

Frequently Asked Questions

Centralized Fluid Storage

June 2020

Background

Centralized fluid storage (CFS) allows hydraulic fracturing operators to store large volumes of produced water and other water-based fluids on sites for reuse instead of having it hauled away for disposal. By using Alberta Energy Regulator-approved CFS facilities such as those facilities with engineered containment ponds or aboveground synthetically-lined wall storage systems, operators will be able to safely store and monitor fluids for reuse. As a result, more water will stay in Alberta's rivers and lakes, there will be less truck traffic on Alberta's roads, and innovative technology will be used to keep Alberta's oil and gas industry operating safely.

Q1. What kind of fluid will these storage systems hold and how much risk does it pose?

A1. The storage systems will hold alternative waters including produced water and water-based hydraulic fracturing flowback fluid. These systems are carefully designed and operated to reduce the likelihood of a release and are closely monitored for any sign of a problem. Additionally, there are many safety mechanisms built into the design to ensure wildlife are protected such as fencing and bird netting. And, of course, they are located in areas that reduce the risk to both the public and the environment should a release occur.

Q2. Does this mean fewer rules for industry to follow?

A2. Industry has committed a lot of time, effort and money into working with the Alberta Energy Regulator (AER) to develop solutions that are efficient, safe, and reduce environmental impacts. Before the AER issues an approval for a CFS facility, the company must complete a considerable amount of work to ensure these fluid storage facilities are located away from water bodies and other sensitive areas and provide costs of closure to the AER to protect Albertans from unfunded liability.

Q3. Will these facilities have any benefits for Albertans and the environment?

A3. By using CFS facilities, industry can reuse produced water and flowback instead of pulling water from rivers and lakes for hydraulic fracturing operations. Additionally, these facilities will mean less truck traffic in communities and on roads.

Q4. How can we be confident these are a good idea?

A4. The AER has been working on this project for several years with industry experts and has considered feedback from stakeholders including industry, landowners, municipalities and environmental groups. Based on the research and analyses conducted, the AER is confident that the proper requirements and rules are in place.

Q5. How many of these CFS facilities are out there now? And how many can we expect to be built over the next five or 10 years?

A5. There are less than a dozen CFS facilities approved, with several built and operating; most are in the northwest part of the province. We expect to see more of them over the next five to 10 years (depending on industry activity levels) as more operators move toward this technology to reduce costs and improve their environmental performance.

Q6. How can people find out if one of these facilities is planned for their area?

A6. Applications for CFS facilities will be published on the AER's [Public Notice of Application page](#). Additionally, anyone with concerns with any application posted on our website is able to submit a [statement of concern](#) within the stated deadline with the AER.

Q7. Once these facilities are built, how can we know industry is operating them safely?

A7. The AER holds industry accountable; therefore, these facilities will be part of the AER's [compliance program](#) and subject to inspections like any other industry activity.

Q8. If there is a leak or spill, how much damage could it cause to the land, water, and wildlife?

A8. This a big consideration for both industry and the AER, which is why there are stringent controls and requirements for industry to follow. With the proper controls in place, when a release occurs it will cause minimal damage.

Q9. Will these facilities pose a risk to wildlife?

A9. The design of these facilities includes wildlife fencing and bird netting to protect animals from accidentally coming into contact with the stored fluid. They will also be carefully monitored by the operator to ensure the controls are an effective deterrent.

Q10. How does the CFS project coincide with the AER's work with water conservation and industry reporting?

A10. CFS aligns with the Government of Alberta’s direction on the conservation of water resources by enabling the use of alternative waters, such as produced water and water-based flowback in oil and gas operations.

Q11. Isn’t hydraulic fracturing risky? Does using this recycled water make it riskier?

A11. Hydraulic fracturing has been used in more than 180 000 wells in Alberta since the 1950s. To ensure hydraulic fracturing is done safely, the AER has several requirements for [hydraulic fracturing](#) operations and conducts regular inspections and audits to make sure these requirements are followed. To learn more about how hydraulic fracturing is regulated in Alberta, watch the [Is Fracking Safe?](#) video.

Reusing fluids that are destined for disposal reduces industry’s reliance on natural water sources. With the proper safety controls in place, including monitoring, storing alternative waters is low risk.

Q12. How long will these systems be up and on the land?

A12. These storage systems are an integral part of the hydraulic fracturing process and will be on the land for 10, 15, and perhaps 20 years as they support the development area.

Q13. If a company goes bankrupt, who will take care of these facilities?

A13. Part of the AER’s application process includes conducting a site-specific liability assessment before an approval for a centralized fluid storage facility is granted and is required to be updated every five years at a minimum. This ensures the company can cover its closure costs.

Q14. Will these facilities be visible to residents of nearby communities? Do they generate much noise?

A14. Yes, in many cases the facilities will be visible, especially the aboveground storage systems. However, CFS facilities do not generate noise.