

## **WASTE MANAGEMENT**

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Pamela Bush, Esquire Secretary and Assistant General Counsel Delaware River Basin Commission P. O. Box 7360 25 State Police Drive West Trenton, NJ 08628-0360

Re: DRBC Proposed Natural Gas Development Regulations

**Comments of Waste Management** 

Dear Ms. Bush:

Waste Management appreciates the opportunity to provide comments on the Commission's Draft Natural Gas Development Regulations. As the leading provider of integrated environmental solutions in North America, Waste Management (WM) manages and reduces waste, recovers valuable resources, and creates clean, renewable energy. WM is already hard at work managing the wastes that are generated from the development of natural gas wells in the Marcellus Shale Formation in Pennsylvania, and it expects to provide the same services in the other states within the Delaware River Basin where natural gas can be extracted from the Marcellus Shale Formation.

In Pennsylvania, the processing, treatment and disposal of drilling fluids, raw gas well flow back water (aka "frac water"), produced water, " and the beneficial reuse of the treated frac water for further hydraulic fracturing and extraction of natural gas is already subject to a comprehensive set of regulations promulgated under Pennsylvania's Solid Waste Management Act and its Oil and Gas Act. The Pennsylvania Department of Environmental Protection ("PADEP") has issued three statewide general permits pursuant to 25 Pa. Code Chapter 287 -- WMGR119, WMGR121, and WMGR123 -- that authorize the treatment, processing, and beneficial reuse of frac water. WM currently has a permit to operate the Arthur Central

Treatment Facility in Penn Township, Lycoming County, which will process frac water pursuant to General Permit WMGR123. This facility will recycle one hundred percent of the frac water it receives for treatment with zero discharge. Under the terms of its state-issued general permit, the treated water will be returned to well drillers "for use as makeup water for further hydraulic fracturing and extraction of natural gas at drilling and production operations in the Marcellus Shale." WM also expects to commercialize the same treatment/processing technology in a mobile unit that could be located on a well pad and operated pursuant to an OG71 addendum (Request for Approval of Alternative Waste Management Practices) approved by PADEP under 25 Pa. Code Chapter 78, as part of the well driller's operating permit.

The Commission's draft regulations include multiple provisions that would require DRBC's review and approval in order for companies like Waste Management to process, treat and beneficially reuse frac water. These provisions include Sections 7.4(a)(6), 7.4(c)(3), 7.4(g), 7.5(h)(1(iii)B), 7.5(h)(2)(ii), and 7.5(h)(2)(iv)(B). The DRBC's concerns regarding frac water are entirely understandable. Waste Management agrees that those waste materials must be handled properly and with comprehensive regulatory oversight and control. With that said, it is clear that the Commission has recognized, at least in the context of well construction oversight, that it can and should rely upon the regulatory oversight and control exercised by its member states. In Section 7.1(i) of the draft regulations, the DRBC acknowledges that the states of New York and Pennsylvania have enacted statutes and promulgated regulations governing the gas industry. It further recognizes that it can "utilize and employ existing offices and rely upon agencies of the State of New York and the Commonwealth of Pennsylvania in their respective states in lieu of separately administering natural gas and exploratory well construction and operation standards." The same deference can and should be applied to the statutes and regulations those states have enacted governing the handling, treatment, processing, disposal and beneficial reuse of waste materials generated during the development of wells in the Marcellus Formation, including frac water and drill cuttings.

Waste management is an area of regulation that has long been recognized to fall squarely within the jurisdiction of state environmental agencies. PADEP, for example, has a Waste Management Bureau in its Central Office. It also has Waste Management program offices in each of its six (6) regional offices. It has hundreds of staff dedicated to the review and approval of waste permits, as well as the oversight and inspection of those waste management facilities. Similarly, it has an Oil and Gas Management Bureau and numerous district offices that review and approve well drilling applications. While it is understandable that the DRBC would be concerned about the processing, treatment and beneficial reuse of frac water, those activities are already being actively regulated by the Commonwealth of Pennsylvania and its very able, well-trained, well-qualified professional staff. Just as there was no need for the DRBC to duplicate efforts with regard to well construction and operation standards, there is no need for a duplicative set of regulations requiring DRBC's review and approval of operations

within Pennsylvania proposing to process, treat and beneficially reuse frac water. Companies offering those services cannot process, treat or beneficially reuse frac water without the review and approval of PADEP. Accordingly, Waste Management asserts that DRBC should defer to PADEP's oversight and control of those activities and, just as it did with regard to well construction and operation, DRBC should acknowledge that compliance with the Solid Waste Management Act, Oil and Gas Act, and 25 Pa. Code Chapters 75 and 287 satisfies the Commission's requirements with respect to the treatment, processing and beneficial reuse of frac water. Alternatively, if DRBC will not defer completely to PADEP's authority over waste management, DRBC should make available a permit-by-rule or some other streamlined process for those proposing to treat, process and beneficially reuse frac water using a treatment process that has a zero discharge, pursuant to a state authorization.

As noted above, in Pennsylvania, anyone proposing to treat or process frac water needs to apply for and receive approval from PADEP. Consistent with Pennsylvania's waste regulations, Waste Management applied for and received a General Permit from PADEP, General Permit WMGR123, which authorizes (1) the processing of drilling fluids, raw gas well flow back and produced water generated during hydraulic fracturing and extraction of natural gas wells in the Marcellus Shale Formation and (2) the beneficial reuse of the drilling water as makeup water for further hydraulic fracturing and extraction of natural gas. A copy of that general permit is attached as Exhibit 1. In order to obtain that general permit, Waste Management had to provide a completed general information form, a professional certification (Form B), an application for a municipal or residual waste general permit (Form 20), an acceptance of general permit conditions (Form 27R), bonding worksheets, a PPC plan, and a registration application fee. As long as it operates under GP WMGR123, WM is required by the applicable PADEP regulations to maintain, for a minimum of five (5) years, the following records: (1) the name of the generator and location where the frac water was generated; (2) the dates and volumes of frac water received at the treatment facility; and (3) the dates and volumes of treated frac water produced by the operation of the treatment facility and the dates and locations where the treated frac water was beneficially reused.

WM has a permit to operate the Arthur Central Treatment Facility under GP WMGR123, and will be treating frac water generated in Pennsylvania and returning it to well pads located outside the DRBC's jurisdiction for beneficial reuse. It would expect to provide similar services to well drillers located at sites within the DRBC's jurisdiction, pursuant to the same statewide general permit issued by PADEP or pursuant to a PADEP approved OG71 addendum to the operator's drilling permit, after the DRBC's regulations become effective.

As currently drafted, the Commission's regulations explicitly promote the reuse and recycling of frac water. The draft regulations, in fact, require project sponsors to implement a continuous program to encourage water conservation in all types of use within the facilities

served by the Commission's well pad approval. Further, the draft regulations state that the water conservation program must include the reuse and recycling of flowback and production waters "to the greatest extent possible." See Section 7.5(h)(1)(iii)(F). Waste Management's PADEP-approved treatment process recycles 100 percent of the frac water. It also returns 100 percent of the treated frac water for beneficial reuse with zero discharge. In that regard, Waste Management's treatment and processing of frac water pursuant to a PADEP-issued general permit (either WMGR119, WMGR121, and WMGR123) furthers the DRBC's stated policy of encouraging the reuse and recycling of flowback and production waters "to the greatest extent possible".

If the Commission really wants to help facilitate and encourage the reuse and recycling of frac water generated at well pads located within the DRBC's jurisdiction, it should provide incentives in the form of relief from the review/approval requirements in Sections 7.4(a)(6), 7.4(c)(3), 7.4(g), 7.5(h)(1(iii)B), 7.5(h)(2)(ii), and 7.5(h)(2)(iv)(B) of the draft regulations. Those incentives could be in the form of a complete deferral to PADEP (and NYDEC's) applicable regulations governing the treatment, processing and beneficial reuse of frac water, or it could be in the form of a permit-by-rule that would avoid the need for a docket approval.

As noted above, in Section 7.1(i) of the draft regulations, the Commission acknowledges that Section 1.5 of the Compact authorizes and directs the Commission "to utilize and employ such offices and agencies for the purpose of this compact to the fullest extent it finds feasible and advantageous." DRBC can and should defer to PADEP's review and approval of projects that propose to treat and process frac water with zero discharge and return the treated water to well pads for further beneficial use. Based on that authority, and for reasons consistent with the Commission's deferral to the states in the context of gas well construction, WM respectfully requests that any natural gas development regulations adopted by the Commission should clearly state that "compliance with state laws and permit requirements relating to the treatment, processing and beneficial reuse of frac water shall constitute satisfaction of the project sponsor's obligations under Section 3.8 of the Compact that relate to the treatment, processing and beneficial reuse of frac water." It further recommends that DRBC revise its draft regulations to add a sentence in Section 7.1(f)(i), which would state as follows: "A project sponsor's compliance with Pennsylvania's requirements in the Solid Waste Management Act, 35 P.S. §§ 6018.101 - 6018.1003 and/or the Oil and Gas Act, 58 P.S. §§ 601.101-601.605, and 25 Pa. Code Chapters 78 and/or 287, as those relate to the treatment/processing of frac water and returning it to the well pad for beneficial reuse, satisfies the Commission's requirements relating to the sources of supply water for natural gas development." The end result would be that, to the extent a project utilizes the services of a company that holds either a General Permit or an OG71 addendum issued by PADEP, which authorizes the treatment/processing of frac water and the return of that water to the well pad for beneficial reuse, no additional application would need to

be filed with DRBC, and no additional DRBC approval would be necessary, for those same activities. If necessary, in order to ensure that DRBC is aware of those such activities going on within the basin, a data sharing arrangement could be reached between PADEP and DRBC that would provide DRBC with access to approved permits and the data collected pursuant to those permits that relate to the processing, treatment and beneficial reuse of frac waters within the DRBC's jurisdiction. That could provide the Commission with the comfort it seeks regarding the treatment and beneficial reuse of frac water, without the need to create a parallel permitting process that duplicates the regulatory authority that the member states currently exercise over waste handling and disposal.

Waste Management appreciates the Commission's consideration of these comments.

Sincerely,

Eli Brill

Sr. Legal Counsel

Enclosure