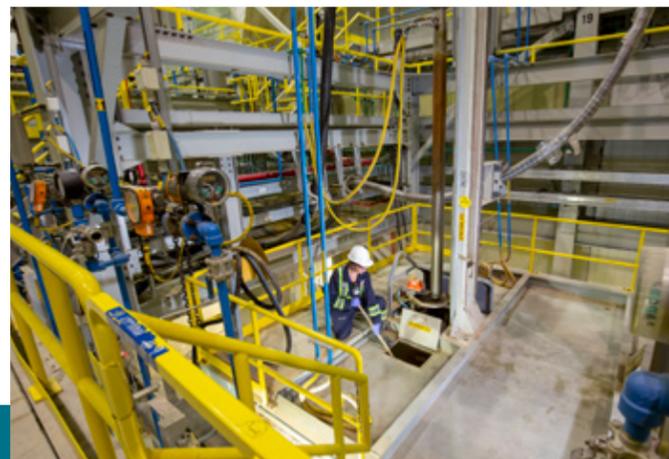
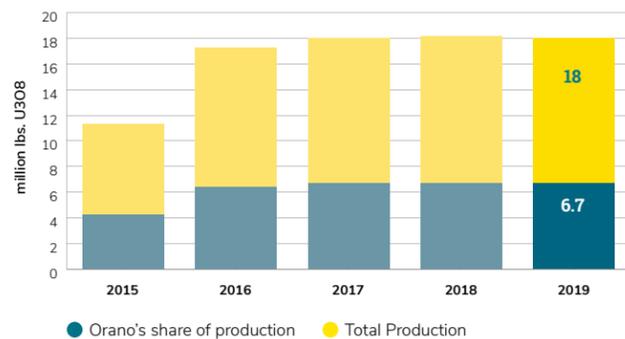
“ The mill is always changing and improving, both production and safety wise. While we keep changing and growing, we also keep finding new and more efficient ways to improve our routine and non-routine procedures, and most importantly our safety. After two years as a Mill Operator, I became the Lead Hand for my crew. The training I took and the experience I gained to become the leader I am today helped me understand how important it is for all of us to take the extra steps in our day to day work to do it safely. With the implementation of the Stop, Think, Act philosophy, and our efforts to be more communicative with other departments, we continue to improve and transform our operations to grow our collective success.”

# Transforming our Operations and Projects

2019 marked 55 years since the very beginning of our Saskatchewan operations, when a small exploration crew ventured out in northwestern Saskatchewan and later discovered what would be our first Canadian mine, the Cluff Lake project and later, the Cigar Lake and McClean Lake orebodies among many others. Starting with our first pound of uranium concentrate produced at Cluff Lake, Orano Canada continues to contribute to the production of low-carbon, reliable and competitive nuclear energy from right here in Saskatchewan.

Today, our reasons for producing uranium haven't changed, our society's need for energy continues to increase. And, our collective drive to produce and use energy in a more environmentally friendly way, is another reason why we continuously transform to safely produce uranium to fuel nuclear power plants around the world. The amount of uranium produced annually by our operations here in Saskatchewan and at our Orano group sister companies in Kazakhstan and Niger is enough to supply all the electricity needs of a country such as Spain. The production of the same amount of electricity from coal would result in the release of 300 million additional tonnes of greenhouse gas emissions.

## McClean Lake: Uranium Concentrate Production



## JEB Tailings Management Facility: Expansion Project

Orano has over 20 years of milling and tailings disposal experience at McClean Lake. It is expected that the tailings management facility (TMF) will reach its capacity as early as 2027, so we are proposing to expand the TMF to allow us to keep mining and milling operations going beyond that time.

Currently, tailings are allowed to consolidate to the top of the pit on the lowest side. To optimize the TMF's footprint, Orano is proposing to build an embankment around the pit crest so that tailings can consolidate to a height even with the high side of the existing ground. The material used to construct the embankment will come from the existing clean waste rock pile. Responsibly, this expansion will take place in stages as the space is needed to continue to produce.

Expansion of the current JEB TMF is the preferred option of several considered as it allows us to use an existing disturbed area, which means the footprint of the site does not increase; it uses existing infrastructure and does not disturb any new areas. The project description is currently undergoing a technical review by the Canadian Nuclear Safety Commission.

Read more about the TMF expansion in our latest TMF fact sheet on our website.

## 55 kt: Transforming Our Process to Maintain Production in the Future

The 55 kt project focused Orano teams on preparing for the future needs of the McClean Lake mill. The objective is to ensure the mill can effectively process more ore to maintain packaged production of 18 million lbs of uranium concentrate per year. As expected, the grade of ore coming from the Cigar Lake mine is starting to decrease over time and as such to maintain 18 million pounds of production, more ore must be processed - approximately 55,000 tonnes per year. The project identifies and addresses the bottlenecks that would affect our ability to process up to 55 kt of ore per year. A number of circuits will be modified to increase the overall capacity and availability of the system.

Learn more about our process to produce uranium. Watch the McClean Lake Mill Animation on our YouTube channel at [youtu.be/cjb8UJaezSY](https://youtu.be/cjb8UJaezSY)

## Cluff Lake: Writing a New Page of Uranium Mining History

Orano Canada's Cluff Lake uranium mine opened in 1980 and at its peak employed more than 300 people. Facilities included four open pit mines, two underground mines, a mill complex and waste management facilities.

In 2002, the mine was closed after producing over 62 million pounds of uranium to fuel generation of low-carbon electricity around the world. Planning for the closure and decommissioning of the mine was considered as part of Cluff Lake's initial design and operation. Demolition was conducted between 2004 and 2006 and following remediation and decommissioning, public access to the site was restored in 2013. Ongoing environmental monitoring shows that the stringent decommissioning objectives set in advance have been achieved.

Orano Canada aims to return the land to the Government of Saskatchewan under the Institutional Control (IC) Program. Orano will provide funds for long-term monitoring and maintenance of the site and an assurance fund to cover costs related to unexpected events. With the Cluff Lake site fully decommissioned, stable, and safe, Orano has commenced the process to transfer the site into institutional control. It is expected that Cluff Lake will be the first modern uranium mine to enter the IC program.

Interested in knowing or seeing more about Cluff Lake? Watch the Cluff Lake: Then and Now video on our YouTube channel at [youtu.be/P00cJPM4YFU](https://youtu.be/P00cJPM4YFU)



# Cultivating our Partnerships

“ My own involvement with Orano Canada goes back over 40 years now as I started with Mokta (an Orano predecessor) as a Geophysics summer student. I’ve seen firsthand how the commitment to hiring local people and local businesses and contractors can have a beneficial impact on northern Saskatchewan. At PACL we strive to build capacity through engaging local people and we have a strong track record of success when working with companies like Orano. ”



**John Scarfe**  
CEO - Points Athabasca Contracting Ltd.

## Our Saskatchewan, Northern and Indigenous Business Preference

Whether we are purchasing supplies and services or planning the next phase of mining, we approach our relationships with those who contribute to our success as true long-term partnerships. Our commitment to the region where we operate and live is demonstrated in the make up and safety of our workforce, our care for the environment and our supply chain practices. We pride ourselves in engaging local suppliers, in finding ways to work together and building capacity in our communities. We support local business and service providers as much as possible, and are proud to be able to say that for several years our operational spend with Saskatchewan based companies has consistently exceeded 60% of our overall spending. The statistics presented below demonstrate our long-term strategy to maximize our partnerships with our northern and Indigenous neighbours. From exploration line-cutting and drilling to catering and security services, and construction work to the transport of necessary reagents and uranium product, our suppliers and contractors are our neighbours.

### Total Goods & Services Expenditures



### Total Goods & Services Purchased From Northern SK Businesses (2019)



### Total Goods & Services Purchased from SK Indigenous Owned Businesses (2019)



## Joint Ventures

### THE CIGAR LAKE MINE

Ore production at the Cigar Lake mine began in 2014, 33 years after the deposit’s initial discovery by Orano’s geologists. All uranium ore from the Cigar Lake mine is processed 80 kilometers northeast at the McClean Lake mill. The Cigar Lake mine is the highest-grade uranium mine in the world and the McClean Lake mill is the only uranium facility in the world capable of processing high-grade uranium ore without dilution. Since commissioning in 2014, Cigar Lake has produced a total of 82.9 million lbs. In tandem, the Cigar Lake and McClean Lake operations produced 18 million pounds of uranium concentrate in 2018 and the same amount again in 2019.

### THE MCARTHUR RIVER MINE AND KEY LAKE MILL

The McArthur River deposit was first discovered in 1988 and production started in 1999. The Key Lake mill began operation in 1983 and in 1999 it started processing high-grade ore slurry from the McArthur River mine. Together, McArthur River/Key Lake are one of the world’s largest high-grade uranium operations, collectively producing a total of 535 million lbs using a variety of mining methods. In July 2018, due to prolonged market weakness, the operations were placed into a safe state of care and maintenance.

## Orano Canada Joint Venture Ownerships

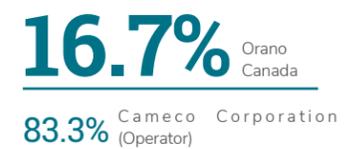
### McClean Lake



### Cigar Lake



### Key Lake



### McArthur River





**Brett Mitchell**  
Safety Coordinator

“ Safety is a must in everything that we do. As the Safety Coordinator on site, I am proud of the changes we have made over the years, including the introduction of our new “pathway to safety” and the Stop, Think, Act. We have also made strides in our safety data management, which allows us to make informed decisions. I always say, “one must be a little selfish in safety, all the while looking out for our peers and coworkers”. As we continue to move from safety compliance to safety as a value, strong safety leaders continue to emerge making our workplace safer and a great place to work, while contributing to individual and corporate success.”

# Ensuring Health, Safety and Radiation Protection

The Occupational Health and Safety Management Assessment Series OHSAS 18001 standard provides the minimum requirements for a comprehensive Health and Safety Management System. It allows an organization to proactively minimize occupational health and safety risks and to continually improve its health and safety performance. Our McClean Lake Operation initially received its certification to the standard in 2008 and has maintained this external certification ever since, always striving for continuous improvement. Similarly, our Exploration activities and the Cluff Lake decommissioned site also maintain this certification.

## Safety Highlights:

### New “Your Pathway to Safety” System

In 2018, a Management Safety Dashboard was created to facilitate safety information sharing. In addition, in 2019 we adopted a simple method for promoting hazard awareness and risk assessment in the workplace to replace the long-standing “5-Point Safety System”. The new “Your Pathway to Safety” system promotes the STOP, THINK, ACT philosophy. It is a constant reminder to keep safety top of mind and close to our hearts. The three main aspects of the program are:

- WhyIworkSafelyCard—focused on what gives the employee the desire to work safely. Employees individualize their own card to bring to life the closest to your heart portion of the mantra.

- Stop & Think Card – a hazards assessment tool to encourage employees to STOP and take time to THINK about the risks of the task. Workers to take ownership of their own safety.
- Safety Improvement Opportunities booklet – to encourage employees to be proactive in identifying hazards.

### Our 5 Safety Anchors

<b>SAFETY EQUIPMENT WORN</b>	<b>PROTECTED MECHANICAL HANDLINGS</b>	<b>SECURED WORKING AT HEIGHT</b>	<b>PEDESTRIAN AND VEHICLE TRAFFIC SECURED</b>	<b>SAFE LOTO (LOCK OUT TAG OUT)</b>

## Emergency Response

As it has for many years, the McClean Lake Emergency Response Team (ERT) participated in the Saskatchewan Mining Association’s Emergency Response/Mine Rescue Skills Competition in five events required for surface operations:

- First Aid scenario
- Proficiency, including written gas testing exam, and self-contained breathing apparatus (SCBA) bench test
- Surface Problem comprised of a technical rope rescue
- Surface Practical Skills in search and rescue
- Firefighting using 20-lb. fire extinguishers

In 2019, the McClean Lake Operation ERT placed runner-up in First Aid, while in 2018 they were the winner for Proficiency and runner-up in Firefighting.

## Safety Drills

At McClean Lake we perform annual exercises to continually test and evaluate our emergency response plan. The 2018 annual crisis management exercise involved site and Saskatoon head-office personnel. And, the 2019 exercise involved McClean Lake and Saskatoon office personnel as well as staff from our parent company Orano Mining.

The 2018 exercise scenario involved a mock accident with a propane delivery truck resulting in a propane release (vapour and liquid) and two casualties requiring medical attention. In 2019, the exercise scenario involved a release of anhydrous ammonia during offloading. For each scenario, the ERT responded as they would in a real situation and many lessons were learned.

In addition to the annual exercise, in 2019 a Mock Fire Emergency exercise was also conducted. This scenario involved a simulated fire (using a smoke generator) in a trailer office complex. Again, the ERT responded and completed a search and rescue of the building as they would in a real emergency. Canadian Nuclear Safety Commission representatives on site that day observed the exercise.

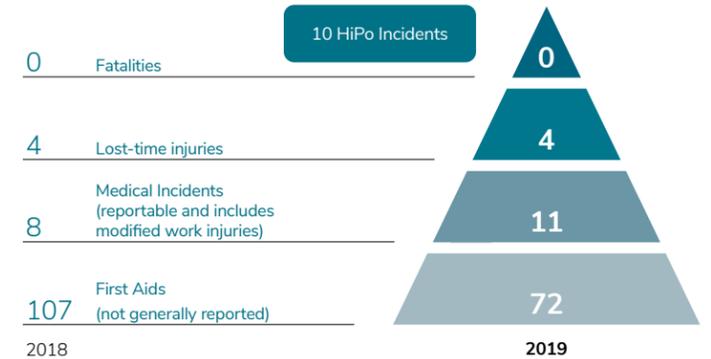
These exercises are part of the ERT’s ongoing training, to test their skills, response times and identify areas for improvement. They also allow to assess communications and decision-making processes at the Emergency Response Command Centres at the site, in the Saskatoon office and in France.

## Safety Day

Safety Day is an annual event when employees come together at McClean Lake and in the Saskatoon Office to participate in safety related activities outside of their normal work environment. For the past 12 years, Safety Day’s interactive format has also provided an opportunity for employees to listen

to topical presentations. In 2018 Safety Day had a mental health focus and featured former NHL star, Theo Fleury as a guest at McClean Lake. In 2019 the focus for Saskatoon employees was on cultural diversity and inclusion.

## Safety Incident Pyramid



## McClean Lake Employees Annual Effective Radiation Dose (average mSv/Year)

Year	Annual Average Total Effective Dose (mSv/year)	Annual Maximum Dose (mSv/year)	Orano Control Action Level (mSv/year)	Regulatory Annual Dose (mSv/year)	Full Body CT Scan (mSv/year)	Chest X-ray	Typical Canadian's yearly exposure to natural background radiation
2019	0.93	4.7	20	50	10	0.10	1.80
2018	0.90	5.5	20	50	10	.010	1.80
2017	0.93	4.7	20	50	10	0.10	1.80

## Occupational and Preventive Health

The health centre at the McClean Lake site is staffed 24/7 by a registered occupational health nurse with direct contact to a physician. Operational and field employees’ health is monitored as necessary should they become ill while on site, and annually by medical check-up. Orano offers comprehensive health benefits to its employees and their families as well as an Employee and Family Assistance Program with access to diverse health professionals, counselors, and self-guided resources. Whenever possible, Orano reinforces local public health advice and messages regarding personal hygiene, immunization, travel advisories, and the spread of diseases such as the common cold, flu, and others. At the McClean Lake site, menus in the cafeteria follow Health Canada’s food guide to promote a healthy diet. Workstations are assessed and set-up to help prevent injuries and enhance the work environment; for example, lighting in the mill was improved to mimic natural light and boost mental wellness. An Indigenous Elder is on site five days per month to counsel and assist employees. First Aid and CPR training is mandatory for some employees in specific roles; however, it is available on a voluntary basis to all employees.

# Valuing our Employees

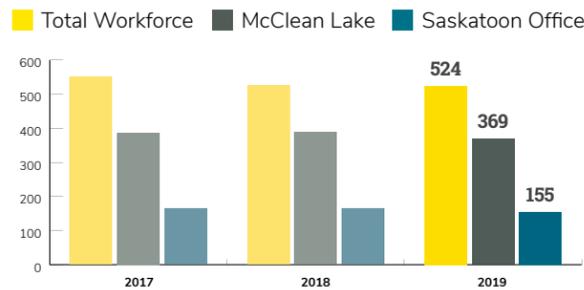


**Carla Robert**  
Supervisor, HR People  
and Business Partner

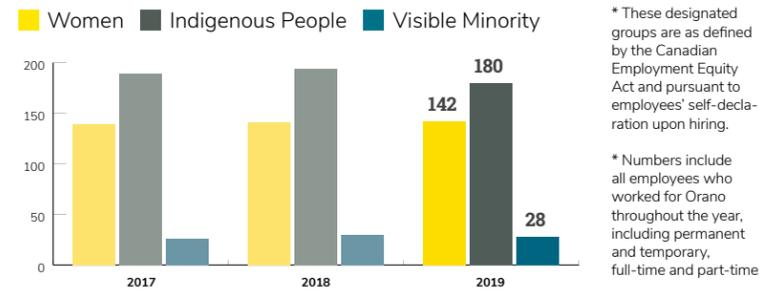
“Now more than ever, the Human Resources function and teams need to adapt and innovate to accompany the Orano Group’s rapid transformations and support our employees and departments through these changes. We are building a collaborative and constructive environment where we can share openly, brainstorm and identify solutions that benefit our employees and the organization as a whole. The evolution of my role has allowed me to connect our teams and company strategies in the areas of recruitment, training and development; and to contribute to some impactful projects, such as the Respectful Workplace and Mental Health programs.

I believe that the driving force behind our successful transformation is our emphasis on practicing Orano Values as our HR teams continue to explore ways to cooperate, challenge the status quo, innovate and deliver a high level of service.”

## Workforce



## Diversity



## Highlights

- In 2019 the McClean Lake operation counted 185 unionized employees (50% of its workforce). On November 13, 2019, the members of Unifor Local 48-S at the McClean Lake operation ratified the new collective bargaining agreement with a 3-year term.
- Similar to 2018, Orano had a 10.05% turnover (for permanent employees’ retirements, voluntary and involuntary departures), and welcomed 103 new hires in 2019 (20 less than in 2018 due to recruitment restrictions in response to the weak uranium market).

Mr. Vincent Martin, our CEO of the past 10 years, a 37-year employee of Orano and its predecessor companies, retired at the end of 2019. We thank him for his leadership and wish him the best in his retirement.

## Northern SK Employees’ Region of Origin in 2019

Year	Total Northern SK	Athabasca Basin	North-Central SK	Northwest SK	Northeast SK
2019*	167	48	59	45	15

\*In 2019, there was a slight increase in the number of northeast residents (15%) and a slight decrease in northwest residents (10%) from 2018 numbers.

**\$66,871,248**  
Total salaries and benefits paid to employees in 2019

**\$38,402**  
Investment in training and apprenticeships in 2019 for residents of northern SK

**9**  
Students worked at Orano including co-operative, interns and summer students

“Getting to know the operators is paramount to training. The biggest challenge can be understanding their personality, how they learn and the best style of training for each of them.

Our training programs are focused on the safety of the operators and the mill, and the respect of procedures. The operators train to clearly understand the hazards in the mill and how to handle them. This is particularly important for experienced operators as some of the most hazardous duties can be routine duties.

Our role as trainers is always evolving, as we become more familiar with environmental, human resources and other areas’ procedures. Having a broader knowledge allows our team of trainers to implement work instructions training reviews and to incorporate the Stop Think and Act safety philosophy more effectively in everyone’s daily tasks.”

**Norbert Proulx**  
Mill Operations Trainer

## ALL EMPLOYEES’ TRAINING

- In 2019 Orano deployed its updated Respectful Workplace Training, with a focus on human rights, harassment prevention, ethical behaviour, including anti-corruption, and diversity and inclusion, with a special focus on getting to know our northern neighbours and their communities better. As part of the Knowing Our Neighbours module, Orano and its joint venture partner created a video featuring members of all ages, from grade school to Elders, from the Athabasca Basin Communities, talking about their communities, the importance of their culture and language and their aspirations for the future. Orano employees also had the opportunity to participate in Aboriginal Awareness Training.
- For the past couple of years, another area of focus has been Mental Health Training. Orano engaged a third-party to deliver Mental Health Awareness Training to all employees and Mental Health First Aid Certification Training to many. In 2018 Orano was awarded a Saskatchewan Chamber of Commerce ABEX Award for the Priority Focus Award on Mental Health for raising awareness and understanding of mental wellness among our employees.

## Long-Service Awards: a 20-Year Tradition

Years	5	10	15	20	25	30	35	40
2019	57	10	8	-	1	5	1	-
2018	52	32	3	1	-	1	-	1
2017	51	24	3	3	-	1	2	1

## Workforce Age Distribution

Age range	29 and under	30-39	40-49	50-59	60+
2019	64	131	85	85	36
2018	69	129	85	87	31
2017	80	127	92	88	26

# Protecting the Environment



**Breanne Senik**  
Sr. Environment Technician

“As I transitioned into the position of senior environment technician, my role and responsibilities have expanded. This has resulted in more challenging tasks and increased learning opportunities. I strive to be a mentor for new employees to ensure they succeed in their position as environment technicians within the organization.”

At Orano Canada, our respect for the environment is reflected in the many ways we constantly assess its state at and around our sites, monitor it and implement programs to help protect, and when necessary remediate it.

In keeping with our stakeholder’s concerns for the protection of the environment Orano Canada’s Environmental Policy states: “Orano recognizes that continued economic and social development depends on a healthy environment and incorporates environmental protection considerations into all company activities to ensure sustainable development. Orano is committed to continually improve approaches and technology to minimize the effects of its activities on the environment.”

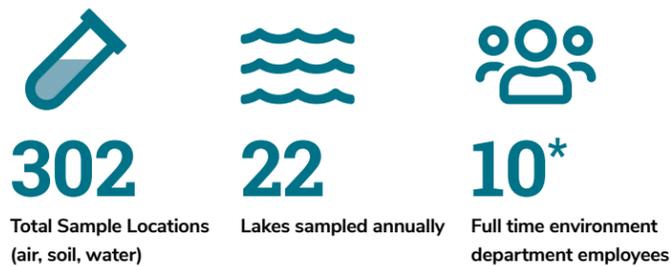
Through our baseline studies, our care for the environment starts well before a site is ever developed, and it continues well after a site closes. During operations, our environmental care also includes programs to reduce our consumption of natural resources such as water. We also limit our emissions of substances such as greenhouse gases, decrease our waste and ensure that the water we release to the environment meets strict regulatory standards.

### Spills\*



\*All reportable spills are cleaned-up and investigated. Appropriate measures are implemented to prevent future reoccurrence. Significant incidents are posted on our website at [www.oranocanada.com](http://www.oranocanada.com)

### Environmental Monitoring at our McClean Lake site in 2019

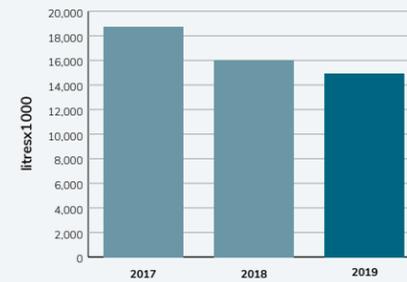


\*Including 9 full-time positions and 1 trainee for an Athabasca Basin resident as part of the Ya'thi Néné Collaboration Agreement commitment

## McClean Lake Reporting

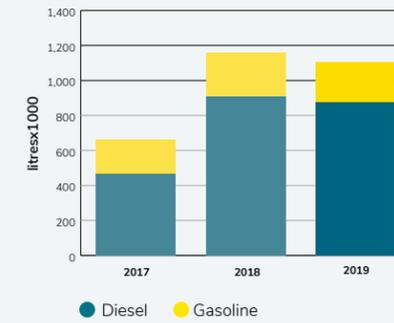
\* The graphs presented on this page reflect Orano Canada's reporting to provincial and federal regulatory agencies, local communities and our parent company's sustainability monitoring system.

### Propane

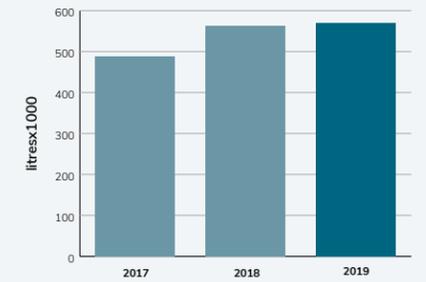


\*2017 propane, diesel, gasoline and water values have been restated compared to the previous edition to reflect a change in reporting approach and methodology.

### Diesel and Gasoline

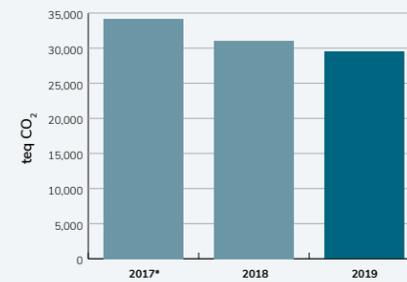


### Water



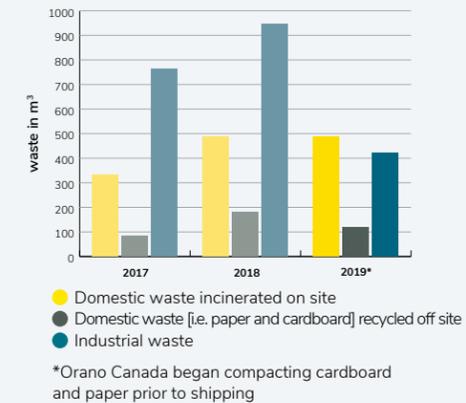
\*These quantities represent our surface water intake.

### Tier 1 Greenhouse Gas Emissions (teq CO<sub>2</sub>)



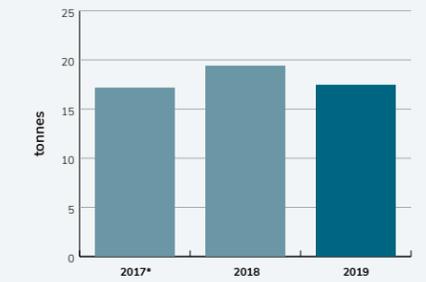
\*2017 GHG emissions restated considering a more detailed reporting approach. New value has been audited and deemed accurate.

### Waste Generated at McClean Lake



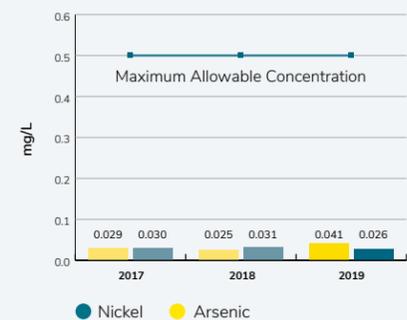
\*Orano Canada began compacting cardboard and paper prior to shipping

### SO<sub>2</sub> Emission (Tonnes)

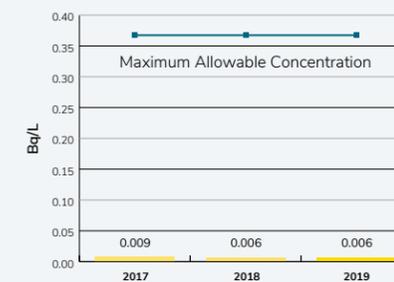


\*2017 SO<sub>2</sub> emissions restated as some mill areas had been omitted.

### Nickel / Arsenic in Effluent

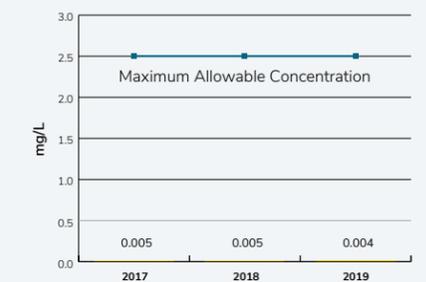


### Radium in Effluent



\*These effluent graphs reflect the average of all the monthly averages each year.

### Uranium in Effluent





**Stephanie Forseille**  
Coordinator, Health, Safety,  
Environment - Exploration

# Exploring and Innovating for the Future

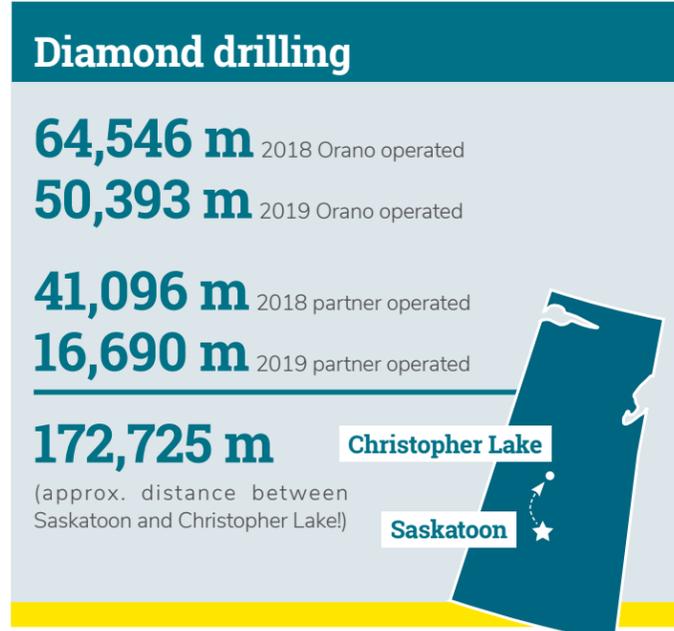
“ My role supports the mission of Orano’s exploration mandate, to discover economic uranium reserves, by positively engaging with leaders, communities, land users and other stakeholders to support long term mutually beneficial relationships. I am proud to be part of a team increasingly proactive in our engagement and communication practices, while maintaining leading environmental protection and health and safety procedures. The results are positive, better relationships are being built and nurtured earlier in the mining cycle. ”

## Exploration: Looking at ground markers of the past to fuel the future

Orano Canada operates 35 exploration projects, including 29 in Saskatchewan, two in Nunavut, one in Alberta and three in Quebec. Our current land holdings in Saskatchewan as project operator total 463,442.60 hectares.

We are partners in an additional 23 exploration projects, of which Cameco is the operator of 14 all located in Saskatchewan. Of the other partner operated projects, one is in Alberta, two are in Quebec and the remaining four are in Saskatchewan.

In 2018, we had one less partner operated project for a total of 22. At that time, Orano already operated 34 projects.



## Spotlight on two of our exploration projects' owners

### Waterbury/Cigar Lake project:

**37.1%** Orano Canada Inc. (Exploration Operator)

**50%** Cameco Corporation (Mining Operator)

**7.9%** IDEMITSU Uranium Exploration Canada LTD.

**5%** Tepco Resources Inc.

### Martin Lake project:

**70.8%** Orano Canada Inc. (Operator)

**29.2%** Cameco Corporation

## Tomorrow's transformation starts with today's innovation

There are many ways in which our industry innovates. It may be in the way we establish fly-in/fly-out operations, how we approach collaboration agreements with the communities closest to our projects or in the way we explore, mine and process the uranium. The SABRE Project is an example of our research and development in preparation for the mines of the future.

### The SABRE Project

Orano Canada is developing the Surface Access Borehole Resource Extraction (SABRE) mining method, which uses a high-pressure water jet placed at the bottom of a drill hole to extract the ore and bring it to surface. Through a series of tests with this new cutting-edge mining method, Orano is evaluating its potential for future mining operations. SABRE would allow the McClean Lake Joint Venture and its partners to access deposits from the surface using a small footprint, limiting potential environmental impacts and the costs of developing larger mining operations.

2019 activities at the SABRE project site at McClean Lake consisted of testing and setting up equipment to prepare for the 2020 mining test. This included commissioning of the high-pressure water jet pumps and the high-pressure mud motor pumps.





# Contributing to our Community

**Tina Searcy**  
Regulatory & Environmental Science Manager

“In my role, I am responsible for ensuring the successful acceptance of projects not only by regulators but by the public, communities and leadership. These are valued relationships. Local involvement in project development, operations and closure is essential for the success of Orano’s activities in northern Saskatchewan. Over the past few years, I have seen significant growth in these connections, and I am personally committed to maintaining and building lasting and meaningful relationships.”

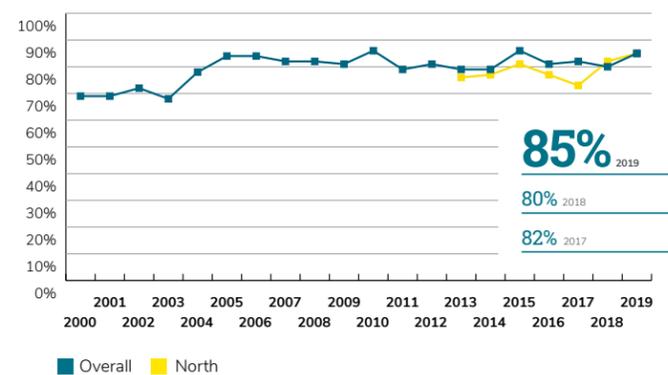
Orano Canada’s Public Information Programs are designed to encourage early information-sharing about the operations, communicate key Orano business decisions and provide opportunities for stakeholders to engage in dialogue with Orano about issues, comments, concerns, and questions regarding on-going or proposed activities.

These information programs take many forms, such as meetings with northern leaders and residents, posts on our social media feeds @oranocanada, distribution of our Athabasca Basin newsletter “Orano n̄h ghalan̄a honie”, inserts in various publications, advertising with local media, radio interviews, updates on our website [www.oranocanada.com](http://www.oranocanada.com) and on occasion news releases.

Every year, with our joint venture partner Cameco Corporation, we gauge public support for uranium mining and milling in Saskatchewan through a public opinion survey conducted independently by Fast Consulting on our behalf.

 **85%** of Saskatchewan people support the continuation of uranium mining

### Support for the Uranium Mining Industry in Saskatchewan, 2000-2019



## Helping our neighbours

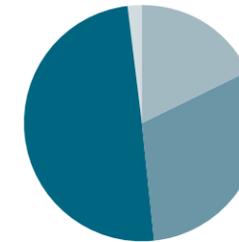
Orano’s community investment program funds non-profit and community initiatives to support primarily education and literacy, health and wellness, Indigenous and cultural programs. In addition, we contribute to the Pinehouse, English River First Nation and the seven Athabasca Basin communities’ Ya’thi Néné collaboration agreements, as well as the Six Rivers Fund for northern Saskatchewan. In 2019, Orano’s in trust contributions to these collaboration agreements totaled \$1.06 million.

### Community Investment

**\$598,000\*** 2019

\$489,000 2018

\$459,000 2017



\*Not including collaboration agreements and Six Rivers Fund contributions

### Northern Scholarships

**\$39,000** 2019

\$34,000 2018

\$35,000 2017



## Celebrating 40 Years of Northern Scholarships

Orano has been contributing to the education of post-secondary students from northern Saskatchewan for more than 40 years. We see the benefit of this investment at our operations, but also in the local communities where northern people share their skills.

Since the inception of our northern scholarships program in 1979, Orano Canada has awarded scholarships to 329 recipients for a total value of \$1.821M.

In 2019, through “Our Shared Future” series, we highlighted some of the scholarships recipients over the years, and we are pleased to feature Ron Martin and Reid Charles-Finley again.



**Ron Martin**  
1980-1984 Northern Scholarship Recipient  
Originally from Uranium City, today Ron gives back through his dental practice.



**Reid Charles-Finley**  
2012-2013 Northern Scholarship Recipient  
Reid is growing his family and career in La Ronge as a power engineer with Orano.

Read Ron and Reid’s full stories on our website [www.oranocanada.com](http://www.oranocanada.com)



# Maintaining our financial results

**Jodi Wall**  
Supervisor, Financial Reporting, Treasury & Planning

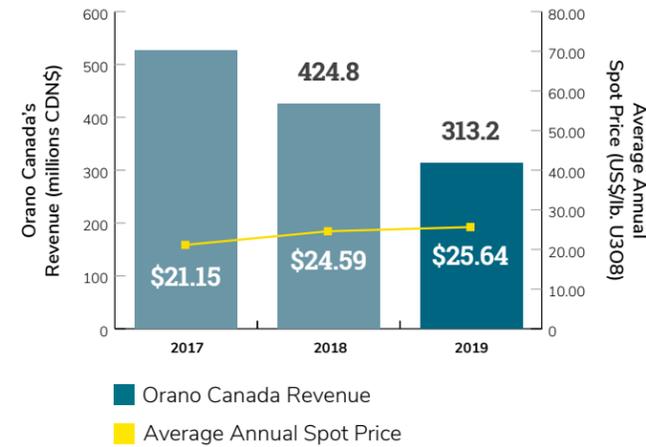
“The Finance & Accounting Department has been through a lot of change over the recent years and has adapted well to the environment by finding efficiencies while remaining committed to a high standard of financial reporting. New roles were created within the department, which provided the opportunity for growth, the generation of new ideas and transformed our department into a well-rounded vibrant team that I am honored to work with.”



## Our Financial Snapshot

In addition to health, safety, environmental and stakeholders' risks and potential impacts to and from our operations, Orano considers financial risks. It means being vigilant in our spending, finding ways to safely manage costs and invest wisely. It also means keeping a close eye on innovations in our industry, environmental trends, and commodities markets. The decline in our revenue this past year, reflects Orano and its joint venture partners' prudent fiscal management, having placed the McArthur River Mine and the Key Lake mill in a state of care and maintenance while waiting for the uranium market conditions to be more favourable. However, the advancements made in nuclear energy with increased research for the development of small modular reactors, the push to address climate change with energy sources producing less greenhouse gas, and the slow but steady rise of the uranium spot price observed the past couple of years bodes well for Orano in the future.

## Our Financial Snapshot



## Expenditures in 2019

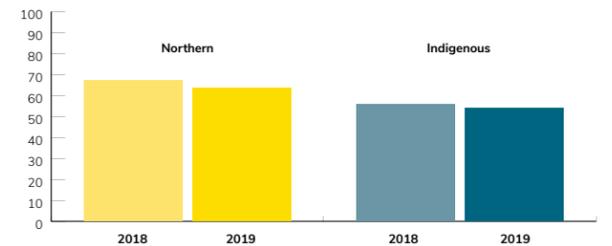
Goods and Services

**\$128,275,000** 2019

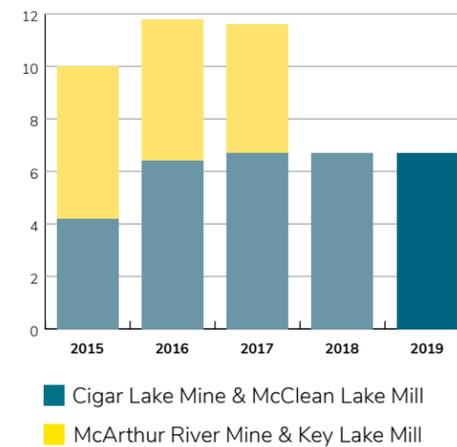
\$129,874,000 2018

Including \$80,000,000 with Saskatchewan businesses of which \$51,000,000 were purchased from Northern Saskatchewan Businesses, and including in particular \$43,000,000 from Indigenous-owned businesses.

### % of Total SK Goods & Services Spend



## Orano's Share of Production (million lbs. U<sub>3</sub>O<sub>8</sub>)



\*As of 2018 the McArthur River Mine and Key Lake Mill are in a state of care and maintenance while awaiting more favourable market conditions.

Capital

**35.7%** 2019

31.4% 2018

Exploration

**38.7%** 2019

38.4% 2018

Reclamation

**1.3%** 2019

1.6% 2018

# Reporting, Methodology and the GRI Standard

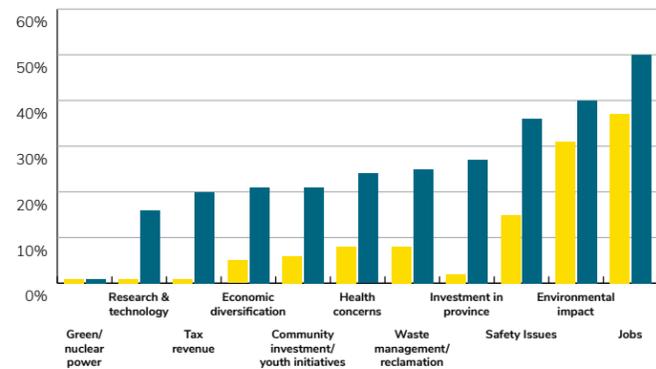
Orano is committed to providing accurate, transparent and open communications. We endeavour to engage the people who live closest to our activities, our regulators and interested stakeholders as often as possible and when required. Orano representatives travel throughout northern Saskatchewan, meet with stakeholders and share information with community members, leaders and regulators to discuss and address concerns and topics of interest, such as health and safety, environmental protection, community investment and employment, training and business opportunities.

Thanks to our community engagement program, our Collaboration Agreements with the Northern Village of Pinehouse, the English River First Nation and the seven Athabasca Communities' Ya'thi Néné, the work of our corporate social responsibility team and our northern Saskatchewan community liaisons officers in Wollaston Lake, Black Lake and Fond-du-Lac, an increasing number of northern residents are familiar with our activities, environmental, health and safety policies and performance, as well as possible job and contracting opportunities. These are topics that are regularly brought forward by our stakeholders during in-person encounters and that are reflected in our annual public opinion survey.

## What issues are important to you when you think about the uranium mining industry in Saskatchewan?



■ Overall ■ North \*Respondents were allowed multiple responses



## Our Methodology: Target Audiences and Stakeholders

Further to our previous stakeholder mapping and stakeholders consultation as part of our public information program, we have classified our stakeholders into three target audience levels based on proximity to our McClean Lake operation and according to historical and current expressed interest in this operation and our overall activities.

**Level I** consists of the three First Nations communities and four municipalities and their leadership located with the Athabasca Basin Region of northern Saskatchewan. These Athabasca Basin communities are Black Lake Denesuline Nation, Fond du Lac Denesuline Nation, Hatchet Lake Denesuline Nation, Northern Settlement of Camsell Portage, Northern Hamlet of Stony Rapids, Northern Settlement of Uranium City and Northern Settlement of Wollaston Lake.

**Level II** includes stakeholders within Saskatchewan's Northern Administrative District outside of the Athabasca Basin. Typically, we provide information to this target group through the Northern Saskatchewan Environmental Quality Committee (NSEQC), which has representatives from 37 communities and the Northern Labour Market Committee among other northern committees.

**Level III** encompasses groups or organizations that may express interest in specific areas of our operations and projects and include suppliers, non-government organizations, Orano employees, and the general public. These groups typically obtain information using traditional media, online sources such as our website or social media platforms.



## Our Communication Strategy and Tools

We regularly review and analyze the effectiveness of our public information program to ensure that we reach our target audiences and that they are well informed. In response to our communications tools monitoring, we may modify our means and frequency of engagement and develop alternate information methods to address emerging topics and needs among our stakeholders. We generally used tools such as brochures, newsletters, videos, magazine articles, radio announcements, website updates and social media posts. We also rely on face-to-face meetings and special community events geared to our Level I audience.

In compliance with our commitment to transparency, we update our Incident Notification Report to inform the public of incidents, which may be of interest to them and include their potential effect on health, safety or the environment and the remedial actions implemented. This report is available on our website at [www.oranocanada.com](http://www.oranocanada.com).

## Our Scope and Distribution

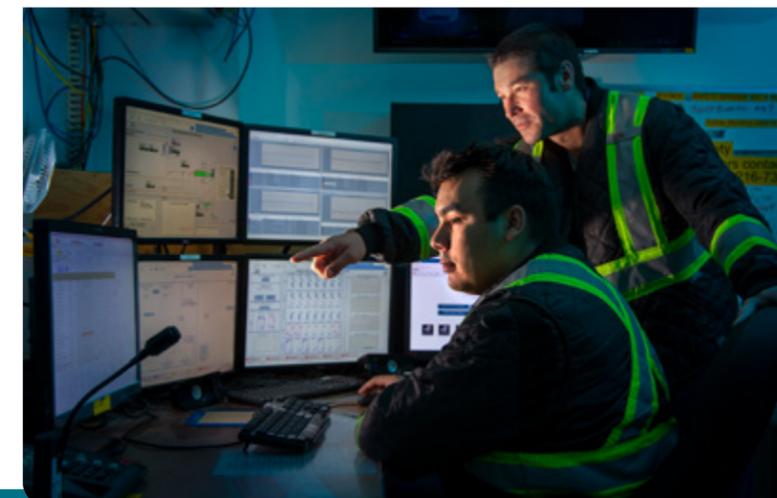
Demonstrating our dedication to the International Council on Mining and Metals (ICMM) principles, this document focuses on providing 2018 and 2019 information (previous report published in 2018 with 2017 data) on the topics of highest interest for our stakeholders in a simple and easily understandable manner. These topics, as outlined in each section of this review, also reflect our corporate social responsibility and sustainability commitments and the main challenges related to uranium exploration, mining and milling activities. Stakeholders interested in more technical aspects of our operations can request specific electronic copies of our regulatory annual reports via our website.

This 2019 Annual Sustainability Review is made available in digital format to all our employees and is downloadable in PDF format from our website. It is shared with stakeholders via direct emails and through our social media platforms. Finally, some hard copies of this review are mailed to specific Level I and II audiences and are also distributed when stakeholder groups visit our operations.

To request hard copies and/or for questions or comments pertaining to this report, please email [oc-publicrelations@orano.group](mailto:oc-publicrelations@orano.group) or call (1) (306) 343.4500 to speak to the Manager, Communications & Stakeholder Engagement.

## GRI Standard

This annual review was prepared using the "Core" guidelines for sustainable development reporting by the Global Reporting Initiative (GRI) as references. Although this report is not in full compliance with all the GRI criteria, it does follow their intent and provides relevant information. The data presented throughout this document were extracted from mandatory regulatory reporting that meet the requirements of the GRI. The following chart indicates the information outlined in this review for the various disclosure categories and their location within the document.



# List of GRI Standards Referenced

The content of this annual sustainability review reflects Orano Canada's reporting to Canadian provincial and federal regulatory agencies, local communities and our parent company's sustainability monitoring reporting system. This material references GRI Standard 2016 and its specific series as listed in the table below to indicate the sections that pertain in part or in full to the corresponding standard.

GRI Standard	Description	Page in 2019 Sustainability Review
<b>Organizational Profile</b>		
GRI 102-1	Name of the organization	3
GRI 102-2	Activities, brands, products and services	3
GRI 102-3	Location of headquarters	3
GRI 102-4	Location of operations	3
GRI 102-5	Ownership and legal form	5
GRI 102-6	Markets served	3
GRI 102-7	Scale of the organization	12
GRI 102-8	Information on employees and other workers	12
GRI 102-9	Supply chain	6, 8
GRI 102-10	Significant changes to the organization and its supply chain	1, 6, 7, 8
GRI 102-11	Precautionary principle or approach	22, 23
GRI 102-12	External initiatives	5, 18, 19
GRI 102-13	Membership of associations	5
<b>Strategy and Analysis</b>		
GRI 102-14	Statement from the most senior decision-maker of the organization	1
GRI 102-15	Key impacts, risks, and opportunities	1, 20
<b>Ethics and Integrity</b>		
GRI 102-16	Values, principles, standards, and norms of behaviour	4
GRI 102-17	Mechanisms for advice and concerns about ethics	4, 5
<b>Governance</b>		
GRI 102-18	Governance structure of the organization	3, 5
GRI 102-20	Executive-level responsibility for economic, environmental, and social topics	3
GRI 102-21	Consulting stakeholders on economic, environmental, and social topics	5, 18, 22, 23
GRI 102-33	Communicating critical concerns	5, 18, 22, 23
<b>Stakeholder Engagement</b>		
GRI 102-40	List of stakeholder groups	5, 22, 23
GRI 102-41	Collective bargaining agreements	12
GRI 102-42	Identifying and selecting stakeholders	22, 23
GRI 102-43	Approach to stakeholder engagement	5, 18, 22, 23
GRI 102-44	Key topics and concerns raised	22
<b>Reporting Practice</b>		
GRI 102-45	Entities included in the consolidated financial statements	21
GRI 102-46	Defining report content and topic boundaries	22, 23
GRI 102-47	List of material topics	22, 23
GRI 102-48	Restatement of information	14
GRI 102-49	Changes in reporting	14
GRI 102-50	Reporting Period	1

GRI Standard	Description	Page in 2019 Sustainability Review
<b>Reporting Practice (continued)</b>		
GRI 102-51	Date of most recent report	23
GRI 102-52	Reporting cycle	23
GRI 102-53	Contact point for questions regarding the report	backcover
GRI 102-54	Claims of reporting in accordance with the GRI Standards	22
GRI 102-55	GRI content index	24, 25
<b>Management Approach</b>		
103-1	Explanation of the material topic and its boundary	22, 23
103-2	The management approach and its components	1, 3, 4
<b>Strategy and Analysis</b>		
<b>Economic</b>		
GRI 201-1	Direct economic value generated and distributed	8, 19, 21,
GRI 201-2	Financial implications and other risks and opportunities due to climate change	20
<b>Market Presence</b>		
GRI 202-2	Proportion of senior management hired from the local community	3
<b>Indirect Economic Impacts</b>		
GRI 203-1	Infrastructure investments and services supported	6, 7
GRI 203-2	Significant indirect economic impacts	8, 19
<b>Procurement Practices</b>		
GRI 204-1	Proportion of spending on local suppliers	8
<b>Anti-Corruption</b>		
GRI 205-1	Operations assessed for risks related to corruption	5
GRI 205-2	Communication and training about anti-corruption policies and procedures	5, 13
<b>Environment</b>		
GRI 302-1	Energy consumption within the organization	15
GRI 302-4	Reduction of energy consumption	15
GRI 303-5	Water consumption	15
GRI 305-1	Direct greenhouse gas (GHG) emissions (Scope 1)	15
GRI 305-5	Reduction of GHG emissions	15
GRI 305-7	Nitrogen oxides (Nox), sulfur oxides (Sox), and other significant air emissions	15
GRI 306-3	Waste generated	15
<b>Social</b>		
GRI 401-1	New employee hires and employee turnover	12
GRI 403-1	Workers representation in formal joint management-worker health and safety committees	5
GRI 403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	11
GRI 403-6	Promotion of worker health	12
GRI 403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	11, 12
GRI 403-9	Work-related injuries	12
GRI 404-2	Programmes for upgrading employees skills and transition assistance programmes	12, 13
GRI 405-1	Diversity of governance bodies and employees	12, 13
GRI 412-2	Employee training on human rights policies or procedures	13
GRI 413-1	Operations with local community engagement, impact assessments, and development programs	5, 18, 22, 23
<b>Mining and Metals Sector Supplement</b>		
MM10	Closure plans	7



**orano**

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