



AER: INVITATION FOR FEEDBACK ON REVISIONS TO DIRECTIVE 020

After a multiyear study, we published [Open File Report 2019-06: A Risk-Based Methodology for Commingled Well Abandonment – Southeastern Alberta Gas Field Case Study](#). Based on the findings of that study, we released [Bulletin 2020-20](#) on September 17, 2020, to inform licensees that we have started accepting nonroutine requests to abandon [commingled wells](#).

We have now made changes to section 5 of [Directive 020: Well Abandonment](#) to allow for *some* routine abandonment of commingled wells that involve qualified subsurface geological strata and corresponding geographic locations. Information on qualified pools will be made available on the *Directive 020* webpage. We are now seeking public feedback on this revision.

To provide feedback, complete the comment form available on our website and email it to Directive020@aer.ca or mail it to the Alberta Energy Regulator, Suite 1000, 250 – 5 Street SW, Calgary, Alberta T2P 0R4. Feedback will be accepted through Friday, December 4. All feedback received will be reviewed and may be used in finalizing the directive.

Personal information provided with comments will be collected, used, and disclosed in accordance with the *Freedom of Information and Protection of Privacy Act*. The AER may use the personal contact information you provide for follow-up communication related to your feedback.

The revised edition of *Directive 020* is available on our website, www.aer.ca > Regulating Development > Rules and Directives > Directives > [Directive 020](#).

Kneehill County writes off over \$1 million more unpaid oil and gas taxes

(Source: Yahoo News) Kneehill County council wrote off over \$1 million in unpaid property taxes owed by oil and gas companies which brings the total unpaid in 2020 to almost double estimates.

The decision to write off \$1,052,001.95 was made at the Oct. 27 regular meeting of council.

Director of Corporate Services Bill McKennan presented a report to councillors stating property taxes on 15 tax rolls should be written off plus the penalties cancelled.

“The accounts in this request for decision are companies that have gone into bankruptcy proceedings and the wells have been handed to the Orphan Wells Association for reclamation or will be soon,” stated McKennan in his report.

“There is no ability for the county to collect.

“The ability for the municipality to collect on tax arrears relating to industrial and linear tax accounts has become extremely difficult based on decisions of the courts.

The Virginia Hills decision regarding the validity of linear tax arrears has made it impossible for municipalities to collect any amounts owing.

“The Redwater decision has also affected the oil and gas sector due to the expectations of any monies left from a bankruptcy be paid first to the Alberta Energy Regulator (AER) for reclamation purposes.

Municipal collections are no longer a priority as legislation provided for in the past due to these decisions.”

He stated Kneehill County exhausted all avenues trying to recover the unpaid tax revenue.

McKenna stated another problem continues for municipalities in Kneehill’s position, and that includes prepayment of taxes like the education requisition that the municipality should have recovered through its own tax collection. The local taxpayers are now left holding the bag for this money.

“The County will be able to apply for the requisition credits with the province and be reimbursed for approximately \$146,492 of this amount,” stated McKenna.

“These credits will be applied for in January when the grant period is open. Once received, they will show as a 2021 revenue.

“The amount of 2020 penalties to be reversed is approximately \$268,306. By reversing these amounts in the 2020 general ledger, we are not artificially showing revenue that will not be collected.”

He added that the credit programs available for municipalities are only a fraction of what the education requisition amount was.

More bad news, noted McKenna, was that the amount of lost revenue due to unpaid property taxes turned out to be much more in 2020 than the county anticipated.

“In anticipation of this situation, the county operating budget for 2020 provided for a \$1,100,000 cancellation budget,” stated McKenna.

“To date council has approved \$985,000 in industrial cancellations and the addition of this cancellation request will put us \$940,000 over budget.”

Reeve Jerry Whittstock noted the council may as well approve the write off because there was no alternative.

“I guess we really don’t have a choice, do we?” the reeve asked.

Councillors unanimously approved writing off \$1,052,001.95 in unpaid property taxes, cancelling the late penalties and applying for provincial help with the unrecoverable education tax.

Stu Salkeld, Local Journalism Initiative Reporter, East Central Alberta Review

Alberta Creating jobs with green tech

More emissions reduction projects will now be possible thanks to funding from the industry-supported Technology Innovation and Emissions Reduction (TIER) system and the federal Low Carbon Economy Leadership Fund (LCELFF). On this page:

Alberta’s government is using up to \$280 million from the TIER system and LCELFF to fund three Emissions Reduction Alberta programs that will support around 5,000 jobs and cut an estimated 13 million tonnes of emissions by 2030 – the same as taking about four million cars off the road.

“The TIER system is key to Alberta’s economic recovery, supporting projects that cut emissions, attract investment, keep industry competitive and get Albertans back to work. This investment comes at a critical time when Alberta must be bold in driving economic recovery.” - *Jason Kenney, Premier*

Up to \$180 million from the TIER fund and up to \$100 million from LCELFF will support innovative projects for small, medium and large industries across all sectors in Alberta. Projects can include technologies like carbon capture, utilization and storage, industrial energy efficiency and geothermal to help facilities lower emissions, create investment opportunities and cut costs. Job creators can use energy savings to get more Albertans back to work.

“We’re equipping our job creators with the resources they need to move forward on projects that reduce emissions, reduce costs, and create good jobs. Alberta is a province of innovators, and I am proud that the TIER system continues to support our province’s leadership in emissions-reducing technology.” - *Jason Nixon, Minister of Environment and Parks*

“The Government of Canada is pleased to support made-in-Alberta solutions to create good jobs and grow a cleaner, more sustainable economy. This announcement underlines the federal government’s focus on supporting industry to adopt clean technology in order to fight climate change and put people to work. Announcements like this will enable Canada to achieve its climate goals while ensuring that we have a sustainable and prosperous economic future.” - *Jonathan Wilkinson, Minister of Environment and Climate Change*

“This commitment of new provincial and federal funding will help unlock the development and deployment of the technologies we need to stimulate the economy now and create the lower-emissions industries of the future.” - *Steve MacDonald, CEO, Emissions Reduction Alberta*

ERA programs include:

Shovel-Ready Challenge

This program will use up to \$150 million in TIER and LCELf funding to support a call for proposals for leading-edge technologies at large industrial sites to reduce emissions and create jobs. It is estimated to inject more than \$500 million into Alberta’s economy when industry dollars are included. Projects could include industrial energy efficiency or carbon capture utilization and storage at sites like oil and gas, concrete or forestry and agriculture. Applications are now open. Details are available [here](#).

“By investing in leading-edge technologies and demonstrations, Alberta’s investment in ERA and the Shovel-Ready Challenge will provide immediate economic value, while advancing long-term technology innovation and environmental goals across several sectors.” - *Lonnie Enns, senior vice-president of power supply, ENMAX*

“Nutrien’s roots run deep in Alberta, as does our commitment to protecting the province’s air, water, and land. We support the province’s investment through Emissions Reduction Alberta for innovative, emissions reduction technologies which will continue to help agriculture become even more sustainable.” - *Chuck Magro, president and CEO, Nutrien*

Energy Savings for Business Program

This program will use up to \$55 million in TIER and LCELf funding to help Alberta’s small and medium-sized facilities benefit from industrial and commercial projects that can be installed quickly to cut emissions, support jobs and add an estimated \$300 million to Alberta’s economy. Projects could include heating and insulation upgrades in a variety of sectors like food processing and waste management, or in office buildings. This program is expected to open pre-approvals in January 2021. Details are available [here](#).

“Alberta businesses have long been committed to minimizing their environmental footprint while continuing to grow our provincial economy. This exciting announcement by ERA will provide much-needed resources for small and medium-sized businesses to continue this important work in a time of ongoing fiscal pressures. By committing to local workers and suppliers, the Energy Savings for Business Program will truly be a win for local economies.” - *en Kobly, president and CEO, Alberta Chamber of Commerce*

Partnership Intake Program

This program will use up to \$75 million in TIER and LCELf funding to continue supporting emissions reduction projects that stimulate Alberta’s economy. The program strengthens financial support for new technologies by helping applicants leverage funding from both ERA and trusted partner organizations, which also cuts red tape. This program will create opportunities for energy efficiency, hydrogen, geothermal, natural gas and nature-based solutions. This program accepts applications on an ongoing basis. Details are available [here](#).

TIER funding

The TIER system is funded by large industry which pay into the fund when they do not meet emissions targets. This investment will help industry reduce emissions and supports Alberta’s recovery from the COVID-19 pandemic and low oil prices.

Alberta's Recovery Plan is a bold, ambitious long-term strategy to build, diversify, and create tens of thousands of jobs now. By building schools, roads and other core infrastructure we are benefiting our communities. By diversifying our economy and attracting investment with Canada's most competitive tax environment, we are putting Alberta on a path for a generation of growth.

Quick facts

- TIER helps industrial facilities, which account for more than 65 per cent of Alberta's total emissions, find innovative ways to reduce emissions and invest in clean technology to save money and stay competitive.
- The TIER fund is being directed into programs that will bring investment to Alberta and continue to build on Alberta's strong record on environmental, social and governance performance.
- Emissions Reduction Alberta invests revenues from TIER to accelerate the development and deployment of innovative clean technology solutions.
- Since 2009, Emissions Reduction Alberta has committed \$611 million toward 185 projects worth \$4.4 billion that are reducing emissions, creating competitive industries and leading to new business opportunities in Alberta. These projects are estimated to deliver cumulative reductions of 34.7 million tonnes by 2030.

Related information

- [Alberta's Recovery Plan](#)
- [Technology Innovation and Emissions Reduction System](#)
- [Emissions Reduction Alberta](#)
- [Low Carbon Economy Leadership Fund](#)
- [A Blueprint for Jobs \(PDF\)](#)

Two forestry companies court-ordered to pay \$40,000 for violating the Species at Risk Act

Strong and effective enforcement of Canada's environmental and wildlife protection laws is one of the concrete ways in which the Government is delivering on its commitment to providing clean air and water as well as ensuring the conservation of wildlife species and their habitat.

On October 15, 2020, Débroussaillage Québec and Forestière des Amériques Inc. were each fined \$20,000—for a total of \$40,000—at the Longueuil courthouse. Each company pleaded guilty to one count of violating the *Emergency Order for the Protection of the Western Chorus Frog* (the Emergency Order) in contravention of the *Species at Risk Act*. The companies pleaded guilty to the charge of carrying out a prohibited activity, namely pruning vegetation— including trees, shrubs, and bushes—in a sensitive area.

On April 23 and 24, 2018, employees of Forestière des Amériques Inc., whose services were retained by Débroussaillage Québec, carried out vegetation-cutting work under high-voltage power lines. The work was done in the enforcement area of the *Emergency Order for the Protection of the Western Chorus Frog (Great Lakes / St. Lawrence — Canadian Shield Population)* in the municipality of La Prairie, near Montréal.

Vegetation-cutting work in the enforcement area of the Emergency Order requires a permit under the *Species at Risk Act*. Neither Débroussaillage Québec nor Forestière des Amériques Inc. had a permit authorizing the brush-clearing activities. The Act prohibits killing or harming a wildlife species that is listed as threatened and damaging or destroying the habitat of these species. The Emergency Order prohibits removing, pruning, damaging, or destroying any vegetation such as trees, shrubs, or plants.

Quick facts

- In Canada, the western chorus frog is found in southern Ontario and in the Montérégie and Outaouais regions of Quebec. The species is divided into two populations. The Carolinian population, in southwestern Ontario, is not at risk. The second population—the Great Lakes, St. Lawrence, and the Canadian Shield population—includes individuals from other regions of Ontario and from Quebec. Since 2010, this population has been listed as threatened in Schedule 1 of the *Species at Risk Act*.

- Western chorus frog populations have undergone serious declines in both Quebec and Ontario. Habitat loss and degradation are the main threats to the species. In Quebec, in the Montérégie region, a decrease of over 90 percent in the species' historical range was noted in 2009, while in the Outaouais region, over 30 percent of inhabited sites have disappeared since 1993.
- Habitat destruction in suburban areas of southwestern Quebec is happening so quickly that populations may disappear from these areas by 2030. In these regions, the main threats to western chorus frog habitat are rapid residential and industrial development and agricultural intensification, such as the conversion of pastureland to grain crops. Many breeding sites in agricultural areas are also at risk of being contaminated by pesticides or fertilizers.
- The area covered by the Emergency Order consists of approximately 2 km² of partially developed land in the municipalities of La Prairie, Candiac, and Saint-Philippe, on the outskirts of Montréal, Quebec. The main purpose of the Emergency Order is to prevent the loss or degradation of the habitat that the western chorus frog needs to grow and reproduce.

Ontario: Proposal to Provide Additional Flexibility for Excess Soil Reuse

(Source: HazMat Magazine) As a result of the COVID-19, the Ontario Ministry of Environment, Conservation and Parks (MECP) is proposing to extend the grandfathering for infrastructure projects and provide additional flexibility for excess soil reuse. Under the [proposal](#), amendments to the Excess Soil Regulation ([O. Reg. 406/19](#)) and other regulations are to be made so that technical assessments are not repeated, delayed projects can proceed, and soil can be managed more flexibly.

Proposal details

In December 2019, Ontario made a new On-Site and Excess Soil Management Regulation (O. Reg. 406/19), supported by risk-based standards that will make it safer and easier for industry to reuse more excess soil locally.

In response to the COVID-19 pandemic and to provide further clarity and flexibility to support appropriate beneficial reuse of excess soil, the MECP is now proposing amendments to O. Reg. 406/19 and O. Reg. 153/04 under the Environmental Protection Act. The proposed changes include:

- extending the date applicable to the grandfathering provisions by which construction projects must be entered into by one year, from January 1, 2021 to January 1, 2022, to accommodate projects that are close to starting construction but delayed due to COVID-19
- clarifying the scope of grandfathering provisions to include geotechnical studies completed by January 1, 2022, to ensure these studies do not have to be repeated
- replacing waste-related Environmental Compliance Approvals with standard rules for operations processing excess soil for resale as a garden product, and operations managing clean soils for residential development projects
- providing added flexibility to soil management rules such as those for soil storage and reuse of soil impacted by salt
- enabling Environmental Compliance Approvals to specify alternative soil management requirements to provide project-specific flexibility
- updating O. Reg. 406/19 and the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the EPA (Analytical Procedure) with the modified Synthetic Precipitation Leaching Procedure (mSPLP)
- clarifying that the excess soil registry to be used for filing notices will be delivered by the Resource Productivity and Recovery Authority and expand the registry's purposes to also include integration with other third-party systems supporting reuse of excess soil, such as tracking systems, soil matching systems and other non-regulatory programs, considering cost, security and other relevant matters.

If the proposed changes are adopted, they would:

- reduce construction costs associated with managing and transporting excess soil
- limit the amount of soil being sent to landfill
- lower greenhouse gas emissions from the sector
- continue to ensure strong protection of human health and the environment

These proposed amendments support delivery of actions in Ontario's "Made-In-Ontario" Environment Plan including:

- recognizing excess soil as a resource
- developing clear rules to support beneficial reuses of excess soil and to help address issues of illegal dumping

Deadline for Public Comment -The deadline for comments on the proposal is November 19th, 2020.

Finalists for National Brownfield Rehabilitation Awards Announced

(Source: environmentjournal.ca) The Canadian Brownfields Network (CBN), in partnership with Actual Media, have announced the finalists for 2020 Brownie Awards. The 21st annual awards are being presented during an e-gala on November 24.

The awards provide a forum to celebrate the projects, programs, and people that are transforming under-utilized properties across Canada (brownfields) into thriving community assets.

"The redevelopment of brownfields is vital to the health of our communities. It provides opportunities to create a cleaner urban environment, safer and more secure neighbourhoods, and a chance to create vibrant in-fill assets for the betterment of the entire community," said Christopher De Sousa, president of board of directors of CBN. "CBN is proud to honour this year's well-deserving finalists, and we look forward to celebrating their achievements at this year's Brownie Awards."

There are 10 awards presented as part of the annual event. Six awards recognize project and program excellence in the categories of: Reprogram, Remediate, Rebuild, Reinvest, Renew, and Reach Out. Three additional awards are presented for the Best Small-Scale Project, Best Large-Scale Project, and Best Overall Project, selected from all of the nominations received. The final award recognizes the "Brownfielder of the Year."

The list of finalists of each of the awards can be found below.

2020 Brownie Award Finalists

REPROGRAM: Legislation, Policy and Program Initiatives

- Housing Now – Toronto, Ont.
- Brownfields Modernization & Excess Soil Regulation – Toronto, Ont.
- Pier 8 Redevelopment – Hamilton, Ont.

REMEDIATE: Sustainable Remediation and Technological Innovation

- Port Lands Area – Block & Adsorb Pilot-Scale Testing – Toronto, Ont.
- Parc D'entreprises de la Pointe Saint – Charles Environmental Remediation – Montreal, Que.
- Remediation of former firearm firing range – Mission, B.C.
- Former Retail Outlet Soil Treatment Program – Lethbridge, Alta.
- Sambault Landfill Remediation Project – St-Isidore-de-Laprairie, Que.

REINVEST: Financing, Risk Management and Partnerships

- Lakeview Village – Mississauga, Ont.
- City of Guelph Snow Management Facility – Guelph, Ont.

REBUILD: Redevelopment at the Local, Site Scale

- Reunion Crossing – Toronto, Ont.
- 75 Billy Bishop – Toronto, Ont.
- West Niagara Secondary School & New Ridgeview Garden Centre – Beamsville, Ont.
- Bata Shoe Factory – Batawa, Ont.

RENEW: Development at the Community Scale

- Crosstown Celestica – Toronto, Ont.
- Barrel Yards – Waterloo, Ont.
- Garrison Crossing – Toronto, Ont.
- Midtown Gateway Project – Nanaimo, B.C.

REACH OUT: Communications, Marketing and Public Engagement

Community Wellbeing Framework – Toronto, Ont.

The Meadoway (TRCA) – Toronto, Ont.

Port Lands Flood Protection – Toronto, Ont.

BROWNFIELDER OF THE YEAR

Josee Samson – City of Montreal

For further information on the Brownie Awards, click [here](#).

CCLM User Experience Survey

You may already know that five collaborating organizations, including InnoTech Alberta, Ducks Unlimited Canada, ECCC – National Boreal Caribou Knowledge Consortium, NRCan-Canadian Forest Service, NAIT-Center for Boreal Research) joined forces to develop the Canadian Conservation and Land Management Knowledge Portal (CCLM) – (<https://www.cclmportal.ca/>)

Launched in April 2020, the website was designed to provide an accessible and centralized place to share conservation and land management (reclamation and restoration) resources from across Canada and is now home to nearly 1000 resources.

This fall, we will be entering our second phase of site development, with the aim of further enhancing and refining the many features and functionalities available on the CCLM Knowledge Portal. Therefore, we are reaching out to our site users to collect their feedback on how the site is working for them and to assess areas for improvement or future growth. We would like to invite you and any of your colleagues who have had the opportunity to explore the CCLM Knowledge Portal to complete our CCLM User Experience Survey - <https://www.surveymonkey.com/r/TJMQP5X>

This survey will only take a few minutes of your time and will play a crucial role in guiding our next phase of development. Your participation is greatly appreciated and you can access the survey here: <https://www.surveymonkey.com/r/TJMQP5X>

The survey will be open until November 9, 2020.

Alberta's Soil Sterilants Program is seeking bromacil or tebuthiuron impacted soil that has been historically treated with activated charcoal. The soil would be used in experiments to assess the long-term effects of activated carbon on the immobilization of soil sterilants. If you are able to provide soil or site access to support these experiments, please contact:

- Simone Levy (simone.levy@innotechalberta.ca)
- Sarah Thacker (sarah.thacker@innotechalberta.ca)

Hundreds of coal mining jobs to end as TransAlta switches to natural gas

(Source: Yahoo News) TransAlta will end operations at Highvale thermal coal mine by the end of 2021 as it switches to natural gas at all of its coal-fired plants in Canada.

The announcement brings with it hundreds of job losses and comes four years earlier than TransAlta originally planned.

After Highvale's coal mining ends, 40 to 50 people will continue at the site in reclamation work, which is expected to take about 20 years, TransAlta CEO Dawn Farrell said Wednesday on a conference call.

That's a far cry from the workforce of 1,500 at the mine's peak. Roy Milne, president of United Steel Workers Local 1595 representing Highvale miners, said workers knew this was coming but the end date has changed several times.

"The membership is already resigned to the fact that those jobs are disappearing," Milne said.

Highvale near Wabamun Lake, about 70 km west of Edmonton, is one of three surface coal mines owned by TransAlta.

The percentage of power in Alberta generated from coal has fallen from more than 80 per cent in the 1980s to less than one-third now, partly due to rising provincial government prices on carbon that began in 2007.

Some of the laid-off workers will use provincial government programs as a bridge to re-employment or retirement, Milne said, but the closure means workers will have to figure out those next steps sooner than expected.

"There's been way more stress on the average worker, simply with the uncertainty and the changing target date," Milne said. "But that's no different from anybody else that's been working from home."

"The silver lining for our end is we have a more firm date on where the rest of your life is going to have to go from."

Workers were notified last week about TransAlta's announcement, said Don Gray, who has worked at Highvale for a decade.

Gray worked at Whitewood Mine in the same area until it closed in 2010. The 51-year-old then moved over to Highvale and had planned to work there until his retirement. Now he thinks he likely won't be a part of the mine's reclamation project.

Some Highvale workers were shocked, he said, at how the timeline to close the site changed so quickly. Some feel misled, he said, after they were expecting to be able to work there for a few years longer.

"Nobody had seen it coming this week from when it was first announced," he said. "It was supposed to be a slow process and then the timeline just went quick."

In Wabamun, a village near Highvale, coal mining has been a part of the community's identity for decades, said Mayor Charlene Smylie. When the transition away from coal mining was first underway, the municipality estimated about one third of residents would be directly affected.

"These are people who have spent most of their lives working at the mine," Smylie said. "It has been challenging for a lot of our residents and the residents in the area as the jobs have been drying up."

Coal power profitability is becoming less attractive as the costs of renewable power fall, said Binu Jeyakumar, the Pembina Institute's director of clean energy.

"It's good news for (greenhouse gas) reduction and the health of Albertans to have coal being phased out earlier," Jeyakumar said.

Jeyakumar cautioned that converted coal plants are unlikely to be as efficient as new natural gas-powered plants, and that emissions from the production and transportation of gas present an ongoing GHG risk.

TransAlta's announcement was related to the economics of producing power on coal with the carbon tax, Farrell said.

Farrell said TransAlta's GHG emissions will be under 11.5 million tonnes by the end of 2022, down almost 70 per cent from 2005. She added the company has cut 32 million tonnes per year across its global operations since 2005.

TransAlta said it will stop burning coal in its Keepphills Unit 1 and Sundance Unit 4 plants, which will operate at lower capacity with natural gas, while it evaluates full conversion projects.

The company will still produce power from coal at its Centralia facility in Washington state, which has a transition agreement allowing it to burn coal until its end of life in 2025, Farrell said.

TransAlta also owns a 50 per cent stake in the Sheerness power plant in eastern Alberta, which is operated by American firm Heartland Generation Ltd., and continues to burn coal although it has some dual-fuel capabilities.

B.C.'s high court upholds new trial for two managers after spill at mine

(Source: CBC News) The Banks Island Gold mine began commercial production in January 2015, and was ordered to cease operations in July 2015. In January 2016, the company filed for bankruptcy. (courtesy Ian McAllister)

A new trial will go ahead for two senior executives of a now-closed gold mine in northwestern British Columbia.

B.C. Court of Appeal Justice Lauri Ann Fenlon issued the decision Thursday after rejecting appeals from Benjamin Mossman and Dirk Meckert.

The two opposed a lower court order overturning their acquittals on charges related to a 2015 spill from the Banks Island Gold site, which is also known as the Yellow Giant mine, 120 kilometres south of Prince Rupert.

Mossman's two convictions and \$15,000 fine for minor offences relating to the spill were also set aside by the court.

The men argued unsuccessfully that the B.C. Supreme Court judge who ordered the new trial in February made several errors and used the wrong framework to assess alleged charter breaches.

The Yellow Giant mine closed in 2015, shortly after enforcement officers from Environment and Climate Change Canada said waste from the operation had been found in the woods and wetlands surrounding it.

Court documents show Mossman was the president, CEO and manager of the gold and silver mine, while Meckert was the chief geologist and assistant mine manager.

A date for a new trial has not been set.

Federal government tells Teck to improve water quality from 2 B.C. coal operations

A road sign to one of Teck's mines. Teck is a significant economic force in the Elk Valley. (Josh Pagé/CBC)

Teck Resources Ltd. says it has been ordered by Environment and Climate Change Canada to improve the quality of water affected by two of its coal mining operations in B.C.'s Elk Valley.

The company said in a statement the direction to Teck Coal Ltd. from the federal government is under the Fisheries Act and doesn't resolve potential charges it had previously been notified about.

Teck said discussions with respect to the charges continue.

The statement said the measures to improve water quality and prevent calcite deposits from the Fording River and Greenhills coal sites complement the plan Teck is already implementing in the valley.

It says the government direction will require spending of \$350 million to \$400 million over 10 years, which is beyond its water quality plan.

The statement says two facilities that are under construction should be operating by the end of this year or early 2021, giving treatment capacity of 47.5 million litres of water per day, compared with the current daily output of 7.5 million litres.

Teck's Fording River and Greenhills operations are near Elkford in southeastern B.C. They are two of four Teck steel-making coal operations in the Elk Valley.

REMEDIATION TECHNOLOGY NEWS AND RESOURCES

(The following are selected items from the US EPA's Tech Direct - <http://clu-in.org/techdirect/>)

Upcoming Live Internet Seminars

ITRC Geospatial Analysis for Optimization at Environmental Sites - November 17, 2020, 1:00PM-3:15PM EST (18:00-20:15 GMT). The purpose of ITRC's Geospatial Analysis for Optimization at Environmental Sites (GRO-1) guidance document and this associated training is to explain, educate, and train state regulators and other practitioners in understanding and using geospatial analyses to evaluate optimization opportunities at environmental sites. With the ITRC GRO-1 web-based guidance document and this associated training class, project managers will be able to: evaluate available data and site needs to determine if geospatial analyses are appropriate for a given site; for a project and specific life-cycle stage, identify optimization questions where geospatial methods can contribute to better decision making; for a project and optimization question(s), select appropriate geospatial method(s) and software using the geospatial analysis work flow, tables and flow charts in the guidance document; with geospatial analyses results (note: some geospatial analyses may be performed by the project manager, but many geospatial analyses will be performed by technical experts), explain what the results mean and appropriately apply in decision making; and use the project manager's tool box, interactive flow charts for choosing geospatial methods and review checklist to use geospatial analyses confidently in decision making. For more information and to register, see <http://www.itrcweb.org> or <https://clu-in.org/live>.

FRTR at 30 Years: A Retrospective of Applied Innovative Technologies for Successful Site Remediation - November 18, 2020, 1:00PM-3:30PM EST (18:00-20:30 GMT). The Fall 2020 Meeting of the Federal Remediation Technologies Roundtable (FRTR) will be held as a webinar session on Thursday, Nov. 18, 2020. As always, FRTR meetings are open to the public. FRTR's objectives for this meeting are to: provide a retrospective on 30 years of interagency collaboration, technology transfer and advocacy by FRTR to advance technology innovation for site remediation; and highlight current FRTR initiatives in technology transfer and applied innovative technology that are contributing to successful site remediation. For more information and to register, see <https://clu-in.org/live>.

SERDP ESTCP Abiotic Degradation of Chlorinated Solvents in Subsurface Environments - November 19, 2020, 12:00 PM EST (17:00 GMT). Join SERDP and ESTCP on Thursday, November 19th for a webinar featuring DoD-funded research efforts to measure and enhance abiotic natural attenuation (ANA) under in situ conditions. First, Dr. Paul Tratnyek of the Oregon Health & Science University will present his work developing three core concepts for characterizing ANA and in situ chemical reduction more broadly. He will also summarize efforts to date to further the first two concepts. Second, Dr. Michelle Scherer of the University of Iowa will summarize efforts to evaluate factors controlling ANA of chlorinated solvents by magnetite and clay minerals. For more information and to register, see <https://serdp-estcp.org/Tools-and-Training/Webinar-Series/11-19-2020>.

ITRC Optimizing Injection Strategies and In situ Remediation Performance - December 1, 2020, 1:00PM-3:15PM EST (18:00-20:15 GMT). ITRC developed the guidance: Optimizing Injection Strategies and In Situ Remediation Performance (OIS-ISRP-1) and this associated training course to identify challenges that may impede or limit remedy effectiveness and discuss the potential optimization strategies, and specific actions that can be pursued, to improve the performance of in situ remediation by: refining and evaluating remedial design site characterization data; selecting the correct amendment; choosing delivery methods for site-specific

conditions; creating design specifications; conducting performance evaluations, and optimizing underperforming in situ remedies. The target audience for this guidance and training course is: environmental consultants, responsible parties, federal and state regulators, as well as community and tribal stakeholders. This training will support users in efficiently and confidently applying the guidance at their remediation sites. An optimization case study is shared to illustrate the use of the associated guidance document. For more information and to register, see <https://www.itrcweb.org> or <https://clu-in.org/live>.

New Documents and Web Resources

ITRC Per- and Polyfluoroalkyl Substances (PFAS) and Risk Communication Fact Sheets. ITRC's PFAS Team has released 12 updated and new fact sheets - 11 PFAS fact sheets and one risk communication toolkit fact sheet. The PFAS Team developed the short fact sheets with updated content to replace the older, longer fact sheets. For more detailed information, users of the fact sheets will also want to access the newly updated PFAS Technical and Regulatory Guidance Document. View or download at <https://pfas-1.itrcweb.org/fact-sheets/>.

Technology Innovation News Survey Corner. The Technology Innovation News Survey contains market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. Recent issues, complete archives, and subscription information is available at <https://clu-in.org/products/tins/>. The following resources were included in recent issues:

- Final Year 1 Semiannual Report for the Site Investigation for Monitored Natural Attenuation Pilot Study Site 45 Former Building 200 Wash Rack Disposal Pit Volume 1 of 3 NAS Jacksonville FL
- PFAS Degradation and Mass Removal Using Thermally-Enhanced Persulfate Oxidation Followed by Pump-and-Treat
- Evaluating the Long-Term Ecological Responses to Riparian Ecosystem Restoration at the Fort Benning, Georgia Military Installation

New State Coalition for Remediation of Drycleaners Website.

The State Coalition for Remediation of Drycleaners (SCRD) can now be found online on the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) website at <http://astswmo.org/state-coalition-for-remediation-of-drycleaners-scrd-publications/#>. SCR D was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. The Coalition includes states with established drycleaner remediation programs (member states) and states without drycleaner-specific remediation programs but who are involved in the remediation of drycleaner sites under other authorities (represented states). Any state or agency that has an interest in drycleaner remediation is welcome to attend SCR D's quarterly calls. Interested parties may contact the current chair, Steve Teel, Washington State Department of Ecology (steve.teel@ecy.wa.gov).

UPCOMING EVENTS

AER: TRAINING SESSION: WELLS FUNCTIONALITY MOVING INTO ONESTOP

Starting on November 26, 2020, there will be updates to well applications within OneStop. To support OneStop users, we will be hosting virtual training sessions. These sessions will prepare industry for submissions related to well amendments, re-entries, deepenings and cancellations, and provide general OneStop updates. Participants can choose from four sessions.

Register To register, visit our [events page](#).

For more information about these training sessions, email industryrelations@aer.ca.

**SMART REMEDIATION
INTRODUCES 2021 VIRTUAL SEMINARS
CALL FOR ABSTRACTS**



Due to the COVID 19 Pandemic and expected travel restrictions we have decided to hold SMART as a Virtual Seminar Series in 2021. We are looking at ways to have Live Networking and Remote Speakers so attendees can interact in real time. More on the virtual experience to follow.

SMART talks have focused on innovative technologies for contaminated sites, approaches for characterization, case studies, regulatory and industry perspectives, and more. We invite you to share your experience with our environmental community. Topics of interest could include (but not limited to):

- Treatment Systems / Methods (Physical / Biological / Chemical / Thermal)
- Advances with in-situ and ex-situ remediation
- On-site excess soil treatment and management
- Risk Assessments and Remediation
- Sub-slab depressurization and vapour intrusion control
- Regulatory / Industry Perspectives on site remediation
- Solidification / Stabilization
- Natural Attenuation
- Advanced site characterization, delineation and monitoring
- Emerging Technologies
- Emerging Contaminants
- Interesting developments in the research field
- Case Studies

For more information on SMART Remediation and past topics, visit www.smartremediation.com.

Abstracts should be no more than 500 words and include a presentation description and presenter biography. If you are interested in submitting an abstract or have any questions, please contact [Bruce Tunncliffe](mailto:Bruce.Tunncliffe). Please submit your abstract/presentation to info@smartremediation.com by November 20, 2020.

We are considering two-half day events, one the end January 2021 and one in February 2021. Your input on format would also be appreciated! If you would like to help us with the organization or any of our events, please reach out to help, we enjoy working with others to ensure the SMART Remediation events are of the highest quality and value to our amazing environmental community!

For more information, please visit www.smartremediation.com.

Join the discussion on

RCA RECYCLING COUNCIL
OF ALBERTA

chemical recycling

RCA Webinar 10 am – noon MT, November 17

Many organizations are looking to accomplish diversion goals and better manage plastic. There is also increased involvement from government with single-use plastic bans, recycled content requirements and policies to advance recycling. Companies in Canada, the United States and Europe have been tackling plastic management challenges with chemical recycling – breaking plastic down into monomers to rebuild into new plastics.

Is it too good to be true and where are the opportunities? There is a lot at stake – both for environmental outcomes and the market to manage plastics – estimated at \$120 billion by Closed Loop Partners. The RCA will bring these

organizations together in a webinar on November 17 with a focus on how these technologies might influence the future of plastics recycling. Register at <https://recycle.ab.ca/workshop/rcas-2020-webinar-series/>

BCEIA Webinar: An Introduction to Indigenous Law and Environmental Management - Registration Now Open!

Wednesday, November 25, 2020 | 4 to 6 PM (PST)

BCEIA's First Nations Committee is pleased to invite you to an educational webinar featuring presentations by Deborah Curran, *Executive Director, Environmental Law Centre, University of Victoria* and John Borrows, *Canada Research Chair in Indigenous Law, University of Victoria*. Topics to be discussed include:

- An overview of Indigenous Law as it relates to the environment
- Details regarding how Indigenous Law is created
- Indigenous community processes and how they interact with colonial environmental management systems
- Examples of Indigenous environmental law in action.

BCEIA Members \$25 | Non-Members \$35

Proceeds from the webinar will support BCEIA First Nations scholarship funding.

[**Register Online**](#)

Industry Positions Openings



As a benefit of ESAA Membership, ESAA Members can now post position openings on our website at no charge. Position opening ads also will appear in the newsletter at no charge. For full details visit: <https://www.esaa.org/news/job-board/>

Note: You must still complete the advertising form. After completing the order form, you will receive an email with a link to post your position.

Non-Members are welcome to advertise as well for a nominal charge. Visit [advertising form](#) to place your order.

Job Title	Organization	Application Deadline	Term	Details
Consultant	Fort McKay Metis Nation	2020-11-10	Contract	more
Planner, Lands	ATCO Electric	2020-11-10	Full-Time	more
Data Entry/ Remediation Technician	Trium Environmental Inc.	2020-11-13	Contract	more
Intermediate Environmental Scientist - Field	360 Energy Liability Management	2020-11-30	Full-Time	more
VP Environmental, Alberta	H3M Environmental Ltd.	2020-11-30	Full-Time	more
Project Manager	H3M Environmental Ltd.	2020-11-30	Full-Time	more