

Facilities operating under HB 59. Rules have not been finalized for these facilities.

1) 4 K Industrial Park, LLC
1001 Main St.
Martins Ferry, Ohio 43935

application 46 pages

Will utilize waste treatment resources of the former RG steel Martins Ferry Ohio operation. Treatment of hydraulic fracturing water, and drilling fluids to acceptable quality for recycle back to drilling companies for reuse. Various chemical additives will be used. The operation will be a zero discharge system requiring modification of the NPDS permit. Chemicals include, but are not limited to, sulfuric acid, L, soda ash, 30% caustic, polymer flocculant.

Water received will be pumped into a 200,000 gallons incoming storage tank. The current proposed treatment will allow between 135,000 and 150,000 gallons of flow back per day. The facility is located in Belmont County borders the Ohio River on the west at mile marker 88.5.

A technician will walk around the truck with a hand-held radiation survey monitor and record the survey. The top hatch will be opened and the following air contaminants will be screened with a hand-held calibrated instrument with in the headspace of the truck, Hydrogen sulfide, percent oxygen, LEL, methane, carbon monoxide.

Facility is under 24-hour surveillance by security cameras strategically placed on the property.

Process residue will be collected within the geo-tube filter bag stored in roll-off container. The contents of which will be tested in accordance with the approved landfills acceptance policy. NORM/TENORM, liquids will be screened in the laboratory if reasons are found for further analysis. Samples will be collected and sent to an approved laboratory for radium 226 and 228. The Ohio Department of Health will be consulted for guidance in proper handling of elevated levels. Current options for disposal considerations are approved dilution techniques, transport to approve low-level radiation landfill or to a Michigan landfill that allows levels up to 15 picocuries/grams for contaminated material.

2) Antero resources
Brine treatment and recycling
Miley Pad, Noble County, Ohio

application 39 pages

The facility will be capable of treating up to 12,000 barrels per day, which is equivalent to a design capacity of 504,000 gallons per day. It is anticipated that a flow of 100,000 barrels per month (4,200,000 gallons per month) will be processed. Approximately 1 ton of wet sludge is generated per 1000 barrels of flow treated, which is equivalent to about 100 tons per month of anticipated flow.

Sludges will be solidified with fly ash and sent to the WMI Northwest landfill in Parkersburg, West Virginia. The WMI landfill does not require testing TENORM.

3) Buckeye brine, LLC
6505 US 36.
Tuscarawas, OH

application broken down into multiple files

The facility will receive waste oil field fluids and treat them to specifications suitable for reuse as Fracking fluid. The facility will also receive oilfield sludges and solids, de- water them with a centrifuge. The solids will go to a landfill in a dry state requiring no further. Solidification, while the water will be introduced into our recycling operation, or disposed of in our injection well, 30 miles away to the east in Coshocton. All vessels intended to be processed in the solids. Facility will be scanned using a handheld Scintillation monitor.

Note: letter to ODNR, since starting operations, we have received over 1 million barrels of fluid and have accumulated a considerable inventory of solids. We first clean solids out of our tanks in July and did so again in early September. Owing to widespread confusion and concern about the TENORM rules and guidance, we have been unable to get the material except that at any Ohio landfill. After much struggling, we have finally managed to start moving the material to a landfill outside of Ohio. Meanwhile, we face the need for another tank cleanout immediately at a time when we are under way with some new construction projects. We need to move our solids out of the Coshocton facility and store them at another location until we can dewater the solids. To the extent possible through gravity separation in preparation for shipping them to a landfill.

4)Chesapeake Exploration LLC application multiple files
9125 Dawson Road.
Hopedale, OH

Electrocoagulation , solids are skimmed, decanted and properly disposed in accordance with current regulations. This appears to be a mobile unit maximum processing capacity is 10,000 barrels a day.

5)CNX gas company LLC
Cowgill Road.
Sarahsville, OH

The proposed facility is an in ground centralized impoundment the facility will receive freshwater flow back in produced fluids from multiple Consol gas operations. The fluids will be stored in the impoundment and sent to surrounding Consol Utica Wells for recycling during frack operations. The facility will have a 6 inch clay liner, covered with a secondary HDPE liner, covered by a geo-net fabric for the leak detection layer than a primary HDPE liner. Facility will operate with automatic security and fluid tracking system.

The total volume of storage will be approximately 10,000,000 gallons with 2 feet freeboard. Fluids will be delivered to the site via pipeline and possibly by tanker trucks. Depth of the impoundment will average 16 feet, with up to 22 feet at the sump. No mention of how solids will be handled.

6)Dow Cameron oil and gas.
1470 Adamsville Rd
Zanesville, Ohio

Facility receives oil and gas brine filters to remove suspended solids, then transports filtered water to accepted disposal Wells. Solidification process has been implemented in order to manage all residual solids. No mention of what this process is or where the solids are disposed of.

**7)EnerGreen 360 Holding Company LLC
East Ohio regional industrial Park
Belmont County, Warren Township**

Will manufacture several products and structural fill to develop the property. The material will be used at the same location that the treatment process takes place, structural fill for pad ready sites – drilling sites eligible to be under ODNR authority. Road base for construction of least roads – within regulated area. The property will be developed with the chemically and geotechnically treated material. Once placed in the backfill the professional engineer will render the site “clean” certified under Ohio voluntary action program (OEPA) issuing a “no further action” letter on the redeveloped site.

Our intent is to remain on the site developing sections of the 200+ acres in 6 acre tracts as we go.

**8)Enviro Clean Services
515 Industrial Blvd.
Wooster, Ohio**

Centralized waste treatment facility. All waste brought into the facility for solidification unloaded into solidification pit, mixed with sawdust and auto fluff and tire fluff. Can manage 90 – 100 tons per day. The facility may also accept tank bottoms for treatment. Solids to be disposed of at a permitted landfill. Facility also plans to accept TENORM waste for down blending. The facility will conduct a “finger printing” test on the waste with a Rad – Alert 100 radiation screening unit.

**9)Enviro Tank Clean.
Belpre, OH**

Basically the same operation as Enviro Clean above. Same owner from West Virginia.

**10)GreenHunter Water
50810 State Route 7
Washington County, Grandview Township**

Brine holding facility. Brine water is held until capacity is available at one of five permitted disposal Wells in Ohio or to permitted disposal Wells in West Virginia. If water is received that because of solids cannot be taken directly to a disposal well, the water is processed through a vibration system that removes the solids. The water is then taken to disposal well for injection or offered back to the producer. As of yet, no producer has taken the water. Solids are taken to Waste Management through a WV disposal profile. This landfill does not require TENORM testing.

**11)Halliburton energy services, Inc.
liquid mud plant
Zanesville, Ohio**

application 398 pages

Use drilling mud, containing any contained drilling solids, is placed into the facility storage tanks for processing. The use drilling mud may be processed through a centrifuge at the LMP to physically

separate out the drilling solids from the use drilling mud. Solid and liquid chemicals are mixed with the recycle drilling mud to create the different consistencies and types of drilling mud required for specific well drilling applications. The facility is capable of handling and processing more than 250 barrels per day of drilling mud.

**12)Heckmann Water Resources Inc.
935 E. Pike
Norwich Ohio**

Storage facility consists of six – 500 barrel frack tanks. Each bracket tank is individually filled directly from the truck. All frack tanks are located inside of the Earth and containment with a 16mm HDPE textured liner, with a 10 ounce nonwoven geotextile between the Earth and the liner. Depending on the need of the customer, the brine inside the tank is either disposed of at an injection well or returned to the customer. No comment on treatment of solids.

**13)Iron Eagle Sherrodsville, LLC
20 S. Church St.
Sherrodsville, OH**

The site for the proposed transfer station will be on the same location as the proposed, iron Eagle treatment facility, whose preliminary notice has already been supplied to ODNR. **NOTE: preliminary notice for Iron Eagle treatment facility has not been included in ODNR response to my records request.**

**14)Liquid waste solidification LLC
440 S. 3rd St.
Steubenville, Ohio**

A pre-frack nonhazardous solidification facility. We solidify 100% of all liquids that are brought into our facility. We are a fully indoor facility on a concrete floor without any floor drains in our entire facility. We empty the waste into our 1/2 inch thick steel bends that are 6 feet deep, 10 feet wide and 30 feet long. We then add solidification agents such as sawdust and quicklime and mix within excavator. Once the material is to a point that it will pass the paint filter test we then load it into a truck and ship it to our local landfill APEX. Presently handling anywhere from 100 to 500 barrels a week.

**15)Somerset regional water resources.
43031 Industrial Park Dr.
Cadiz, OH**

Proposing to construct a beneficial reuse wastewater treatment facility to treat wastewater, and drilling muds that will be trucked in from the oil and natural gas wells. Will be receiving frack flow back water, produced water, and drilling muds from the oil and natural gas wells to be treated and reused at well sites. Will also treat pipeline testing water and drilling mud for reuse at oil and natural gas drilling sites.

Each truck will be tested for drip gas level and radiation scan will be performed using a handheld instrument prior to and loading. If radiation readings are below are permit level the water will be pumped into the DAF unit. Anticipated volume, 600,000 gallons daily. Dewatered mud will be placed in

the roll-off boxes will be hauled off-site for disposal at an approved landfill. The roll-off boxes will be scanned for radiation levels prior to be sent off-site.

16)The Belden brick company.
375 Dover Rd. NW.
Sugar Creek, Ohio

Brine is hauled from production tanks at the well to the brine storage facility and placed in tanks where it is stored until it is taken by truck to be used for dust control on our haul roads.

17)Weavertown Transport Leasing, Inc.
2741 Stonecreek Rd, Southwest
New Philadelphia, Ohio

Cleans tote containers used for oil and gas primarily in Eastern Ohio. Future plans for expansion of service to be provided at the facility will include solidification of drilling mud, CNET water, and drill cuttings and brine water processing poor recycling and/or transport to class II injection well. Solids will be sent to a landfill. Anticipated that the treatment facility could process up to 200,000 gallons per day. Application does discuss down blending but does not discuss how tested.

18. Warren Drilling
305 Smithson Street
Dexter City, OH

Write a brief description of the facility and operations: Brine Storage consisting of 4 ea 500 bbl frac tanks. The frac tanks will be parked parallel on containment with no interconnections. Brine will be trucked to and from as operation requires. Containment liner will be PIG Well Pad Liner 130 #MAT7000 - 130 mil,,PIG Well Pad Liner 130Extra-thick liner is designed for long term use over coarse, sharp or shift-prone subbase. Polypropylene composite consists of three barrier films sandwiched by double layers of

19. CMS Oilfield Services
69500 Bannock Road
St Clairsville, OH

Storage, drilling mud, drill cuttings, other. Flow Back, Produced waste and sand.

Temporarily store above materials from surrounding natural gas drill sites in frac tanks with proper containment. . Separate solids from liquids , filter liquids for reuse or deep well disposal .Solids will be solidified or hauled as is to appropriate landfill.

20. Keystone Clearwater Solutions, LLC
Grunder Pad to Jenkins Pad to Ocel Pad
Carroll County

Write a brief description of the facility and operations: Fresh waterline transporting water from to and from impoundments to be used for hydraulic fracturing practices at 3 well pad sites. The well pads are named Grunder, Jenkins and Ocel. The one end of the waterline is located at the Ocel Pad in Fox Township and travels to the west and ends at the Grunder pad, north of Carrollton.

**21. NuGlobal Water Solutions, LLC
44995 Dickerson Church Road
Cadis, OH**

Write a brief description of the facility and operations: NuGlobal Water intends to install a semi-permanent water treatment center at the above stated address. The multi patented process involves a number of steps and will be customized to treat and clean produced and frac water, from oil and gas operations, to specific standards so that it can be reused for furthering fracking jobs or safely disposed of.

**22. Industrial Waste Control/Ground Tech.
240 Sinter Court
Youngstown, OH**

Industrial Waste Control/Ground Tech., Inc. (“IWC/Ground Tech.”) proposes to operate the IWC/Ground Tech. Facility located at 240 Sinter Court, Youngstown, Ohio (“IWC/Ground Tech. Facility”). The IWC/Ground Tech. Facility will perform radiological waste characterization, tank cleaning and decontamination, waste solidification, brine storage, and preparation for disposal operations. The radiological waste characterization and handling at the IWC/Ground Tech. Facility will be performed by Austin Master Services, LLC, who has been issued License for Radioactive Material No. 03219 510000 by the Ohio Department of Health.

**23. K&H
28333 West Belpre Pike
Coolville, OH**

Solidification facility. Solids sent to landfill in WV. Not TENORM testing re