

## Clearwater Technologies LLC

Facilitating the Industry Solution to Environmental Stewardship

Ryan A. Thompson, CEO 626 Beaver Street Sewickley, PA 15143 \$\frac{1}{2}\$ 412.741.8189 ryanthompson@pennclearwater.com



September 4, 2014

Beth Pratt
Ohio Department of Natural Resources
Division of Oil and Gas Resources Management
2045 Morse Road, Building F-2
Columbus, Ohio 43229-6693

Re: Ohio DNR Application to Operate a Facility Submission

#### Dear Ms. Pratt:

As per our telephone conversation of today with your colleague Blake Arthur, please find enclosed herewith the required documentation submitted by Clearwater Technologies LLC for review and processing by the Division of Oil and Gas Resources Management in reference to an Ohio DNR *Application To Operate A Facility*.

The recommended documentation has been submitted to you as required both electronically via email, and herewith in the form of two (2) hard copies.

We appreciate your assistance in this matter. Please do not hesitate to contact me with any questions or for any required additional information.

Regards,

Ryan Thompson

CEO, Clearwater Technologies LLC

Enclosures (2)



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### APPLICATION TO OPERATE A FACILITY

Ohio Department of Natural Resources Attn: Chief of Division of Oil and Gas Resources Management Division of Oil and Gas Resources Management 2045 Morse Road, Building F-2 Columbus, Ohio 43229-6693

Dear Chief of the Division of Oil and Gas Resources Management:

Clearwater Technologies LLC would like to respectfully submit herewith the following recommended documentation in reference to an Ohio DNR *Application To Operate A Facility* application submission:

- Completed application form signed by Clearwater Technology CEO Ryan Thompson.
- II. Map and aerial photographs of the proposed site.
- III. Detailed explanation of the proposed process to store, recycle, treat, process or dispose of brine and other waste substances from production operations, including:
  - a. Water processing plant service offering description
  - b. General process description
  - c. General process flow schematic
  - d. Disclosure of chemical reagents and MSDS and a description of their function
- IV. Estimated volume of materials to be managed by the facility daily, monthly and annually.
- V. Methods of documenting the type and volume of materials received and reused, and the disposition of materials from the facility.

The recommended documentation is being submitted in the form of one (1) electronic copy and two (2) hard copies.

Specializing in providing practical and safe environmental solutions for industrial water use processes, construction operation compliance to water standards, and affordable solutions for water protection, Clearwater Technologies incorporates proven water treatment processes with state of the art technology, resulting in cost-effective, safe solutions for the clients we serve. Our focus is enabling clients to bring their wastewater disposal practices—in the most economical and efficient manner—into stringent tolerances acceptable by the DEP and EPA. We are solidly committed to working with partners to successfully facilitate the industry solution to environmental stewardship in light of ever-increasing public, regulatory and legal pressure for proactive and optimally-effective wastewater treatment processes.

Thank you for your consideration, and please do not hesitate to contact us with any questions or for any required additional information.

Regards,

Ryan Thompson CEO, Clearwater Technologies LLC



I. Completed and Signed Application Form

### **APPLICATION TO OPERATE A FACILITY**

OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT
2045 MORSE ROAD, BUILDING F-2
COLUMBUS, OHIO 43229-6693
(614) 265-6922

1.	Name of Applicant: Clearwater Technologies LLC Phone #: 412-741-8189
	Address: 626 Beaver Street, Sewickley, PA 15143
	Date: 8-22-2014 eMail Address: ryanthompson@pennclearwater.com
	For an Order or a Permit to Operate: Existing Facility New Facility
-	PURPOSE OF FACILITY: Storage Recycling Treatment
2.	PORPOSE OF FACILITY.
	(Check an that Apply)
3.	TYPE OF MATERIAL:
	Brine Drill Cuttings
	Drilling Mud Other Waste Substance (explain)
4.	If a Business Entity, list the statutory agent and include a certified copy of their appointment:
7.	Name: Clearwater Technologies LLC
	Address: 626 Beaver Street, Sewickley, PA 15143
	Address. Ozobedver street, servicing, In the servicing servici
5.	Engineer of Record:
	Name: James Albertz
	Address: Green Energy Initiatives LLC, 45050 National Road, St. Clairsville, OH 43950
	Ohio Professional Engineering License Number: #53228
6.	Address of Facility:
0.	Address: 219 Public Road. Yorkville, OH
	The state of the s
	Township: Warren
	Municipal Corporation:
	Latitude: 40.163549
	Longitude:80.701144
7.	Write a brief description of the facility and operations: The facility located at the ESMARK (formerly the
	Ohio Cold Rolling Co. and Wheeling Pitt Steel plant) steel mill will capture the existing water treatment infrastructure currently
	permitted for the treatment of wastewater generated in the steel production process. The equipment including oil/water
	separator, sand filtration, aeration, and clarifiers will be repurposed to effectively and efficiently treat oil-produced, gas-produced
	and flowback wastewaters. The existing infrastructure has a full capacity of 1.5mm gpd operations and will require little modification to generate immediate services for the industry. The treatment facility, which will operate 24/7 for various oil and gas
	producers in the region, will treat for suspended solids, dissolved solids, pH neutralization and biocides.
	producers in the region, will treat for suspended solids, dissolved solids, pri neutral accounts.
8.	Include all information as set forth in the "Guidelines for Application for Chief's Order". Attach Additional Documents
I, the undersigned, being first duly sworn, depose and state under penalties of law, that I am authorized to make this application, that this application was prepared by me or under my supervision and direction, and that the facts stated herein are true, correct, and complete, to the best of my knowledge.	
I certify that the facility will comply with or is currently in compliance with all provisions of Chapter 1509 ORC, Chapter 1501 OAC, and all terms and conditions of orders and permits issued by the Chief, Division of Oil and Gas Resources Management.	
Signature of Authorized Agent	
Nar	ne (Type or Print) Ryan A. Thompson Title PRESIDENT
_	day of Scalember 2014.
	orn to and subscribed before me this the day of day of  R 1509.22 (12/2013)

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal
Gwendolyn L. Safran, Notary Public
Sewickley Boro, Allegheny County
My Commission Expires April 8, 2015
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

(Notary Public) (Date Commission Expires)



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II. Map and Aerial Photographs of Proposed Site







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### III.d. Disclosure of Chemical Reagents and MSDS and Description of Their Function

Refer to General Process Flow schematic on previous page (HCL and Hydrated Lime).

#### Estimated Volume of Materials to be Managed by the Facility Daily, IV. **Monthly and Annually**

The estimated volume of materials to be managed by the facility is 750K gallons per day over a 350-day year (262.5M gallons annually).

# V. Methods of Documenting the Type and Volume of Materials Received and Reused, and the Disposition of Materials From the Facility

- Water flow samples are collected at discharge points.
- Inbound water is verified against bills of lading.
- Volumes are measured through calibrated Flow Meters/Totalizers at truck unloading and loading points.
- Water samples are periodically gathered at all truck loading points.

NOTE: Any additional monitoring requirements as determined by the Ohio DNR will be incorporated as necessary as dictated by measuring frequency, sampling type and monitoring months.