

Topic: What is the volume of companies and industries that have raised issues with regards to the carbon competitiveness incentive regulation". (Reference Transcript PA660-661; Mr. Loewen)

- The Alberta Climate Change Office (ACCO) has presented webinars and met individually with operators to walk through the Carbon Competitiveness Incentive Regulation (CCIR) benchmark development process and the calculation procedures for determining an individual facility's compliance obligation.
- ACCO has offered additional clarification support to any operator to ensure that facilities understand the expectations and procedures of the CCIR.
- Approximately 15 facilities thus far have contacted the ACCO to discuss opportunities for access to Innovation funding, Industrial Energy Efficiency funding, offsets or other matters related.

Topic: Provide information on the grant to Innotech to support pursuing registration of an invasive mussel control agent with the federal government, as referenced in the annual report. (Reference Transcript PA665; Ms. Luff)

- The grant was for a period from April 2016 to March 31, 2018, in the amount of \$200,000. Final reporting on the grant deliverables is due June 30, 2018.
- The grant required Alberta Innovates Technology Futures to perform coordinated research on Control Agents for Aquatic Invasive Species including:
 - managing external expertise including but not limited to a regulatory consultant;
 - actively participate in a Collaborative Potash Registration working group;
 - provide project updates to the project manager;
 - with the assistance of the regulatory consultant, develop the Pest Management Regulatory Agency (PRMA0 registration package for potash, and;
 - scoping out and pursuing additional options for control agents for mussels and/or other Aquatic Invasive species that are a potential threat to Alberta's aquatic ecosystems.

Topic: With regards to sand and gravel and the recommendation from the Office of the Auditor General on delivery of a security deposit commensurate with reclamation costs and risks, “are there not other jurisdictions that we could learn from? And why not require them to have insurance and pay premiums so that their liabilities are covered as any other company would?” (*Reference Transcript PA666; Dr. Swann*)

- The department completed jurisdictional reviews for general aggregate policy (allocation, reclamation, etc.) as well as reclamation security policies for Canadian, American, and international jurisdictions.
- The review indicated that most jurisdictions require both a security deposit and standard commercial liability insurance on aggregate operations. For example, British Columbia requires operators on crown land to carry \$2M in liability insurance, as well as a flat-fee per-acre reclamation bond held by the Ministry of Energy, Mines, and Petroleum Resources and, if deemed necessary, separate security guarantees held by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development.
- Generally, insuring bodies in all jurisdictions will cover claims during operation, use, and occupancy of land, but will not cover claims related to the default of regulatory liabilities, such as reclamation. Standard insurance is expected to cover events such as natural disasters, emergencies, engineering failures, and equipment malfunction. Security deposits differ from insurance in that they are collateral specifically to cover noncompliance with regulatory requirements, such as failure to reclaim, failure to pay fees, or other regulatory non-compliances.
- The department authorizes pits on public land through dispositions. All dispositions issued on public lands have conditions applied to their approval documents. Alberta requires insurance on public land as a condition of a disposition.
- On private land, Alberta requires full cost reclamation security prior to approving an operation, but does not require liability insurance. The Code of Practice for Pits outlines requirements for Class I Pits (pits larger than five acres), and reclamation liability is addressed by requiring the full amount of security for that pit prior to commencing operations.

Topic: According to a 2016 employee engagement survey 36 per cent of the staff in your department do not feel that information flows effectively from senior leadership to staff and less than half of the employees at Environment and Parks have confidence in senior leadership and Staff. Is there a human resources or leadership problem in the upper ranks of public service at Environment and Parks? Is it in the minister's office, the deputy minister's office, or is it in both? (Reference Transcript PA667; Mr. Loewen)

- The Alberta Public Service has committed to making the Government of Alberta a great place to work. The Public Service People Strategy has also been developed. This strategy was developed in response to the 2016 employee engagement survey.
- Environment and Parks and departments across government have also developed their own Employee Engagement Action Plans with specific actions to make positive changes in our organizations.
- These plans were created through consultation with staff at all levels in the organization and have been fully endorsed by Human Resources and Senior Leadership.

Topic: Can you share with us the ministry’s effort to address the recommendations of the expert science integrity review panel and the Auditor General of Alberta with respect to oil sands monitoring, and what is the schedule for implementing the remaining recommendations? (Reference Transcript PA667; Mr. Carson)

- To address the Auditor General's recommendation to improve oil sands planning and monitoring, the program has implemented effective processes for monitoring project status and also, developed and implemented work plans with clearly defined deliverables, roles, responsibilities and timelines. A follow up audit by the Office of the Auditor General is currently underway.
- The expert science integrity review panel's recommendations and related actions to address them are as follows:

	Expert Panel Recommendation	Actions Underway	Timeline
1	Better define and document specific policy and scientific goals of the governments of Canada and Alberta for the monitoring of the oil sands	<ul style="list-style-type: none"> – On December 21, 2017 the governments of Canada and Alberta signed a Memorandum of Understanding (MOU) to renew the joint commitment for environmental monitoring of oil sands development. The MOU sets the course for the future of the Oil Sands Monitoring Program, which includes the development of an Operational Framework by both governments, and Indigenous communities and organizations in the oil sands region. – The Operational Framework will define the monitoring (science, policy) objectives of the Program as well as the governance model to guide decision-making, program processes, structure, roles and responsibilities. Work on developing the Operational Framework is currently underway and involves federal and provincial governments and Indigenous communities and organizations in the oil sands region. Industry is also briefed on a regular basis and CAPP has provided comments into the process. 	Sep 2018
2	Conduct more comprehensive data analysis and interpretation.	<ul style="list-style-type: none"> – Comprehensive data analysis of water results (2012-2015) has been completed; an OSM Water Monitoring Synthesis Report Series is planned for release in 2018. – Similar synthesis report is in the final stage of preparation for air quality and atmospheric deposition components of the OSM Program. – Results from the OSM program have been published in scientific journals and a bibliography of papers for improved public access. Approximately 369 scientific technical documents 	Dec 2018

	Expert Panel Recommendation	Actions Underway	Timeline
		have been published since 2013.	
3	Take the necessary steps to enhance the integration of the monitoring within and across the four components.	<ul style="list-style-type: none"> - A review of the air monitoring network design was completed in 2016. A report of the findings from the Air Monitoring Network review is planned for release in 2018. - A series of integration program wide workshops to improve understanding of environmental impacts resulting from oil sands development activities on receptors including forests, wetlands, lakes, amphibians and birds are planned for delivery in 2018-19. It is expected that the outcome of the integration workshops will inform future program direction. 	Sep 2018
4	Develop and document a uniform Quality Assurance (QA) approach that is implemented and tracked across all monitoring activities.	<ul style="list-style-type: none"> - Beginning in 2016-17, the program initiated efforts to establish program wide publicly available Standard Operating Procedures (SOPs) Inventories for Oil Sands Monitoring. - Work on the SOP inventory and implementing uniform Quality Management Plan across program is ongoing. 	Dec 2018 and ongoing
5	Make monitoring data and information more readily available and accessible to stakeholders.	<ul style="list-style-type: none"> - Program wide efforts focused on making monitoring data and information more readily available and accessible to stakeholders continue; it is intended that OSM scientific and technical data provided by all delivery organizations will be accessible through a single OSM portal. At present OSM data is available through: https://www.canada.ca/en/environment-climatechange/services/oil-sands-monitoring.html and the websites of partner organizations. - The development of a data portal that identifies in one location scientific products from the program is at an advanced stage of completion. 	2018-19

Topic: On the climate leadership plan how many new jobs are directly attributed to that program, and how do these break down between permanent and temporary positions? Given the anticipated job losses from measures such as the early shutdown of coal, can the ministry provide figures on its current expectations of the net change in employment due to the climate leadership plan? (Reference Transcript PA667; Mr. Loewen)

- In 2016-17 Climate Leadership Plan (CLP) investments supported close to 2800 jobs. Specifically, the CLP supported 1822 direct jobs, 506 indirect jobs and 471 induced jobs, for a total of 2799.
- These results were calculated by Statistics Canada using an input-output model based on actual 2016-17 CLP expenditures categorized by North American Industry Classification System.
- The Alberta Climate Change Office and Treasury Board and Finance have completed comprehensive economic modeling of the expected impacts of the Climate Leadership Plan and the market access it is enabling.

Topic: One issue identified by the expert panel review is the need for comprehensive analysis of data collected between 2012 and 2015, comparing this data to before the joint oil sands monitoring program was implemented. Are these initiatives under way, and what is being found as a result of this analysis? (Reference Transcript PA667; Mr. Carson)

- Analysis of data and results from monitoring efforts indicate that there is consistent, ongoing evidence of low level changes in the ambient environment related to oil sands development activities. These changes appear pronounced in areas of closest proximity to oil sands development, and diminish with distance from development sites. However, in some cases, e.g., landscape disturbances, changes appear to have increased over time. Further details on program findings are presented in various program reports available online through the following link
<http://environmentalmonitoring.alberta.ca/resources/document-library-2/>.
- Comprehensive data analysis of water results (2012-2015) has been completed and the release of the OSM Water Monitoring Synthesis Report Series is planned for 2018. Similar synthesis report is in the final stage of preparation for Air Monitoring (air quality and atmospheric deposition) components of the program. In addition, results from the program have been published in scientific journals and a bibliography of papers for improved public access.