

Via Email

June 23, 2017

Heather and Dale Sorenson

Calgary Head Office
Suite 1000, 250 – 5 Street SW
Calgary, Alberta T2P 0R4
Canada

Dear Sir and Madam:

www.aer.ca

**RE: Request for Regulatory Appeal by Heather and Dale Sorenson
Tidewater Midstream and Infrastructure Ltd.
Application No.: 1823491 (License F48965); 1839269 (Licence 57708)
Application No.: 1876945 (Directive 051 Gas Injection Approval for Licence 0124064)
Application No.: 1858587 (Transfer of Gas Storage Approval 12203A)
Location: 08-25-071-07W6M; 02-35-071-07W6M; 05-36-071-07W6M
Regulatory Appeal No. 1849419, 1880296, 1881743 (Regulatory Appeal)**

The Alberta Energy Regulator (AER) has considered your requests under section 38 of the *Responsible Energy Development Act (REDA)* for a regulatory appeal of the AER's decision to approve the Licences. The AER has reviewed your submissions and the submissions made by Tidewater Midstream and Infrastructure Ltd (Tidewater).

The applicable provision of *REDA* in regard to regulatory appeals, section 38, states:

38(1) An eligible person may request a regulatory appeal of an appealable decision by filing a request for regulatory appeal with the Regulator in accordance with the rules. [emphasis added]

The term "eligible person" is defined in section 36(b)(ii) of *REDA* to include:

a person who is directly and adversely affected by a decision made under an energy resource enactment, if that decision was made without a hearing.

For the reasons that follow, the AER has decided that you are not directly and adversely affected by a decision made under an energy resource enactment and are therefore not eligible to request a regulatory appeal in this matter. Therefore, the requests for a Regulatory Appeal are dismissed.

Reasons for Decision

In your regulatory appeal requests, your primary concerns are with safety in the event of an incident relating to Tidewater's gas injection and storage operations.

At the outset, the AER notes that the concerns you have raised and the impacts you have alleged are the same as or similar to those raised previously in statements of concern filed by you or on your behalf with respect to the initial facility and pipeline applications filed by Tidewater (1823491 and 1839269). In its written response to your statements of concern, the AER found that you would not be directly and adversely affected by the applications, which have now been approved. Reasons were provided for this finding, and you have provided very little additional information to support that you are or may be directly and adversely affected by these decisions.

In your request for a regulatory appeal of pipeline Licence 57708, you have not indicated how you are or may be impacted by the pipeline. Instead, you questioned the AER's due diligence on reviewing the safety of the pipeline having regard for its proximity to county residents and the City of Grande Prairie.

Please note that Tidewater must comply with a number of operational requirements and technical specifications in the design, construction, and operation of its pipeline. The AER thoroughly reviews the application to ensure that all technical requirements are met. Tidewater will also use Supervisory

Control and Data Acquisition equipment to provide 24 hour a day monitoring of the pipeline for possible leaks or ruptures. The pipeline will have emergency shutdown valves and pressure control devices which will activate in the event of a change in pressure. Please also note that the pipeline has recently been amended to account for lower operating pressure and a smaller diameter of pipe. Given the above, the distance of the nearest boundary of your lands from the pipeline (approximately 428 meters away), and the fact that the pipeline will transport sweet natural gas, you have not demonstrated that you are or may be directly and adversely affected by its decision to approve pipeline 57708.

As noted by the AER previously, your lands are located just over one kilometer from the facility. Your main concern about the gas storage facility and injection of gas into the underground reservoir is the possibility that these operations will result in a 'catastrophic accident'. You have cited examples of gas leaks and fires that have occurred at facilities in other jurisdictions in support of this view.

The examples of incidents you have provided are not relevant to the AER's consideration of whether you may be impacted by Tidewater's storage scheme and related facilities because these incidents relate to different operators in separate jurisdictions, operating under different requirements. The 2014 incident in Saskatchewan appears to relate to a solution mined storage salt cavern at a pumping tank, which is different than storage of gas into a depleted naturally occurring gas reservoir. The incident in California appears to have been caused as a result of safety valves being intentionally removed and not replaced from a well that was drilled in 1953.

There are numerous reservoirs in Alberta currently operating under gas injection and storage approvals. The Dimsdale Paddy A reservoir into which gas will be injected is approximately 1,300 meters below the surface. It is an approximately 10 m thick porous rock formation. Gas is injected and stored within the porous rock. Prior to being used for injection, natural gas had been produced from the reservoir. Prior to being depleted due to production, the original reservoir pressure was 10,485 kPa. Tidewater's storage approval prohibits the average reservoir pressure from exceeding the initial reservoir pressure, and limits the volume of gas that can be injected. The 2-35 well that has been approved for injection has met all Directive 051 requirements for injection operations, including requirements for well integrity. Further, injection at a well must not exceed the maximum wellhead injection pressure prescribed in Tidewater's scheme approval, determined through the Directive 065 application process.

You have also stated that you have concerns with the integrity of casing for suspended offset wells not licensed to Tidewater and previously drilled through the Paddy Dimsdale A reservoir. Offset wells drilled through the Paddy Dimsdale A wells were considered and assessed in relation to the proposed injection and storage scheme as part of both Directive 065 and Directive 051 technical application review processes. These wells have been part of the subject pool's production history from January 1987 to the date of the last known production in November 2013. The AER considered the integrity of these wellbores and potential for cross-migration of gas at the time of these applications and was satisfied that injection into the reservoir could occur without compromising the integrity of these wells. In addition, as part of the injection and scheme approval process, licensees of offset wells were notified of the applications and given an opportunity to raise issues and concerns with respect to their wells, and no such concerns were raised.

Regarding the church that you believe is too close to the facility and within AER setbacks for public facilities, please note that the setbacks you refer to apply to sour gas wells, facilities and pipelines. Please note that Tidewater's Gas storage approval only permits the injection of sweet gas, hence there is no possibility of a leak involving H₂S.

The AER's has numerous requirements with which Tidewater must comply to ensure that groundwater sources are protected. Given the nature and depth of the reservoir into which injection will occur, and the AER's numerous requirements which are protective of groundwater sources, it is very unlikely that your well water will be impacted.

The decision to approve an energy activity, including injection of gas into an underground formation, assumes operational compliance with all AER requirements and approval conditions. Tidewater must operate in accordance with the terms and conditions of its approval as well as all AER operating requirements. It is a contravention of AER requirements to impact ground water sources due to energy activities. Any such contravention would be subject to AER enforcement action, which may include suspension of operations and other remedial action. To report any impacts to your well water which may be caused by energy resource activity, please call the **AER's Energy and Environmental 24-hour Response Line at 1-800-222-6514**. The AER notes that Tidewater has gone beyond AER requirements by committing to perform baseline and follow-up tests of your water. The AER expects that the follow-up water well tests will have been or will be performed and analyzed under the direction of a qualified professional registered with APEGA, and provided to water well owners as well the AER's Grande Prairie Field Center.

Your concerns about odours and noise were raised in your statements of concern and previously addressed by the AER in its December 10, 2015 letter in response to your statement of concern. The AER reiterates that Tidewater has employed noise and odour reduction techniques and equipment at its facility and there are operational requirements with which Tidewater must comply that address such concerns. The AER also notes that you are approximately 1050 meters from the facility.

For these reasons and the reasons previously stated, you have not demonstrated that you are or may be directly and adversely impacted by gas injection into the reservoir, noise, or odours associated with Tidewater's project.

Regarding your concerns about stakeholder engagement on behalf of Tidewater, as you are aware the AER has required Tidewater to bolster its participant engagement program, including requiring Tidewater to notify you of and file all future applications non-routinely if they relate to Tidewater's gas storage project. The AER is satisfied that since your regulatory appeals have been filed Tidewater has devoted additional time and effort towards addressing stakeholder concerns about its proposed gas storage project and related infrastructure. If other residents identify themselves as having concerns with Tidewater's project, Tidewater must notify them in the same manner. The AER has also recently advised that it expects Tidewater to bundle its individual applications wherever possible so that the AER can consider the applications, potential impacts, and statements of concern on a project basis. Tidewater's most recent applications have followed this process.

You also stated that you had concerns about the lack of notification of the application for the initial Gas Storage Approval Scheme 12203A. This scheme was approved on January 2, 2014, in the name of Ranchwest Energy Inc. As that application was for subsurface scheme approval, AER requirements required subsurface interest holders only to be notified at that time. As a landowner with known concerns about the gas storage project, Tidewater is and was required to notify you of all surface infrastructure applications. As you know, the AER also recently directed Tidewater to apply non-routinely for and notify you of all applications regarding its gas storage project, whether subsurface or surface related.

Regarding Tidewater's Directive 051 application for gas injection at well licence 0124064, the approval was issued prior to any statements of concern being filed due to an inadvertent technical error in the

AER's processing of the application as 'routine'. This processing error has been rectified on a go forward basis, and any deficiency in the process you have received has been remedied by your filing of a regulatory appeal request on the Directive 051 approval for gas injection, which provided you with an opportunity to have your concerns about the approval considered by the AER. . Your concerns about gas injection wells approved under the Directive 051 process are addressed above.

You stated that no injection operations should be approved while active regulatory appeals are before the AER, and that there were previous instructions from the AER to this effect. Please note that filing a regulatory appeal request does not automatically stay or suspend an approval, and Tidewater is entitled to construct and operate in accordance with AER approvals and requirements. The AER wrote to you on March 8th and 10th, 2017, and advised you that the RA's would be considered because Tidewater had revoked its previous voluntary suspension of its operations.

Regarding your concern that Tidewater's application 1876425 for an amendment to Licence 55371 failed to follow AER Participant Involvement requirements, appropriate compliance measures were taken against Tidewater by the AER. The AER acknowledges that because of the failure to follow AER notification requirements, your statement of concern regarding application 1876425 was not considered prior to approval. However, this deficiency has been remedied by the AER accepting your statement of concern as a regulatory appeal request. Having reviewed the same, the impacts you have raised will not result from the reversal in flow of a previously approved and constructed pipeline located more than a kilometer away from you, and you are not directly and adversely impacted by the amendment to the Licence.

The AER finds that you have not demonstrated that you are or may be directly and adversely affected by the decision to issue the licences and approvals captioned above. Therefore, you are not an eligible person for the purposes of section 38(1) of REDA and the request for a regulatory appeal is dismissed.

Sincerely,

< original signed by >

K. Parks
Chief Geologist

< original signed by >

K. Fisher
Manager, Regulatory Effectiveness,

< original signed by >

R. Marx
Director, Regulatory Development, Strategic Management

Cc: Tidewater