

April 3, 2018

Landowner: TBA

Re: PROPOSED DISPOSAL WELLSITE INFORMATION LETTER

LANDS: SE 25-069-06W6

WELL NAME: PROGRESS GOLDCK 7-25-69-6

SURFACE LOCATION: 07-25-069-06W6

Dragos Energy will be applying to the Alberta Energy Regulator ("AER") for approval for a class II fluids disposal well at the location **7-25-69-6W6** as shown on the attached plot plan. The total vertical depth will be approx. **1295.0 m** and will be recompleted and operated in accordance with good oilfield practices as well as Alberta Environment and AER regulations. The following table summarizes the AER regulations for this well:

Description	Industry/Public Notification	Disclosure/Notification Radius
Produced Water Disposal (Class II)	Industry <ul style="list-style-type: none"> - Unit operator (if applicable) Approval holder of scheme <ul style="list-style-type: none"> - All well licensees, including those of abandoned wells - All mineral lessees - All mineral lessors 	A radius of 1.6 km from the proposed disposal well where the disposal zone is known to be present
	Public <ul style="list-style-type: none"> - Landowners and occupants 	A radius of 0.5 km

Specific information relative to this project is detailed below:

General Inquiries and Contact Persons:	Company (Drilling) Representative: Scott Lauginer	Telephone No: (587) 583-3455
	Surface Land:	Telephone No: (403) XXX
	Field Operations: Steve Laidlaw	Telephone No: (403) 869-9790
	Field/Construction Representative Steve Laidlaw	Telephone No: (403) 869-9790
Emergency Contact:	DRAGOS Main Line (24 hours)	Telephone No: (403) 269-2459
Surface Facility / Location:	SE 25-069-06W6	
General Description of Project:	DRAGOS proposes to re complete one vertical disposal water well on location 7-25-69-6W6. The disposal zone target formation (Cardium) does not typically contain H2S. Once approval has been granted, a service rig will be moved onto the location to complete and equip the well for disposal of water.	
Category / Type: (From AER D51)	Category: Class II	
	Description: Produced Water and Brine Equivalent Fluids Disposal refers to the injection of fluids into underground formations for purposes other than enhanced recovery or gas storage. Fluids included in a Class II disposal scheme may include: <ul style="list-style-type: none"> • Produced water associated with the recovery of oil, bitumen, gas, or coalbed methane • Brine from salt cavern or solution mining operations • Water-based pigging fluids from cleaning of collection and injection lines • Brine reject or backwash from water softeners associated with enhanced recovery • Water containing polymers or other chemicals for enhanced recovery • Waste fluids from circulation during well cementing • CaCl₂ water In addition to meeting the above criteria, information on the types and sources of wastes intended for disposal must be disclosed in the application for the disposal scheme. The information must support that the quality of the wastes is appropriate for the intended disposal zone based on well bore design/conditions, containment/isolation within the intended disposal zone, and protection of non-saline water sources. The AER will consider the information on a case-by-case basis while also considering other applicable provincial and federal acts and regulations, as well as information from other jurisdictions on deep-well disposal.	
Target Formation:	Cardium	
Need for Proposed Development, Existing and Future Plans:	Dragos Energy requires disposal for 3 rd party produced water and oilfield waste within the Gold Creek Kakwa Area, Alberta.	

Expected Substance Type:	<input type="checkbox"/> Oilfield/Industrial Wastes (Class Ia) <input checked="" type="checkbox"/> produced water/specified wastes (Class II) <input type="checkbox"/> All
Construction & Soil Conservation	Operational needs and environmental considerations will guide construction practices. Normal lease and access road construction practices involve separate stripping and storage of the A and B soil horizons. In the treed areas, the lease will be maintained in a manner to allow for eventual tree and bush regrowth. Efforts will be made to maintain topsoil quality, control weeds and minimize the amount of trees and land that is disturbed. Upon abandonment, the following drilling of a “dry hole” or after the well has reached economic limit, the lease will be reclaimed in accordance with provincial regulations as dictated by Alberta Environment.
On-Site Equipment Required:	In the event that the well is successful, the site will be equipped with tanks, pump and filter equipment, and constructed for ongoing injection purposes.
Potential Flaring Operations:	During drilling and completion operations, there is no potential for flaring/venting where no further notification is required.
Potential Emissions & Odours:	No significant odour emission during drilling and completion operations is anticipated.
Safety and Scheduling:	The wells will be equipped with standard oilfield safety equipment during each of the recompletion, equipping and ongoing operation phases. We anticipate commencing recompletion operations in Q2-2018 and expect the recompletion to take between 8-12 days . If successful, the well will then be equipped with tank storage and fluid injection equipment. We anticipate this to take 30 days .
Anticipated Noise:	The noise associated with the drilling and completion operations will be temporary in nature and we will adhere to the regulations set out in Directive 038 (Noise Control Directive) that defines permissible sound levels for all activities associated with oil and gas operations. Noise generated by production equipment will be controlled and meet all AER regulations.
Traffic Impacts:	All associated traffic will travel along the leased access road. Drivers will be made aware of traffic concerns and we will strive to ensure the speed of all associated traffic is within safe and legal limits. Completion operations will require 3-4 loads of equipment and service vehicle traffic. Traffic during the ongoing operation phase will include multiple tank trucks on a daily basis and various service equipment as required.
Emergency Response Plan:	The proposed well is going to be completed in the Cardium which has no potential for H₂S. The Cardium zone in the area is a water wet zone with minimal to no hydrocarbons. The Cardium zone is over-pressured , but is intended for the purpose of disposal and thus is not expected to produce or flow to surface at any time during operations. The Emergency Planning Radius is 0m from well center so a Site Specific Emergency Response Plan will be present on location. Dragos Energy will follow its Corporate Emergency Response Plan in the unlikely event of an emergency during the drilling, completion or operation of the proposed well. Dragos Energy stands behind its reputation of drilling, operating and constructing high standard facilities designed to meet or exceed all AER, safety and environmental protection guidelines and regulations.
H₂S Concentration:	<u>00.0</u> mol/kmol Emergency Planning Radius: <u>0.000</u> km Release Rate: <u>0.0000</u>m³/s
Setbacks:	As with all wells, pipelines and facilities, there are setbacks put in place as a minimum distance between an energy facility and a dwelling, public facility, rural housing project or urban centre. Simply put, setbacks prevent populated areas from developing too close to energy facilities or energy facilities getting too close to people. No development will be permitted within 100 metres of the well head unless all applicable relaxation consents can be obtained. Contact your local municipality for further details on their specific development setbacks and relaxation policies.
Hydraulic Isolation	Disposal approvals specify the disposal zone and limit injection to that zone only. Migration of disposal fluids to other zones is highly undesirable. Dragos Energy will provide the necessary logs, including pressure testing, and additional information to AER to confirm that there is no flow of injected fluid behind casing or associated aquifers based upon the initial pressure of the zone.

Emergency Planning & Emergency Contact Information:

Dragos Energy has a corporate Emergency Response Plan in place. The emergency contact number for Dragos Energy is **403-269-2459**. A site specific emergency response plan is not required for this facility as per AER guidelines.

EnerFAQs

Further to the foregoing information, available online through AER Public Information, please contact the undersigned or these may be downloaded from AER’s website at: <http://www.aer.ca/about-aer/enerfaqs>

- What is the AER?
- Having Your Say at an AER Hearing
- Inspections and Enforcement of Energy Developments in Alberta
- All About Critical Sour Wells
- Explaining AER Setbacks
- Flaring and Incineration
- Proposed Oil and Gas Wells, Pipelines, and Facilities: A Landowner’s Guide
- The AER and You: Agreements, Commitments, and Conditions
- All About Alternative Dispute Resolution (ADR)
- Oil Sands
- Expressing Your Concerns – How to File a Statement of Concern About an Energy Resource Project
- How to Register a Private Surface Agreement

This notice is being provided to you pursuant to AER Directive 51: Injection and Disposal Wells requirements. Should you require further information or clarification regarding this or any other proposed development by Dragos Energy please contact the undersigned directly at **403-869-9790**.

Sincerely,
Dragos Energy

Per:
Steve Laidlaw
Drilling & Completions Engineer

CONFIRMATION OF NON-OBJECTION

I/We have no concerns or objection to the AER issuing a permit to Dragos Energy to apply to license a disposal water well for 07-25-069-06W6 (AER Class II).

Dated this _____ day of _____, 2018.

Name:
Title:

Name:
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