


## MEMORANDUM

TO: North Bill Oilfield Wastewater Disposal Facility File  
GGH Wyoming - Grasslands Environmental COWDF File

THROUGH: Steve Dietrich, Air Quality Administrator  
Fred Di Lella, Stationary Source Compliance Program Manager

FROM: Chris Hanify, District Air Quality Engineer 

SUBJECT: Odor Complaint

DATE: November 5, 2014

On October 1, 2014, Pete Mogen lodged an odor complaint with produced water disposal facilities north of Bill, Wyoming (35 miles north of Douglas on WYO 59.) Contact information for the complainant is provided at the end of this memo. Mr. Mogen said that when he rides the bus to and from the coal mine, every time they pass by the produced water disposal pits everyone on the bus complains about the smell.

On October 22, 2014, I investigated the odors at the two produced water disposal facilities north of Bill. Those facilities are North Bill Oilfield Wastewater Disposal Facility and GGH Wyoming - Grasslands Environmental COWDF.

For GGH Wyoming - Grasslands Environmental COWDF, that facility was still under construction and has not accepted any produced water. On February 25, 2014, wv-15931 was issued for authorization to construct this facility. GGH Wyoming expects to start taking produced water around November 15, 2014. Discussing the complaint on October 22 with Jerry Hamel, General Manager, he suspected that organic matter in the stripped topsoil might have been the source of the complaint. Since I did not detect any appreciable odor, no concern was noted with this operation.

Further north is the North Bill Oilfield Wastewater Disposal Facility. Permit waiver wv-12021 was issued September 9, 2011 for construction of this facility. At this facility I met Dan Pauli, Manager. After explaining the purpose of this visit, he explained what they were doing, described the ponds, and provided directions around the site so I could conduct my odor survey. Incoming produced water is offloaded into a covered receiving pit near the office on the south end of the site. Oil is skimmed off the pond and the produced water is sent to the first evaporation pond located in the southeast corner of the pond complex. Produced water then flows to the second pond located in the southwest corner before going to ponds 3, 4, and 5. Bugs are added in ponds 1 - 4 to break down hydrocarbons in the water. Aerators are used in all of the ponds to provide oxygen to the bugs. During the summer months, sprinklers are used to aid in evaporation.

An odor survey was conducted just to the east outside the pond area, beginning at 1:40. Weather this day was 60°F with clear sky and wind out of the WNW at 15 MPH. I conducted the survey while driving up to the north gate of the facility and then returned, entering the pond area and continuing the survey on the berm from 1:55 to 2:00. An odor was detected near Pond 1. A truck was offloading into the receiving pit and petroleum odor was detected. The offloading activity would not cause a breach of the odor standard since it does not take 15 minutes to

empty a truck. Going downwind of Pond 1, two scentometer readings were done 200 yards east of Pond 1, with the second reading made 70 feet south of the first. Neither scentometer reading resulted in any detectable odor at the 7:1 threshold in WAQSR Chapter 2 § 11. Both readings were done inside the property line, representing a "worst case" scenario. Therefore, no violation of the standard was found. Before leaving the facility, I let Mr. Pauli know about the Division's findings. Even though the odor standard was not exceeded, North Bill Disposal said that it would work to reduce the odor. I left the facility at 2:45.

Mr. Mogen was informed of the result of this investigation. Pete and Kristi Mogen are set to close on their house November 14, 2014 and will be moving out of the area.

Contact Information:

Pete Mogen  
18 Clearview Road  
Douglas, Wyoming  
307-351-2287 (home)