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Environmental Quality
Board

west virginia department of environmental protection

Office of Legal Services
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0460 Phone
(304) 926-0461 Fax

Harold D. Ward, Cabinet Secretary
dep.wv.gov

August 29, 2024

Re: Riverside Valley Services, Inc. v. WVDEP
Appeal No. **24-08-EQB**

Dear Ms. DeRaimo:

On behalf of the West Virginia Department of Environmental Protection, Division of Water and Waste Management, please find enclosed the following documents to supplement the record in regard to Appeal No. 24-08-EQB, Riverside Valley Services, LLC. v. WVDEP.

- Correspondence from the WVDEP to Riverside Processing, LLC c/o Comtech Industries, Inc. dated January 5, 2024.
- Certification from the Secretary of State of the State of West Virginia.
- Waste Profile Sheet: Sludge – Hydrocarbon (Solid) from Riverside Valley Services, LLC.
- Treatment Process Description by Riverside Valley Services, LLC. Dated May 1, 2024.
- Email correspondence dated May 29, 2024.

Please do not hesitate to contact me if you have any questions.

Sincerely

A handwritten signature in blue ink, appearing to read 'J. Frame', is written over the name 'Jon C. Frame' which is printed below it.

Jon C. Frame

Enclosures

Promoting a healthy environment.



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street, SE
Charleston, WV 25304
Phone: 304-926-0495

Harold D. Ward, Cabinet Secretary
dep.wv.gov

January 5, 2024

Riverside Processing, LLC c/o Comtech Industries, Inc
Allison Knowles Lloyd, CSP
1300 Ashwood Drive, Suite 1301
Canonsburg, PA, 15317

CERTIFIED RETURN RECEIPT REQUESTED

Re: Riverside Processing, LLC
Permit Determination
Marshall County, West Virginia

Dear Ms. Lloyd:

The agency reviewed Ascent Consulting and Engineering submission on behalf of Riverside Processing, LLC c/o Comtech Industries, Inc. Facility (Riverside Processing, LLC) in Marshall County, West Virginia. The request, emailed on July 8, 2023, and supplemented with additional information on December 27, 2023, aims to ascertain the regulatory prerequisites for a wastewater treatment facility managing brine/wastewater derived from oil and gas-related waste.

Riverside Processing LLC is planning a two-phase wastewater treatment facility. In the initial phase, brine water from WV and OH is received, treated in one of two basins (the second basin is for clean water), each with a capacity of approximately 20,000 gallons. The treated wastewater is subsequently transported through a new pipeline to the Ohio River, loaded onto a barge, and disposed of out of state.

The second stage of the operation involves setting up a new tent-style structure with a shallow foundation for processing production fluids. The tent, equipped with processing tanks and filters, will be in its own containment, ensuring periodic monitoring for leaks. The foundation includes a composite liner, interstitial space, and secondary containment with berms. Processed water will be transferred to the existing treatment facility for final filtering and settling before being stored in a clean basin for transport out of State. The second basin will handle sludge/sediment, mixed with fly ash for disposal at an approved out-of-state facility. All basins are sealed to prevent leaks, with a protected area for truck activities. Regular monitoring, checklists, and training will ensure compliance with regulations, and **Riverside Processing, LLC cannot dispose of treated wastewater or solid waste within the state.**

Also, since the owner/operator does not propose to discharge pollutants per the definition in 47 CSR 10-2.13/2.14 or 47 CSR 2-2.14, a WV/NPDES Individual Permit Application is not required currently per 47 CSR 10-4.1. a.

Any future construction of a process wastewater discharge pipe to navigable waters will require a WV/NPDES Individual Permit Application, will be subject to the NSPS of 40 CFR 437, will require a WV/NPDES permit, will require the establishment of baseline water quality (60 CSR 5), and result in effluent limitations from the federal guideline being applicable to the effluents from each individual treatment unit's discharge to ensure performance standards are met. Therefore, if the future includes constructing a process wastewater discharge point source to any navigable water, it is recommended that the Best Available Technology identified during development of the effluent guideline be installed at the facility during construction. Best Available Technology (under PSNS) would also be required if there is any future for the discharge of process wastewater to a Publicly Owned Treatment Works (POTW) as a non-domestic user. A modification to the POTW's NPDES permit, and an anti-degradation review would be required.

Considering the above, the agency does not object to the proposed waste treatment facility contingent upon the following:

- **There shall be no potential to discharge any pollutants from any point source to the State's waters as defined by 47 CSR 10-2.13/2.14, 47 CSR 2-2.14, or 47 CSR 10-2.38 either by the owner / operator of the proposed treatment unit or the owner / operator of any facility accepting treated/recycled wastewater unless the owner / operator holds an active WV/NPDES Individual Industrial permit for the discharge of those pollutants.**
- Contaminated or uncontaminated storm water or any other discharges via any point source from the facility is also prohibited without an active WV/NPDES permit. Any stormwater discharge controlled via a point source as defined per 47 CSR 10-2.38 must be covered under an Individual Industrial WV/NPDES permit prior to construction of any treatment/disposal system that proposes to add pollutants via a point source. In addition, construction of the facility may require registration under WV/NPDES General Permit No. WV0115924, Stormwater Associated with Construction Activities. **An Individual Industrial WV/NPDES Permit or MSGP (Multi-Sector General Permit) would be required for stormwater discharges from facility operations of this type.**
- The owner/operator shall comply with all regulations for this type of operation specified by the Resource Conservation and Recovery Act (RCRA), Clean Air Act, or additional Clean Water Act programs (ex. Oil and Gas or Underground Injection Control).
- The facility is subject to the Groundwater Protection Act (47 CSR 58) and therefore all tanks should be properly constructed (minimum number of liners and thicknesses, leak detection systems, etc.) and all tanks shall be installed with secondary containment as necessary. Baseline/routine groundwater monitoring and best management practices may be required for any in-ground impoundments that are designed to hold raw fracturing

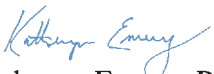
wastewater prior to and/or post treatment. The facility is required to maintain an approved GPP on the site.

- The owner/operator must obtain approval from the agency prior to disposal of any sludges/solids generated by the facility. The owner/operator may not accept Technically Enhanced Naturally Occurring Radioactive Materials (TENORM, 64 CSR 23). To determine if TENORM is going to be accepted at your facility, it is suggested that all raw wastewater is sampled and analyzed to confirm that radionuclides are either absent or de minimus in all sources of fracturing wastewater. If radionuclides are present in sufficient levels, the facility must be certified by the WVDHHR or the NRC to accept TENORM and routine monitoring of radionuclides may be necessary. Please contact Tera Patton, of the Office of Environmental Health Services/Radiation, Toxics and Indoor Division prior to accepting wastewater that has the potential to contain TENORM.

The agency encourages all owners/operators to obtain coverage under a WV/NPDES permit when operating a closed disposal/treatment system where toxic pollutant are present to ensure that proper operation, maintenance, and management practices are employed to protect human health and the environment. Please be aware that owners / operators that do not hold an active WV/NPDES permit may not claim certain provisions of the permit should an illicit discharge occur that impacts waters of the State. For example, leakage, bypass or upset of the disposal/treatment system beyond the control of the owner/operator cannot be considered an acceptable defense in the case of an enforcement action brought against the owner/operator by this agency or by any third party (including the USEPA) without a WV/NPDES Permit.

If you have any questions, please contact Yogesh Patel, P.E. of this office at (304) 926-0499 ext. 43877.

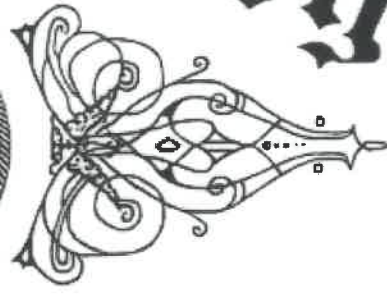
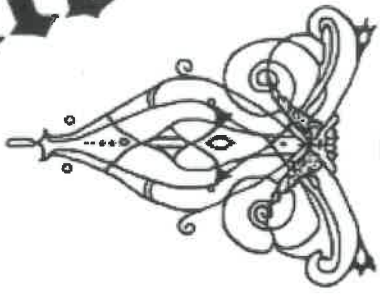
Sincerely,


Katheryn Emery, P.E.
Director

KDE/yp

cc: Env. Insp. Supv.

State of West Virginia



Certificate

*I, Mac Warner, Secretary of State,
of the State of West Virginia, hereby certify that*

RIVERSIDE VALLEY SERVICES LLC

has filed the appropriate registration documents in my office according to the provisions of the West Virginia Code and hereby declare the organization listed above as duly registered with the Secretary of State's Office.



*Given under my hand and
the Great Seal of West Virginia
on this day of
March 27, 2024*



Mac Warner

Secretary of State

Waste Profile Sheet: **Sludge - Hydrocarbon (Solid)**

General Information				
Original Use:	Wastewater digester, filter backwash pond, process pond and utility boiler sludge.			
Physical Description:	Liquid sludge (semi-solid).			
Contaminants:	Can contain the following in varying amounts - water, solids, hydrocarbons (TPH), PAH's (aromatic hydrocarbons), sulfides, chlorides and trace metals.			
Other Codes:	SLGPRO (Sludge – process) - reportable			
Hazard Information				
Physical:	Not Applicable.			
Health:	Eye Irritation, Skin Irritation, Skin/Respiratory Sensitization, Carcinogenicity, Mutagenicity, Reproductive Hazards.			
SDS:	For additional information see specific contaminant SDS (e.g. Crude oil, iron sulfide)			
WHMIS Label:		Protective Equipment:		
Environmental:	Potential groundwater contamination with leaching of hydrocarbons, metals, and PAH's if improperly stored. Metals concern if waste stream is combined with low pH water. Further analysis may be required to determine pollution concerns from individual sludges.			
First Aid Measures:	<p>Inhalation: Use proper respiratory protection to immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest and call for immediate medical attention.</p> <p>Eye Contact: Flush eyes, including under eyelids, with a continuous flow of water for at least 15 min. If irritation persists, get medical attention.</p> <p>Skin Contact: Flush with large amounts of water. Use soap if available. Remove severely contaminated clothing and clean thoroughly before reusing.</p> <p>Ingestion: DO NOT induce vomiting since it is important that no amount of the material should enter the lungs (aspiration). Keep at rest and get prompt medical attention.</p>			
Management Methods				
Classification By	Testing Required			
Regulations (typical):	Testing Required			
Storage:	Store in tanks or barrels. Segregate from other sludges.			
Disposal:	Disposal based on specific characteristics. Options include: physical/chemical treatment, landfill, biodegradation and thermal treatment.			
Reportable Releases: (Check SDS re classification)	Report any release of a substance into the environment that may cause, is causing, or has caused an adverse effect. An adverse effect is impairment of, or damage to, the environment, human health or safety, or property. Refer to federal and regional release reporting regulations.			
Transportation				
UN No.	Shipping Name	Class	Packing Group	Special Provisions
	See "Comments" below.			
Small Container:	If TDG regulated: appropriate class label, shipping name (with technical name of contaminant in brackets if Special Provision 16) and UN Number			
Large Container:	If TDG regulated: appropriate TDG placard if more than 500 kg or in direct contact with large means of containment. UN Number required with the placard if in direct contact with a large means of containment or shipping >4000 kg.			
Documents:	If Non-Dangerous Waste / Non-Hazardous Waste use a Truck Ticket. If Dangerous Waste / Hazardous Waste use the Waste Form.			
Comments:	This waste has to be tested to determine if it meets the criteria as a dangerous good. Potential classes include 3, 4.1, and 4.2. Permit required if shipping as MIXED OILFIELD PRODUCTION FLUIDS (classification not required).			

RVS Treatment Process

May 1, 2024

1. Scan incoming truck for TENORM - all sides. Confirm below limits. Document TENORM scan.
2. Weigh incoming truck before and after unloading
3. Confirm truck & material matches the manifest description
4. Collect sample for bench test
5. Document the driver's manifest. Turn all paperwork into the office. Send driver to off load area.
6. Unload truck into half round using pumps with flow meters which are used to load/unload trucks
7. Pump water into holding tank based on its characteristics
8. Once the water is ready to process, transfer into the mixing tank and chemically treat based on bench test
9. Ferric Chloride will be added at approximately 2,000ppm, about 40 gallons, and allowed to mix with the water for 30 minutes as needed
10. Sodium Hydroxide (25%) would follow to raise the pH between 7.0 – 8.0, usually about 1,00ppm or 20 gallons, and allowed to mix for 30 minutes as needed
11. Water is then pumped into clarifier for separation at a flow rate of approximately 300 gallons per minute
12. Approximately 20ppm of anionic polymer flocculant will be added after the pump, but before the clarifier, aiding separation
13. Clean water discharged from the clarifier will be tested and pumped into clean water holding tank and disposed of at a saltwater disposal facility
14. All sludges will be transferred from the clarifier into a dewatering box using an air diaphragm pump
15. Water will be pulled from the box and transferred to the clean water tank or reprocessed depending on quality
16. The dry sludge will be transported to a landfill for disposal using the dewatering box
17. Oil skimmed from the top of the clarifier will be transferred into 500bbl holding tank for further processing
18. The solids are decanted using a centrifuge, collected in a dumpster, tested for TENORM, then sent to landfill
19. Remaining fluid would be processed with a high-speed tri-canter
20. Solids going to the same dumpster as the decanted solids, tested for TENORM, and sent to landfill
21. Waste is solidified by a combination of settling equipment, shakers, centrifuges to dewater. Final solidification is performed by addition of materials such as other dry wastes, soils, and finally pozzolomic materials such as fly ash, or cement. 7 - 10% pozzolomic agents such as fly ash or cement is consistently added at the same ratio as presented in the latest strength samples.
22. Water transferred to a holding tank (step 15) is reprocessed until clean enough to be sent to the injection well. All water is tested before being sent out for injection.
23. Depending on water quality other chemicals may be added to enhance the treatment process:
 - Sodium Hypochlorite (12.5%) for disinfection if water is reused for truck wash outs
 - Hydrogen Peroxide (<34%) as a hydrogen sulfide scavenger / odor control
 - Sodium Nitrate (30%) for hydrogen sulfide / odor control
 - Aluminum Chloralhydrate as a primary coagulant when ferric chloride is not effective

Carri Tucker
Sr. EHS Specialist for Riverside Valley Services LLC



RE: RVS denial

message

From: Carri Coleman Tucker <carri@tuckercoleman.com>
To: "Patel, Yogesh P" <yogesh.p.patel@wv.gov>
Cc: Terry Gadd <Terry.Gadd@jpmascaro.com>

Wed, May 29, 2024 at 7:54 PM

Yogesh,

I was able to obtain a copy of the original submission from Ascent. It does not say anything about not disposing of solid completions waste in WV. It only says that waste will be profiled and landfilled. It says the brine water will be shipped down the Ohio River, maybe that is what you were thinking of?

Thank you,

Carri

304-433-4422

www.tuckercoleman.com

From: Patel, Yogesh P <yogesh.p.patel@wv.gov>
Sent: Wednesday, May 29, 2024 4:42 PM
To: Carri Coleman Tucker <carri@tuckercoleman.com>
Cc: Terry Gadd <Terry.Gadd@jpmascaro.com>
Subject: Re: RVS denial

Carri,

Do you know why they said in January 2024; they can take wastewater and waste out of the State and now it's an economical issue, just kind of curious what will change in 5 months economically? They have provided all information during the permit determination process and now it is an economical issue? I am struggling to understand the economics on this issue. Would you be able to explain in detail please?

thx

Yogi

On Wed, May 29, 2024 at 3:10 PM Carri Coleman Tucker <carri@tuckercoleman.com> wrote:

Correct. It's much more economical for them to dispose of their waste at Wetzel so they would like to apply for a permit to do so.

Thanks,

Carri

On May 29, 2024, at 3:05 PM, Patel, Yogesh P <Yogesh.P.Patel@wv.gov> wrote:

Carri,

I thought you were providing an explanation on your plan change. According to previous requests from RVS, they are taking wastewater and waste out of State for disposal. You were referring that the plan is changed now, and you are submitting an explanation.

Thx

Yogi

On Wed, May 29, 2024 at 2:52 PM Carri Coleman Tucker <carri@tuckercoleman.com> wrote:

I need the written permit denial for RVS please.

Thanks,
Carri