



115 VIP Drive, Suite 210
Wexford, PA 15090
Phone: (724) 933-7306 | Fax: (724) 933-7310
Email info@pioga.org | Web: www.pioga.org

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VIA ELECTRONIC SUBMISSION @ <https://www.ahs.dep.pa.gov/eComment/>

Jessica Shirley, Policy Director
Policy Office
Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 2063
Harrisburg, PA 17105-2063

Re: General Permit WMGR123 – Processing and Beneficial Use of Oil and Gas Liquid Waste, Comments

Dear Ms. Shirley:

The Pennsylvania Independent Oil & Gas Association (PIOGA) respectfully submits the following comments to the PA Department of Environmental Protection's (PA DEP or the Department) **General Permit WMGR123 – Processing and Beneficial Use of Oil and Gas Liquid Waste**. Our organization supports the development of a useable and reasonable general permit for the treatment and storage of oil and gas wastewater; however, we are submitting the following comments and concerns to assure that the proposed revisions to the renewal of the WMGR123 permit will result in a useable and reasonable general permit, as contemplated and authorized by the provisions of the Solid Waste Management Act and the Chapter 287 regulations.

PIOGA is a nonprofit trade association, with nearly 500 members, representing Pennsylvania independent oil and natural gas producers of conventional and unconventional supplies, marketers, service companies and related businesses, and royalty owners. PIOGA members are subject to provisions of Pennsylvania's Oil and Gas Act (Act 13, Chapter 32), Solid Waste Management Act, Clean Streams Law, Land Recycling and Environmental Remediation Standards Act, and numerous federal environmental statutes and implementing regulations applicable to oil and gas operations in Pennsylvania. The association and our members therefore have a direct interest in the revised WMGR123.

We thank the Department for working with us prior to the official public comment so that we could provide industry-specific concerns and solutions.

Although we agree and support fellow industry trade organizations' comments concerning the draft, we have noted several differences as outlined below due to our association's also representing the conventional oil and natural gas industry.

Background

In general, the Solid Waste Management Act along with numerous other regulatory citations provides the Department authority to regulation the processing and storage of residual waste. This General Permit WMGR123 under the Bureau of Waste Management, Division of Municipal and Residual Waste, was developed to provide general requirements for the process, storage, and beneficial use of residual waste for the oil and gas industry.

Since the General Permit was first developed in 2010 and then later amended in 2012, there have been many changes in the industry. When the industry first started to complete wells, most of the wastewater that returned to the surface from the wellbore was disposed of either in UIC injection wells or through treatment and discharge into the waterways of the Commonwealth. In 2011, the Department ordered it was no longer acceptable for produced water to be discharged unless there was extensive treatment.

As the industry increased operations and technology advanced, industry was able to reuse more and more of its own wastewater. Some operators reuse wastewater with little to no treatment. Many operators report their ability to reuse 100% of their own wastewater in the hydraulic fracturing of new wells, thereby displacing the amount of freshwater needed.

However, with the decline in fracturing new wells due to market conditions, many operators are once again searching for new methods for permanent disposal. Treatment providers have emerged to provide disposal solutions, which include evaporation.

Although this General Permit has helped to increase the reuse of wastewater, it has hampered reuse at the same time for being too rigid and imposing restrictions on this industry that are not imposed on other residual waste producing industries. PIOGA is not advocating for no regulation, but for this General Permit to be more flexible to meet industry needs in a timely manner, consistent with the options provided by the law and regulations to other residual waste producing industries.

For background, the Residual Waste Regulations in Chapter 287, Sec. 287.1, define “waste” and “beneficial reuse” as:

Waste—

(i) Discarded material which is recycled or abandoned. A waste is abandoned by being disposed of, burned or incinerated or accumulated, stored or processed before or in lieu of being abandoned by being disposed of, burned or incinerated. A discarded material includes contaminated soil, contaminated water, contaminated dredge material, spent material or by-product recycled in accordance with subparagraph (iii), processed or disposed.

(ii) Materials that are not waste when recycled include materials when they can be shown to be recycled by being:

(A) Used or reused as ingredients in an industrial process to make a product or employed in a particular function or application as an effective substitute for a commercial product, provided the materials are not being reclaimed. This includes materials from the slaughter and preparation of animals that are used as raw materials in the production or manufacture of products. Steel slag is not waste if used onsite as a waste processing liming agent in acid

neutralization or onsite in place of aggregate. Sizing, shaping or sorting of the material will not be considered processing for the purpose of this subclause of the definition.

(B) Coproducts.

(C) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material shall be returned as a substitute for feedstock materials. When the original process to which the material is returned is a secondary process, the materials shall be managed so that there is no placement on the land and the secondary process takes place onsite.

(iii) The following materials are wastes, even if the recycling involves use, reuse or return to the original process (as described as follows):

(A) Except for coproducts, materials used in a manner constituting disposal, or used to produce products that are applied to the land.

(B) Except for coproducts, materials burned for energy recovery, used to produce fuel or contained in fuel.

(C) Materials accumulated speculatively.

(iv) Discarded or recycled material may not be waste if a determination is made by the Department in accordance with § 287.7.

(v) In enforcement actions implementing the act, a person who claims that the material is not a waste in accordance with subparagraph (ii) shall demonstrate that there is a known market or disposition for the material, and that the terms of the exclusion have been met. In doing so, appropriate documentation shall be provided (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste. In addition, owners or operators of facilities claiming that they actually are recycling materials shall show that they have the necessary equipment to do so.

Beneficial use —Use or reuse of residual waste or residual material derived from residual waste for commercial, industrial or governmental purposes, if the use does not harm or threaten public health, safety, welfare or the environment, or the use or reuse of processed municipal waste for any purpose, if the use does not harm or threaten public health, safety, welfare or the environment.

Based on these definitions, (ii)(A), PIOGA continues to assert that produced water (“material”) is not a waste so long as operators beneficially reuse the material in their hydraulic fracturing processes as a make up for the fluids necessary to fracture wells. Once an operator makes the determination that part or all their material is scheduled for disposal, only then should that material be classified as “waste.”

General Comments

Section A. Description and Definitions:

Processing: Rather than utilizing the definition of Processing as defined in Sec. 287.1, the Department created a new definition:

Processing - A method or technology used for the purpose of reducing the volume or bulk of oil and gas liquid waste, or a method or technology used to convert the oil and gas liquid

waste for beneficial use. The term includes the transfer or storage of oil and gas liquid wastes.

To be consistent, the Department should use the definition established in Sec. 287.1, which has been approved through the regulatory review process (emphasis added):

Processing—

(i) *The term includes one or more of the following:*

(A) *A method or technology used for the purpose of **reducing the volume** or bulk of municipal or residual waste or a method or technology used to convert **part or all of** the waste materials **for offsite reuse**.*

(B) *Transfer facilities, composting facilities and resource recovery facilities.*

Creating a new “processing” definition in a regulatory document that is not subject to the regulatory review process to replace one that has been, and which restricts options for our industry that are available under the IRRC-approved definition is simply unlawful. If the Department does not want to use the established definition *verbatim*, then PIOGA suggests the following changes to the new definition so it is consistent with the established definition:

*“Processing - A method or technology used for the purpose of reducing the volume or bulk of oil and gas liquid waste, or a method or technology used to convert **part or all of** the oil and gas liquid waste for beneficial use **for offsite or onsite reuse**. The term includes the transfer or storage of oil and gas liquid wastes **associated with the WMGR123 permitted activities**.”*

Adding “part or all of” and “for offsite or onsite use” to the definition is consistent with the options available under the Department’s regulations to other generators of waste for their material for processing, which includes “reducing of volume” so that “part of” of the waste can still be beneficially used in some capacity.

Transfer Facility: The Department proposes a new definition (“Transfer”) that is not in Sec. 287.1 but, as with the new “processing” definition, omits an option for our industry that is available under the Department’s regulations. For the same reasons as stated above for “processing,” PIOGA recommends that the Department use the definition of “Transfer Facility” as defined in Sec. 287.1 instead of the new “Transfer” definition:

*Transfer facility—*A facility which receives and processes or temporarily stores municipal or residual waste at a location other than the generation site, and which facilitates the transportation or transfer of municipal or residual waste to a processing **or disposal facility**. The term includes a facility that uses a method or technology to convert part or all of the waste materials for offsite reuse. The term does not include a collection or processing center that is only for source separated recyclable materials, including clear glass, colored glass, aluminum, steel and bimetallic cans, high-grade office paper, newsprint, corrugated paper and plastics. (Emphasis added).

The established definition provides that a transfer station may receive material for either “processing or disposal.” By making the above change, a WMGR123 permittee would be able to use the General Permit to transfer material for processing or disposal the same as other industries.

If the Department does not want to use the established “Transfer facility” definition *verbatim*, then PIOGA suggests the following changes to the new “Transfer” definition so it is consistent with the established “Transfer facility” definition:

*“Transfer - Receiving and processing, or temporarily storing, oil and gas liquid waste at a location other than the site where the oil and gas liquid waste was generated, and **which facilitates** the transportation of oil and gas liquid waste to a processing facility, a DEP permitted well pad, ~~or~~ permitted impoundment, or other facility designed to hold liquids for the development or hydraulic fracture of an oil or gas well or **disposal facility**. The term includes a facility that uses a method or technology to convert part or all of the waste materials for beneficial use.”*

Oil and Gas Liquid Waste: PIOGA recommends making the following revisions that better align with definitions in Chapter 78a re “Oil and gas operations” as well as oil and gas pipelines:

*“Oil and gas liquid waste – The term includes liquid wastes **generated** from ~~the drilling, development and operation of oil and gas wells and pipeline facilities~~ **oil and gas operations as defined in 25 Pa. Code § 78a.1**. The term includes contaminated water from well sites, the development of ~~transmission~~ **oil and gas operations** and the facility operating under this general permit, provided the generating facility has satisfied all other permitting requirements that may apply to contaminated water. The term does not include condensate from oil and gas ~~transmission~~ pipeline compressor stations that exhibits a characteristic of hazardous waste under 40 CFR Part 261, Subpart C, as incorporated by reference at 25 Pa. Code § 261a.1.”*

Section B. – Determination of Applicability Requirements

1. This section requires the Determination of Applicability to be submitted “on forms provided by DEP” but does not specify exactly which forms those are. PIOGA recommends that the PA DEP specify which forms are required; for example, are they the same forms as listed in Section F for permit renewals, or different forms? If different, then those forms should be clearly identified and, if they are currently in Draft form, they should be made available for review and comment.
2. The last sentence of Section B prohibits activities from commencing until approved, in writing, by PA DEP, but there is no timeframe specified within which the Department must respond with an approval (or denial). PIOGA recommends that either a timeframe should be specified, or language added that the registration is deemed approved if no response is received within a specified timeframe, such as the Permit Decision Guarantee.

Section C. – Operating Conditions

Condition C.1.b.: For consistency with the terminology in the introductory paragraph of C.1.b., the use of the term “facility” in subparagraphs b.i. and b.ii. should be changed to “unit.” Condition C.1.b. deals with de-wasted materials (i.e. no longer considered a waste), but the term “facility,” as defined in Condition 2 (which refers to the definition at § 287.1) means a facility where “waste” is managed, and

since de-wasted material in Condition C.1.b. is no longer a “waste,” different terminology should be used, as shown below:

“b. The processed oil and gas liquid waste meets the concentration limits in Appendix A of this general permit and, will be stored in an impoundment or other unit designed to hold water to develop or hydraulically fracture an oil or gas well. The impoundment or other unit must be owned or operated by the permittee or the owner or operator of an oil or gas well. Transportation shall be done in accordance with the following:

i. Processed oil and gas liquid waste meeting the requirements of Condition C.1.b is not a residual waste when transported to the impoundment or other unit facility.

ii. If processed oil and gas liquid waste meeting the requirements of Condition C.1.b will be transported in a vehicle that previously contained residual waste, the vehicle must be decontaminated prior to transporting the processed oil and gas liquid waste to the impoundment or other unit facility.”

Condition C.2: This condition requires that a minimum amount of testing should be done over a certain time prior to “*the initial storage and dewatering.*” It is inferred that this step is a trial or pilot project of either the technology or process at a facility to meet the limits in Appendix A. If there is no pre-existing facility prior to receiving the permit to operate, a potential permittee must be able to store the water in some manner while conducting the tests. The Department should specify how this can be done under this permit.

Furthermore, for an existing facility that wants to try new equipment and already has a WMGR123, the process needs to be consistent and fair across programs. For example, if I have new evaporation technology, I could do a trial at an oil and gas well with little paperwork (such as an OG-71). However, if I wanted to try that same piece of equipment at a WMGR123 facility, I would need to do a full permit modification and resubmit almost all of the paperwork that is required when first applying for a WMGR123. We understand that the Department needs to know what equipment is being tried, and for how long, but how that is done must be guided by reason and common sense. For many years the Department’s practice was to allow a WMGR123 facility to obtain a letter of approval to try or test equipment to see how it works and before committing to purchase, but in recent years the Department has made a policy change requiring a full permit modification. This is a classic example of regulatory overkill. There is no way that requirement fits the situation, but what it does do is work against companies’ trying to obtain the most effective treatments at reasonable cost. The Department should return to its past practice, or explain how this new policy promotes the objectives of the Solid Waste Management Act and other applicable statutes.

Condition C.3.: Since this section addresses “continuing” to store material in accordance with Condition C.1.b., meaning that the material has been demonstrated to meet the Appendix A concentration limits, and at this point has also met the demonstration required by Condition C.2., PIOGA recommends that the material should be referred to as “de-wasted material” in Condition C.3. rather than as “waste,” as shown below:

*“To continue storing **de-wasted material** ~~processed oil and gas well liquid waste~~ in accordance with Condition C.1.b, the permittee shall demonstrate that the **de-wasted material** ~~oil and gas liquid waste~~ continues to meet the limits in Appendix A by:”*

Condition C.4.: The allowance to request a reduction in the frequency of sampling and analysis under this section should not be limited to permittees that process waste from only one generator. PIOGA suggests that regardless of the number of generators sending waste to the facility, the ability to request a reduction in sampling and analysis frequency should be available as long as the specified consistency in achieving the Appendix A limits has been demonstrated. Furthermore, a facility should be able to request the reduction in frequency of sampling. Also, given the cost and burden of requiring daily sampling and analysis for Strontium, Barium, and TDS, the time-frame specified in C.4., subparagraphs a.i., a.ii., and b.i. should be reduced from one year to three months. The changes recommended for Condition C.4. are shown below:

"4. Permittees processing oil and gas liquid waste ~~from only one generator~~ may request a reduction in the required frequency of sampling and analysis, and a reduction in the number of parameters, for processed oil and gas liquid waste stored in accordance with condition C.1.b. by submitting an application to the appropriate Department regional office (see attached list) for a permit modification to the permittee's coverage under this general permit.

a. A reduced sampling and analysis frequency may be requested if the following criteria are met:

*i. Analysis of representative samples of the processed oil and gas wastewater has been conducted in accordance with this general permit for a **three month** ~~one-year~~ period; and*

*ii. The permittee has demonstrated that the constituent limits in Appendix A have been satisfied for a **three month** ~~one-year~~ period.*

b. A reduced parameter list may be requested if the following criteria are met:

*i. The permittee has demonstrated that the parameter(s) in Appendix A that is sought for removal from ongoing sampling and analysis requirements has not been detected in analytical results for at least **three months** ~~one-year~~.*

ii. If the reduction in parameters is approved, the permittee must sample and analyze for the removed parameter(s) on a quarterly basis to demonstrate that the reduction can continue.

iii. If the results of the quarterly sampling and analysis performed to satisfy this condition show a detection of a parameter that was removed from ongoing sampling and analysis requirements, then the permittee must immediately notify DEP and reinstate the detected parameter(s) into sampling and analysis required by Condition C.3. until the permittee demonstrates to DEP's satisfaction that the detection was an anomaly, or the parameter is no longer being detected."

Condition C.11.: Maintaining documents at a remote facility that has periods of inactivity due to operation needs is not practical. Some of these remote facilities do not have offices located at them as they may only have tanks and a load/unload system. Therefore, PIOGA requests the following changes, which would allow remote access to documentation:

*A copy of the Department approved Radiation Protection Action Plan (RPAP), for the facility must be maintained **while the facility is permitted and may be located off premises so long as it is made available for review to DEP staff either at the physical office it is located or electronically within 24 hours of request.** ~~maintained by the permittee at the facility at all times.~~*

The RPAP must address the management of oil and gas liquid waste and solids generated that contain technologically enhanced naturally occurring radioactive material (TENORM), and be implemented during all phases of operations at the facility.

Condition C.14.: The citation to the Oil and Gas Act in this paragraph is out of date and should be updated and revised accordingly, as shown below:

“14. Nothing in this general permit shall be construed to supersede, amend, or authorize a violation of any of the provisions of any valid and applicable law, ordinance, or regulations, providing that said local law, ordinance, or regulation is not preempted by the Solid Waste Management Act (SWMA), 35 P.S. §§ 6018.101 - 6018.1003; Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. §§ 4000.101 – 4000.1904; Air Pollution Control Act, 35 P.S. §§ 4001 - 4005; Waste Transportation Safety Act, 27 Pa. C.S. §§ 6201 - 6209; Oil and Gas Act, §§ 58 ~~Pa.C.S.A. §§ 2301—3504~~ P.S. 601.101—601.605; Radiation Protection Act, 35 P.S. §§ 7110.101 - 7110.703 and the Clean Streams Law, 35 PS. §§ 691.1 - 691.1001.”

Section D. – Recordkeeping

Condition D.1.a.: The introductory sentence of Condition D.1 requires permittees to maintain certain listed “records of the processing or storage and beneficial use of oil and gas liquid waste.” However, the first subparagraph D.1.a. of Condition D.1. would require records of the volumes of the fresh surface water and other water sources withdrawn for use by the facility, which is unrelated to the records of oil and gas liquid waste managed at the facility. As such, PIOGA recommends that Condition D.1.a. should either be removed entirely from the permit or moved to a section separate from Condition D.1. dealing with records related to waste.

Condition D.2. Maintaining documents at a remote facility can be challenging. PIOGA recommends the following text modifications, which would allow remote access to documentation.

*All records required in this general permit shall be maintained **at the Permittee’s principal place of business and made available electronically on-site** for a minimum of five years and shall be made available to the Department upon request. Should a facility be no longer located at the site where the processing occurred, the records shall be maintained by the permittee for a minimum of five years and shall be made available to the Department DEP upon request.*

Section E. – Reporting Requirements

Condition E.1.: There should be no need to “immediately” report any of the types of changes that are listed in this condition, particularly since the notification must be made by certified mail and it’s not possible to notify PA DEP immediately by mail. PIOGA recommends that the notification timeframe in this condition be changed from “immediately” to “within ten business days” as shown below:

*“1. Any person that operates under the provisions of this permit shall ~~immediately~~ notify DEP **within ten business days** via certified mail of any changes in: the company name, address, owners, operators, and/or responsible officials of the company, compliance status, and the status of any permit issued by DEP or the federal government under the environmental protection acts.”*

Condition E.2.: PIOGA recommends that WMGR123 permits related to operator-owned facilities that only treat/store their own oil and gas liquid waste should be exempt from the annual reporting requirement as they are required to report waste data to the Department monthly and in their annual 26R reports.

Condition E.2.e. PIOGA recommends that this condition should be removed. Providing the information required in conditions E.2.b, E.2.d and E.2.c should be all that is required.

Condition E.2.f. The PIOGA recommends removing this from a reporting requirement, as updating the bond is not a reporting requirement. Updating bond calculations would be associated with a permit modification.

Condition E.3. Oil and Gas operators that hold WMGR123 permits for their own facilities will come in conflict with what is required in this condition based on what is required in 25 Pa. Code § 78a.66 that was finalized in 2016. Below are specific provisions in 78a.66 that conflict with Condition E.3, specifically, notifying the Department through the appropriate emergency hotline, the timing, and the discharge event specifics:

78a.66(b)(ii) A spill or release of 5 gallons or more of a regulated substance over a 24-hour period that is not completely contained by secondary containment.

78a.66(2) In addition to meeting the notification requirements of § 91.33, the operator or other responsible party shall contact the appropriate regional Department office by telephone or call the Department's Statewide toll free number as soon as practicable, but no later than 2 hours after discovering the spill or release.

PIOGA recommends that the Department reference the Chapter 78a requirements for Oil and Gas operators that hold WMGR123 permits. Without clarification there would be confusion on what an oil and gas operator is required to follow given the conflict between WMGR123 permit condition and what is in regulation under Chapter 78a.

Appendix A

Appendix A Limits: The Department is not proposing any revisions to any of the parameter limits in Appendix A. PIOGA's concern is that the list of constituents is excessive and the statutory authority for many of the limits is unclear. The constituents listed should be those that have established limits for aquatic life uses in a natural stream system, at the highest level for protection. Many of the constituents listed appear to be based on drinking water standards, which is inappropriate, unnecessary and untenable by industry without expensive and excessive treatment for oil and gas liquids that are meant to be beneficially re-used in the industrial process, *not* discharged into streams or distributed to consumers as drinking water.

The introduction to the list mentions that other limits are based on current levels in stream systems, but no background data is presented as proof of this claim and, even if the data is available within the Department, it has not been provided for review and the constituents may not have any limits established within Pennsylvania regulations for either drinking water or aquatic life uses. The small chance of a spill getting into a surface water from a WMGR123 facility should not be the basis for an overly stringent de-wasting requirement for storage and subsequent use. Many commercial products stored at facilities across a broad spectrum of industries contain constituents far above drinking water

standards and aquatic life limits that if spilled, could cause damage, yet they are recognized as legitimate products, not waste. Processed oil and gas liquids prepared for beneficial use should be treated no differently. Appendix A in its current form is more strict than the NPDES program that allows discharges to streams for other industries in Pennsylvania.

Furthermore, the Department allows only treated water that is de-wasted to be used downhole for hydraulic fracturing. This has effectively made treating to this standard useless, on the basis of the Department's policy decision that if this "de-wasted" water would be stored in a freshwater impoundment, all of the water in that impoundment could be used only for hydraulic fracturing and could not be used for anything else, such as dust suppression or hydroseeding. By making this decision based on policy rather than facts and science, the Department has virtually eliminated this as a treatment option.

PIOGA suggests that if the water meets the parameters in Appendix A and is truly "de-wasted" then that water should be able to be used for other purposes, such as make up water for compressor stations or other applications that require basically distilled water that is the same whether it comes from the industry or other sources.

Closing

PIOGA thanks the Department for the opportunity to provide comments and respectfully requests the above suggested changes be reviewed closely and accepted. We look forward to working with the Department on this document as it goes through the review process.

Sincerely,



Daniel J. Weaver
President and Executive Director
PIOGA