



December 21, 2018

Re: 2019 TENORM Tracking Spreadsheet

Dear Landfill Operator:

The Pennsylvania Department of Environmental Protection (DEP) has reviewed the 2018 TENORM tracking sheets as part of its continuing evaluation of the effectiveness of the TENORM disposal protocol. As a result, DEP has found that the protocol implemented for the 2018 calendar year is working as anticipated. Therefore, no revisions to the TENORM tracking spreadsheet are necessary for 2019. Each facility's TENORM allocation will continue to be calculated using the average amount of non-TENORM containing waste (cold waste) received for disposal in the prior three years. The multiplier of "1.5" will continue to be applied to residual waste codes (RWC) for wastewater treatment sludge (RWC 804) and filters, filter socks and other filter media used in the treatment of oil and gas-related wastewater (RWC 812). The multiplier of "0.38" will also continue to be applied to all TENORM-containing wastes other than those with RWC 804 or 812. The same process for completing the monthly TENORM spreadsheets employed in 2018 will also be used in 2019.

In addition, DEP's Bureau of Waste Management and Bureau of Oil & Gas Planning and Program Management recently evaluated two 800-series RWCs (pertaining to non-coal mining, oil and gas, and other well drilling wastes) due to recurring confusion regarding the appropriate usage of the RWCs. The Department determined that the descriptions of RWCs 802 (Produced Fluid) and 804 (Wastewater Treatment Sludge) should be further clarified to ensure sediment from the storage of oil and gas wastewater is correctly coded as RWC 804. Please note that these language revisions are not changing the way waste materials under RWCs 802 and 804 should be coded. Rather, the descriptions of RWCs 802 and 804 are being clarified to ensure that there is no confusion regarding which waste code applies to a particular waste stream.

The following revisions are being made to RWCs 802 and 804, effective January 1, 2019.

- **802 - Produced Fluid** - Includes flow-back, brine, and any other formation fluids recovered from the wellbore. Flow-back is defined as fracturing/stimulation fluids, *including any colloidal and suspended solids within the fluid*, recovered from the wellbore after injection into the wellbore.
- **804 - Wastewater Treatment Sludge** – Sludge *and solids* generated during the processing of any oil and gas-related wastewater including any sediment generated during storage of oil and gas-related wastewater. Mixed loads of wastewater treatment sludge with other waste for disposal purposes, such as filter socks (RWC 812), will be coded as RWC 804.

A list of the RWCs is enclosed with this letter. Additional and electronic copies may be obtained from the DEP's eLibrary via the following address:

<http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4031>

DEP will continue to evaluate the effectiveness of the TENORM disposal protocol on an annual basis to ensure the health and safety of Pennsylvania's citizens and the environment. If you have questions or require additional information, please contact your regional waste management program. Alternatively, you may contact Chris Solloway or Ali Tarquino Morris in DEP's central office at 717-783-2388.

Sincerely,

A handwritten signature in cursive script that reads "Walt Harner".

Walt Harner
Director
Bureau of Waste Management

Enclosures