

Ohio Department of Natural Resources

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Division of Oil & Gas Resource Management Richard J. Simmers, Chief 2045 Morse Road, Bldg. F-3 Columbus, OH 43229-6693 phone: 614/265-6922

September 18, 2014

Mr. Ryan A. Thompson Clearwater Technologies, LLC 626 Beaver Street Sewickley, PA 15143

RE: Clearwater Technologies, LLC

Application to Operate a Facility

Mr. Thompson:

The Division of Oil & Gas Resource Management (DOGRM) received the application for an order to operate a facility on September 5, 2014, submitted by Clearwater Technologies, LLC. After review of the application and supporting documents, please give consideration to the items listed below and provide a response as to how they will be addressed.

- Sediments, tank bottoms and used filter media are materials that may be encountered in the operations at the proposed facility and these materials are considered to be technically enhanced normally occurring radiological materials (TENORM) as defined in Section 3748.1 of the Ohio Revised Code (ORC). TENORM is required to be tested by the owner for the purpose of determining lawful disposal options. In the detailed description of the facility operations, it states that sludge will be dewatered and the cakes will be sent to the landfill. This material is considered TENORM and must be managed in accordance with Section 1509.074 of the Ohio Revised Code (ORC). I have included this section of the law for your reference.
- A Radiation Protection Plan for the protection of the environment and of the workers is highly recommended. The plan should contain measures investigating and addressing exposure pathways (shielding and distance) and time of exposure for the workers, public and the environment. DOGRM would recommend a Radiation Safety Officer or some other qualified person to develop a specific radiation protection plan for your facility.
- Provide details on containment systems and action plans to be utilized in the event that there is a spill or a failure of one or multiple storage tanks.
- Provide Material Safety Data Sheets for the chemicals to be used on site. The submitted description identified hydrochloric acid and hydrated lime as chemicals that will be used and stored on site.

Administrative rules regulating construction and operation of facilities that treat, recycle, store, and/or process oil and gas waste substances are currently being drafted. To better align this facility for

compliance with the future rules, the division would highly recommend consideration of the following items that address location, construction and operation of a facility:

- Design elements that are necessary for construction in or in close proximity to surface waters, drinking water sources, flood plains, environmentally sensitive areas, and residential or public gathering areas.
- Full construction documents developed and sealed by an Ohio registered professional engineer, to include existing and proposed infrastructure, buildings, equipment, utilities, loading areas, containments systems, security and other stationary items to be operated under the facility permit.
- Spill and secondary containment for all waste storage vessels.
- Geotechnical investigation as necessary to ensure the site is stable and suitable for the intended operation.
- Environmental site assessment to determine baseline soil & water conditions and potential migration pathways. In the event of closure and reclamation of the facility this information will set desired clean-up levels equal to the pre-operating conditions.
- Storm water hydraulic evaluation and design for the site, including an emergency containment plan in the event of a release of waste constituents from the site.
- Erosion & sediment control plan for the site during and after construction.
- Operation and Maintenance plan, to include safety and emergency measures.
- Radiation Protection Plan for the facility and the workers as discussed above.
- Closure and Reclamation Plan for the facility in the event the facility ceases operations.

If you have any questions, please contact me at 614/265-6905 or by email at beth.pratt@dnr.state.oh.us.

Sincerely,

Beth A. Pratt, P.E. DOGRM Engineer

enclosures

C: Ron Trivisonno, P.E., DOGRM Engineer Blake Arthur, P.E., DOGRM Engineer