

November 2022



The Community Connector

BIANNUAL NEWSLETTER - ISSUE 6

INSIDE

Collaborative Oil and Gas Restoration Advisory Committee

Safeguarding our Environment and Protecting Public Safety

Commission Crossword

The Community Connector

Territorial Acknowledgement

We acknowledge and respect the many Indigenous Territories and Treaty areas, each with unique cultures, languages, legal traditions and relationships to the land and water, which the BC Oil and Gas Commission’s work spans. We also respectfully acknowledge the Métis and Inuit people living across B.C.

Cover photo taken from Windfall Lake, Tumbler Ridge, B.C.

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Message from the CEO



Welcome to another issue of the Community Connector where you can find out about the inner workings of the BC Oil and Gas Commission (Commission). There is discussion on how wildfires are managed; a collaboration with First Nations on the restoration of oil and gas sites; and a profile of our senior petroleum geologist who not only studies the subsurface, but also oversees and responds if there are any seismic events as a result of oil and gas development.

That just touches on the breadth of articles you'll find here, but I also wanted to let you know about some exciting news that will transform our organization. The provincial government has passed legislation making the Commission the single-window life cycle regulator for the production of hydrogen. This is in addition to our responsibilities for oil, gas and geothermal development and aligns with our goal to be part of the energy transition and a low carbon economy.

It also modernizes our Board of Directors and in recognition of a renewed and expanded mandate, we would also become the British Columbia Energy Regulator. There is a proud history to the BC Oil and Gas Commission and all of the incredible work and changes it has adapted to in its quarter century of operations. We see the new name as testament to all that has been accomplished and sets us up for future success in the years ahead.

The transition will take time, but you should begin to see some changes early in the new year... and the next time I address you through this newsletter, I believe it will be as CEO of the British Columbia Energy Regulator.

Until then, please enjoy this issue and my wish is for everyone to have a safe and restful holiday season as it seems as though that's just around the corner.

Wildfires and the Energy Sector: A Collaborative Approach

Effective wildfire management for the oil and gas sector begins well before any incident occurs. In early spring, invitations are sent to key industry and local government agencies. They all:

- take part in seasonal hazard briefings;
- update key points of contact;
- review critical processes, such as how BC Wildfire Service (Wildfire Service) works with pipeline companies when heavy equipment needs to work near their lines;
- look at updated tools for situational awareness; and
- apply FireSmart practices, similar to those used by homeowners and communities, to minimize risks to their sites.

When a wildfire occurs, the Commission's own emergency management team quickly identifies all permit holders nearby and organizes a coordination call with Emergency Management BC, Wildfire Service's incident management team, and other subject matter experts such as weather forecasters and fire behaviour specialists. Fire information provided through the Commission can be imported into a company's own mapping tools to know where people and assets may be at risk.

In some cases, evacuation areas and states of local emergency declared by municipalities and regional districts can also affect permit holder operations. These updates and directions are also shared with companies who may be affected. Similar to phone, power and other essential services, sometimes a company's staff needs to enter an area and conduct safety checks on equipment. The Commission works with local authorities and the Wildfire Service to ensure access control protocols are understood and efforts to minimize risks within an affected area are coordinated.



Bearhole Fire, photo taken on Sept. 16, 2022.

Dig into archaeology with the BC Oil and Gas Commission!
Don't miss our newest webinar on demand: Archaeology. The link to this presentation will be emailed to everyone who RSVP's, on Nov. 30, 2022, at 11 am MST. If you're interested in learning more, email stakeholder@bcogc.ca.

To learn more about FireSmart practices, visit firesmartbc.ca.

Department Highlight: An Introduction to Public Trust

Our Public Trust team, previously known as Communications, consists of 10 people who work hard through a variety of communication tools and media to ensure the public, industry, Indigenous communities and government at all levels, better understand everything our Commission employees do to ensure B.C.'s energy resource activities are safe, environmentally leading and socially responsible.

More specifically, that means we're responsible for a variety of communication and engagement functions including: media relations; writing and distributing technical and information updates; strategic communications planning; managing digital content; internal communications; public relations and more.

You may see us out in the community at trade shows or supporting other staff at business meetings or technical presentations. Usually though, we're working behind the scenes to help create and support newsletters, such as this one, fact sheets, technical updates, directives and safety advisories. We routinely update the Commission's website and post regular content on our various social media platforms to inform the public and all those groups the Commission interacts with. We also do a lot of work internally, engaging with staff from different departments to ensure they are informed and prepared when they meet with the public and other organizations.

In addition to the Commission's five core values of Transparency, Innovation, Integrity, Respect and Responsiveness, the Public Trust team has three more: Collaboration, Authenticity and Creativity.

Next time you see us out in the community, be sure to say 'hello'. We'd be happy to chat.



Land owner - A person registered in the land title office as the registered owner of the land surface or as its purchaser under an agreement for sale, and a person to whom a disposition of Crown Land has been issued under the Land Act.



Short-term water use approval - issued under Section 10 of the Water Sustainability Act, authorizing a permit holder to divert or use water for a term less than 24 months.

Collaborative Oil and Gas Restoration Advisory Committee: Collaborating on Restoration

The Collaborative Oil and Gas Restoration Advisory Committee (committee) is developing inclusive and culturally relevant approaches for restoration of oil and gas sites. Working together has many benefits including sharing knowledge, experience, diverse perspectives, the power of common vision for change, and so much more.

The committee operates in northeast B.C. and members include representatives from Blueberry River First Nations, Doig River First Nation, Fort Nelson First Nation, Halfway River First Nation, McLeod Lake Indian Band, Prophet River First Nation, Sauteau First Nation, West Moberly First Nations, and the Commission.

We envision: “Landscape restoration that meets levels of ecological health necessary to support and sustain the restoration of treaty rights, including the ability to carry out Indigenous ways of life in the territories traditionally relied upon, as well as ensuring that restored ecological health is protected for our future generations to ensure cultural continuity.”

The committee has been working together for two years and continue to accomplish so much. There have been two workshops so far: one for engagement on the first draft of the Ecologically Suitable Species Guideline and another for Ecological Restoration that focused on sharing perspectives from the oil and gas industry, restoration practitioners and committee members.

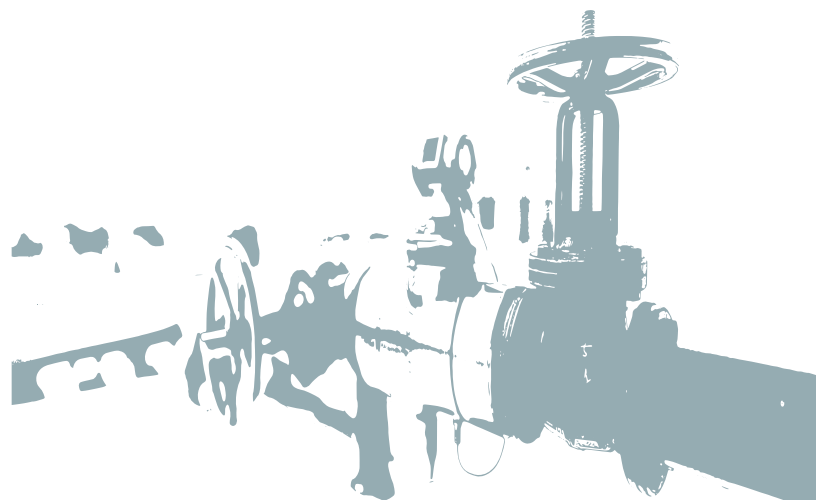
Our growing list of accomplishments includes:

- Engagement and feedback on the draft Ecologically Suitable Species Guideline.
- Updates and feedback on the [PNG Legacy Sites Restoration Program](#).
- Preliminary conversations on developing

a GIS-based mapping tool for reclamation/restoration related data.

- Updates on Commission restoration programs including the Restoration Framework, Orphan Sites Reclamation Fund Program, and Liability Management.
- Regulatory engagement and updates on the Dormancy and Shutdown Regulation.
- Updates and collaboration on ideas for the Indigenous Education Program.

If you have any questions about the committee, please email OGC.Webadmin@bcogc.ca.



Reviewing Industry Water Use - Fall 2022 Update

One of our goals is to increase compliance by ensuring companies follow their water licence conditions. You may remember reading about our surface water licence audit in the [May 2021 issue](#) of this newsletter. Now, the Commission's Stewardship Water Team (Water Team) is focussing on groundwater licenses.

Water licenses granted by the Commission have standard conditions. These include conditions for withdrawal reporting and diversion rates specific to the water source. Through this year's audit process, the Water Team identified 10 groundwater licences held by 10 operators to make sure they are following their licence conditions.

The Water Team sent letters in September 2022, to each licence holder asking them how they follow diversion rate conditions and calculate their actual daily withdrawal volumes. The deadline to respond was October 2022. Submissions are under review and next steps will be decided for any deficiencies we identify. Results of the audit will be posted on our website so stay tuned!



If you are new to reading the Community Connector and you like what you see, please see the past issues posted on our [website](#). You can also get on our distribution list by sending your request to stakeholder@bcogc.ca.

MYTH!

Myth! The Commission controls the cost of gas/diesel at the pump.

Prices at the pump are based on several factors (location, crude price, refining price, etc.), and are not set or influenced by the Commission. For more information on this, please visit the [Gas Prices BC website](#).

Expanding Northeast B.C.'s Water Monitoring Network - Fall 2022 Update

As a follow up to the [Spring 2022 Community Connector](#) article - Expanding Northeast B.C.'s Water Monitoring Network - the Commission's Stewardship Water Team (Water Team) has now wrapped up the summer field season on the BC Oil and Gas Research and Innovation Society (OGRIS) and Geoscience BC projects.

Hydrometric data collected through both projects will be processed and posted to the B.C. provincial Aquarius [website](#) and the [Water Portal](#) in coming months. Locations of the hydrometric stations are Osborn River and Doig River (Doig River First Nation), Aitken Creek and Blueberry River (Blueberry River First Nations), Le Bleu Creek (Saulteau First Nations), Hulcross Creek (Saulteau First Nations and West Moberly First Nations), Stewart Creek (McLeod Lake Indian Band) and Martin Creek* (Prophet River First Nation).

The expansion of the hydrometric program

through the Geoscience BC project has continued to foster building relationships with the First Nation communities that started through the OGRIS project. Ministry of Forests Water Authorization Specialists from the Fort St. John office continue to assist with monitoring both project stations.

A combined in-class/field-based hydrometric training session for the Treaty 8 First Nations was delivered on Sept. 21, 2022, on the Beatton River with help from Peace Country Technical Services, the Ministry of Environment and Water Survey of Canada.

The Water Team is very excited to continue leading these two hydrometric projects in collaboration with our numerous partners.

If you have any questions about the OGRIS or Geoscience BC water projects, please contact us at OGC.Webadmin@bcogc.ca.

***The Martin Creek station was not operated in the 2022 season. It was assessed for suitability in October 2022 and will resume monitoring flows in summer 2023.**



High flow discharge measurement on Hulcross Creek.



Low flow discharge measurement and survey on the Blueberry River.

Staff Profile: Senior Petroleum Geologist

Stuart Venables, P.Geo



As a geologist with the Commission, my primary duty is to interpret and review the characteristics of formations (rocks!) from oil and gas producing zones (like the Montney formation) that are generally two to four km below the surface. I look at the product the formation will produce (e.g., oil, natural gas, condensate) and work with our reservoir engineers to further understand how much can potentially be withdrawn.

In recent years, some oil and gas injection activities (such as fracturing and disposal) have resulted in seismic events, or earthquakes. I've

taken on the role of overseeing and responding to these events, along with the Commission's Senior Reservoir Engineer. Together, we look at it from both a geological perspective and an engineering perspective for a combined response.

We have worked diligently to attract and fund research into induced seismicity and to deploy monitoring stations. We have over 30 seismic stations providing real-time data along the Montney fairway and around the Horn River Basin. These stations enable the Commission to oversee and respond to significant events. All of this is made possible through partnerships we have with Geoscience BC, BC OGRIS, Pacific Geoscience Centre (a division of NRCan) and McGill University. Real time data is collected and interpreted for use in enforcing our regulatory framework and research.

When we first began to have seismic events, it coincided with McGill University's desire to deploy a temporary seismic station array to monitor induced seismicity. We convinced them to deploy their stations in the greater Farmington area. Shortly after the work began, one of the primary researchers at McGill left to go to Ruhr University Bochum in Germany, but they were thrilled with the research that was happening. As soon as they were settled at Ruhr University, they arranged to have the school send an additional six stations to monitor the region for three years (2019-2022). And so began an international partnership!

The relationships we've formed with other organizations makes the ongoing oversight and research into induced seismicity within northeast B.C. possible.

Induced Seismicity - an event resulting from human activity and can be caused by industries such as mining and natural gas development. Induced seismicity is seldom felt at the surface and in British Columbia events have been recorded at low magnitudes.



Safeguarding our Environment and Protecting Public Safety

In early 2022, Fort Nelson First Nation (FNFN) contacted the Commission to discuss their concerns about fuel barrels they found at a remote airstrip in the Thinahtea area northeast of Fort Nelson. The remote airstrip included a stockpile of 107 barrels of aviation fuel. The barrels had been abandoned at the airstrip since the mid 1990's. No owner could be found for the fuel.

FNFN partnered with the Commission to arrange removal of the aviation fuel with funding from the Commission. A project plan was drafted, and a contractor was hired to organize and carry out the project. The final cleanup took place in late August 2022.

The cleanup involved personnel from the Commission, FNFN, a helicopter company, and ground support crews. A pre-work meeting was held to go over the project plan, site safety plan, and role and task assignments to ensure things went as smoothly as possible. Training was provided by the helicopter company on helicopter safety, slinging, and operation of the fuel pump and Fuel Easy bladders that would be employed during removal of the fuel.

On the first day of the project, the Commission and FNFN personnel and ground support crews travelled to a staging area on a high-grade road, as close as possible to the remote airstrip. The ground support crew was divided into two groups; one to remain at the staging area and one at the airstrip where the fuel barrels were located.

Because of their age, the barrels were deemed structurally unsound for intact transport so the crew at the airstrip used a pump to empty all fuel into the Fuel Easy bladders. The bladders were slung by helicopter to the staging crew and emptied into a tanker truck. The empty barrels were then netted and slung to the staging area.

At the end of the project, the empty barrels were sent to Richmond Steel in Fort Nelson for recycling. The aviation fuel was transported to Fort Nelson in the tanker, where it will be used to heat industrial shops over the next number of years. The storage site at the airstrip is now being assessed to ensure any residual fuel is cleaned up.

We are proud to have worked with FNFN to complete this project and thank them for bringing forward this potential environmental hazard.



Working in the Thinahtea field to remove aviation fuel barrels.

Did You Know?

The Commission considers oil and gas sites as temporary; therefore, careful planning beforehand is required to ensure a project's successful completion.

MYTH!

Myth! The Commission regulates truck transport and highway conditions.

The Commission does not regulate truck transportation or highway conditions. In general, B.C. highways are the responsibility of the Ministry of Transportation and Infrastructure. Transportation of dangerous goods (such as gasoline/diesel) are subject to both federal and provincial laws and regulations.

Things to note...

Want to win a Bluetooth Speaker? Join our Regional Networking Group (RNG) for a chance to win!

The RNG includes private land owners and the Commission's Community Engagement team. We share information with land owners and give them the opportunity to send us their feedback and ask questions. This group is open to all land owners across B.C.

RNG members receive information about upcoming Commission events, industry updates, energy development and how we regulate it.

If you would like to join our group (and enter to win) – please phone 250-794-5200 or email us at stakeholder@bcogc.ca. We look forward to hearing from you!

TERMINOLOGY TO NOTE

Freshet - a term used to describe peak discharge in a river, generally occurring in relation to the spring melt of snow or ice in a river or stream watershed. This can last for days to weeks depending on the stream system and can occur throughout the open water season across the province.



Hydrogeology - study of the movement, location and quality of water in geological formations below the earth's surface.

Did You Know?

Did you know you can call in any concern or complaint to the Commission 24 hours a day? All reported concerns and complaints are logged and addressed. If you are a member of the public and would like to bring your concerns about a specific oil and gas activity to our attention, call us at 250-794-5200.

For a toll-free way to reach us, call Service BC at 1-800-663-7867 and ask them to redirect you to the BC Oil and Gas Commission.

Dams and Dam Safety

A dam is a barrier constructed for the storage or diversion of water from a stream or an aquifer or both and must store water above the natural surface grade of the surrounding area. In 2017, the Commission was delegated the authority by the province of British Columbia to regulate dam structures used for oil and gas purposes.

Dams ensure water collected in the spring (when streams are at peak flow) can be drawn upon in the future, when it's needed to complete an oil and gas activity. If a company wants to construct and operate a dam, they must apply for and obtain a water licence through our application process. All dams regulated by the Commission have undergone thorough reviews by Commission staff, including engineers.

Since 2017, we have worked with dam owners to make sure all existing dam structures are upgraded and operate to current standards. We have also worked with companies on construction of many new ones. As of October 2022, the Commission regulates 48 dams.

The [Dam Safety Regulation \(DSR\)](#) requires dam owners to complete the following at defined times:

- surveillance and formal inspections of their dam,
- a review of their Operation, Maintenance and Surveillance manuals and dam emergency plans, and
- a formal dam safety review.

As a result of these requirements, the Commission audits dam operators to ensure all documentation is up to date and all structures continue to be maintained and operated in a safe manner.

48

dams regulated



Aerial view of a dam in northeast B.C.

What's the difference between a dugout and a dam?

Dugouts are water storage structures that store water completely below the natural surface grade of the surrounding area.

Dams have “live storage”, meaning at least some of the water is above the natural surface grade of the surrounding area.

Co-Op Students

The Commission works with universities and colleges across British Columbia in the employment of co-op and summer students. The students work mostly within Compliance & Enforcement, Resource Stewardship, Engineering, and Information Systems and Technology departments.

For example, the Engineering Department routinely employs an engineering student for assistance with statistical data and annual report preparation. The opportunity allows the student to see tangible results of their work and how it influences economic and business decisions throughout the province.

Similarly, the Business Intelligence team hires students to enhance the analysis and governance of their data models. Over the years, the team has harnessed the innovative thinking of co-op students to create dashboards and infographics which inform internal department decisions. The students learn project management skills and work in an agile environment while bringing new technology and tools to the organization.

The Commission's co-op program has a holistic approach and managers and project teams provide students with a highly structured learning experience. The co-op program marries the student goals for work experience in their chosen field with hands on experience and networking, setting them up for future success.

Over the past 10 years, the Commission has had over 100 student placements and approximately one in five of those students have returned as permanent employees at the Commission. The students receive hands on mentorship, state-of-the-art technology, health and wellness monies, reimbursement of co-op fees, connections to leaders in the organization

and organizational wide learning opportunities. The Commission also ensures extra safety considerations are taken and provide safety orientation, mentoring and a buddy system. Many of the co-op students create peer connections at the offices and have been known to host lunch time events.

It is this energy and innovation that makes the co-op program a huge success for the Commission and why it continues to play an integral role in the Commission's workforce plan.

For more information, please email OGC.recruitment@bcogc.ca

This fall, the Commission was awarded the Employer of the Year award from the Fort Nelson Chamber of Commerce! We are so pleased to have been part of their Business and Community Excellence Awards, and look forward to continuing serving the public all over B.C.



A Commission employee accepting our award from the Fort Nelson Chamber of Commerce.

Commission Crossword

Email your completed crossword to Stakeholder@bcogc.ca by 4:30 p.m. MST on Dec. 16, 2022, for your chance to win a Bluetooth speaker!* The answer key will be posted on our website and the winner contacted on Dec, 19, 2022, by email.

*Commission employees are not eligible to win.

HINT: Most answers can be found on our website.

ACROSS

6. The legislation that protects heritage property in British Columbia. All archaeological sites are protected under this whether on private or public lands.

7. The company applying for or holding an oil and gas permit.

8. An event resulting from human activity, and can be caused by industries such as mining and natural gas development.

9. This fund is a levy on industry permit holders used to pay the cost of restoring orphan sites in B.C. (abbr.).

10. The exchange of information regarding proposed oil and gas activities between applicants and recipients within a designated distance.

12. Pre-planned responses to incidents to ensure protection of public health, safety, property and the environment and quick and effective responses.

14. Building and maintaining a mutually respectful relationship between Indigenous and non-Indigenous peoples in Canada.

15. The most prevalent and common component of most natural gas produced in British Columbia.

16. Process of restoring the surface area of a decommissioned wellsite, access road and related facilities to pre-operational conditions as is technically and economically feasible.

17. A person granted non-intensive occupation or use of Crown land by permit, licence, or approval.

18. A well, commonly a depleted oil or gas well, into which waste fluids can be injected for safe disposal.

19. Water occurring below surface, either in unconsolidated materials (ex. sand and gravel) or within bedrock.



Proponent - a company applying for or holding a permit to operate or construct an oil or gas site.

DOWN

1. Found when inspection shows regulations or permit conditions are not met.

2. Natural gas that contains measurable amounts of hydrogen sulphide (H₂S).

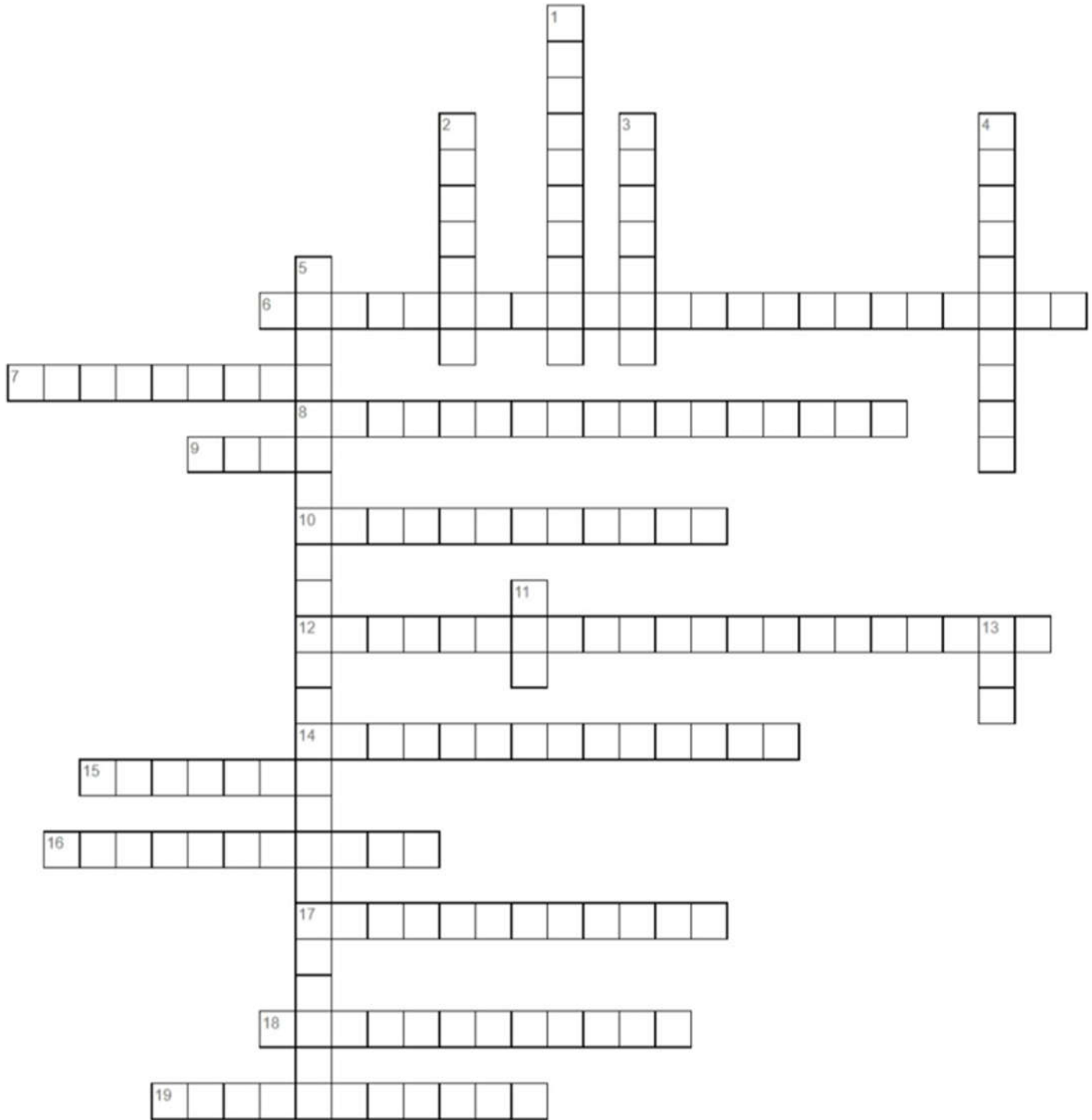
3. Disposal by combustion of natural gas or gas derived from petroleum.

4. The Commission monitors this which can be impacted by flaring, venting and equipment exhaust from oil and gas activities.

5. A document issued by the Commission certifying an abandoned wellsite has been restored to meet regulatory requirements.

11. Abbreviation for natural gas in a liquid state.

13. First Nations participating in this program hire Liaisons who engage with agency staff on joint inspections and training opportunities. Liaisons also conduct independent monitoring of important areas identified by their communities (abbr).





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Discover how we regulate energy in B.C.