



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

Bureau of Waste Management

**PROCESSING AND BENEFICIAL USE OF OIL AND GAS
LIQUID WASTE**

GENERAL PERMIT WMGR123

1/18/2022

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GENERAL COMMENTS AND RESPONSES

Please note that many of the comments submitted during the public comment periods for the individual authorizations under WMGR123 were directed to the WMGR123 base permit or to all authorizations under WMGR123. In these instances, the Pennsylvania Department of Environmental Protection (Department) has considered these comments to be general comments that would apply to all permittees under WMGR123 and have been consolidated into this section of the document.

General Comments:

1. **Comment:** The location of these facilities raises a number of questions. For example, the permit application prohibits the storage, processing, and release of waste within 50 feet of a property line and 300 feet from an occupied dwelling- unless the property owner provides a waiver. It is completely unacceptable that the Department would allow for the processing of radioactive waste in a residential community, period. The fact that the DEP has abdicated regulatory and oversight responsibilities to a private property owner is unprecedented and negligently careless. We know that industry officials are often less than forthright regarding the true risks to public health and downplay environmental damage as a matter of course. To assume that in this regard that industry officials have prioritized public health over corporate profits, simply represents state sanctioned waiving of liability. This is wrong. (16)

Response: The general permit provides setback criteria consistent with the requirements of the residual waste regulations. Areas where residual waste processing facilities are prohibited are stated in 25 Pa. Code § 297.202. These regulations specifically state that residual waste processing facilities may not be operated within 300 feet measured horizontally from an occupied dwelling, unless the owner thereof has provided a written waiver consenting to the facility being closer than 300 feet, and within 50 feet of a property line unless the operator demonstrates that actual processing of waste is not occurring within that distance, storage and processing take place in an enclosed facility, or that the owners of occupied dwellings within that distance have provided written waivers consenting to the facility being closer than 50 feet.

In order to comply with the conditions of WMGR123, permittees are required to maintain a copy of a Department approved Radiation Protection Action Plan (RPAP, or Form X). A RPAP must contain methods by which a facility will detect the presence of radioactivity, identify the type of radioactivity present, measure the radiation emitted, and determine the actions needed to protect workers, the public and the environment from any radiation contained in the waste it receives. The RPAP also must include procedures for the monitoring of areas where waste is stored at the facility. Although the transportation of waste materials outside of the permitted boundaries of the WMGR123 is not something that is covered by the terms and conditions of the general permit, any generator of waste material must know the chemical and physical characteristics of the waste prior to transportation, including the radiological characteristics of the waste transported within Pennsylvania or United States Department of Transportation (US DOT) jurisdiction (i.e., determining whether the waste must comply with US DOT Class 7 Hazardous Material regulations).

2. **Comment:** The sheer volume of permits under consideration and the highly technical nature of this permit application process directed my request to extend the public comment period

beyond the deadline. Unfortunately, I did not receive the courtesy of a reply regarding this direct request for sincere public participation. This is unprecedented during my time in the Senate and suggests a much larger dysfunction within the DEP that must be addressed before any consideration toward granting a 10-year permit should be considered. Quite frankly, if your Department is unable to simply respond to a sitting Senator who serves on the Senate Environmental Resources and Energy Committee, I find it unlikely that you have the capacity to adequately regulate the dozens of facilities that will be permitted to discharge contaminated wastewater directly into drinking water resources for millions of Pennsylvanians. (16)

Response: The commenter is referring to a letter dated March 30, 2021, requesting an extension of the additional comment period provided for certain applications for coverage under WMGR123. The Department responded in a subsequent letter, dated May 27, 2021. This letter explained that forty-nine of the general permit approvals referenced in the March 30 letter were renewals issued to existing facilities that were already permitted under a previous version of WMGR123, which had existed for ten years. Many of these existing facilities have been operating for more than five years in the same location, have several employees and contractors, and have been operating without violations of any kind.

The previous version of WMGR123 was set to expire in 2020. During 2020, and after most existing facilities applied for renewal; the Department proposed revisions to the general permit. After public comments on the revised permit requested that the Department provide more opportunities for public input on applications received under the revised general permit, the Department offered a new process that would include a 60-day public comment period on applications for new facilities or modifications of existing facilities. This comment period was not required by regulation or law, but the Department wanted to expand opportunities for public participation for these new or modified facilities.

Applications for renewed coverage for the existing facilities did not require notice of the Department's receipt of the application or a public comment period under the Department's regulations but were still published in the *Pennsylvania Bulletin* when approved. For 23 of the 49 existing facilities, the Department went further, by publishing in the *Pennsylvania Bulletin* notice of receipt of complete renewal applications along with Department contact information should members of the public desire to review the application materials or otherwise provide the Department with their views on the applications. Significantly, the Department received few or no comments on these 23 renewal applications.

After several environmental advocacy groups expressed concerns regarding the Department's proposal to accept public comment on applications for coverage under the reissued WMGR123, the Department agreed to accept public comments for 60 days for the 49 applications for renewed coverage. This additional public comment period for renewals was not contemplated by the Department's reissuance of WMGR123 or required by regulation, but the Department believed it equitable given the confusion. Accordingly, the Department published notice on March 20, 2021, that it would receive and review comments on the 49 applications for the existing facilities. In addition, the Department included in the March 20, 2021, public notice for six applications it had received for modification to the coverage of existing facilities, and nine applications it had received for new coverages under WMGR123.

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The letter went on to state that the existing facilities included in the March 20, 2021, *Pennsylvania Bulletin* notice have been beneficially reusing this wastewater, in most cases, for five years or more. Very few have been cited for any violations of the WMGR123 permit or Department regulations during their operation. The 49 applications for renewed coverage presented no significant modifications to those existing operations. For 23 of the applications, the March 20, 2021, *Pennsylvania Bulletin* was the third time the public received notice. While the Department understands this is a significant number of applications to review, the majority of the applications reflect operations that are very familiar to the public and that have not changed in any significant way for many years.

The Department believed that the 60-day comment period, which already far exceeded the public participation opportunities provided for in the regulations, was adequate, and a further extension was unnecessary. Moreover, the Department did not believe extending the comment period by another 60 days will result in significant additional public input.

The Department concluded its letter by emphasizing that the end of the 60-day comment period was and is not the end of public participation or input regarding these facilities. The Department receives public input in the form of inquiries and complaints about other permitted facilities on a regular basis. The Department follows up on that input with inspections and investigations and, when appropriate, takes enforcement action to correct conditions that could lead to public concern. This commitment is reflected in our agreement with the environmental advocacy groups and is a key component of implementing the Department's mission statement.

The Department's records, including applications and inspection reports, are available to the public for review. In the past several years the Department has greatly expanded the availability of electronic records in this process so that the public can receive the records quickly and without visiting distant Department offices.

- 3. Comment:** I have written letters and comments to your agency before, but I have noticed that the time given us, the Public, to get our comments in has shortened significantly over the past several years. This is not right, nor is it really obeying the mandate to solicit public opinion. In addition, the way public comment is solicited also is not conducive to actually getting it as such asks are often not well publicized. Therefore, it was not surprising to me that on March 20, 2021, a notice published in the *Pennsylvania Bulletin* announced a 60-day public comment period on 64 WMGR123 applications, including 49 renewals, 6 modifications of existing facilities, and 9 for new facilities. 60 days? For all of this? And how long has your agency had these permits before making this announcement? There has to be a better way. Are you invested in soliciting our comments or not? (54)

Response: The Department disagrees that the time given to the public to provide comments on permitting actions for general permits issued pursuant to the waste regulations has shortened significantly over the past several years. The recent revisions to WMGR123 that went into effect on January 4, 2021, included a change in application requirements from a Registration to a Determinations of Applicability process, which afforded the public a 60-day public comment period – a comment period that was not required by the regulations pertaining to Registration applications or the previously issued version of WMGR123 that had been in effect for 10 years. Please see the Department's response to Comment #2.

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4. **Comment:** The Fracking Waste Working Group is an ad hoc group of frontline, grassroots, and advocacy groups across the state who requested an extension so that its members could work to reach people living in areas affected by 31 of the applications that span 12 counties. The group promptly organized a letter to the DEP that was signed by four legislators, 46 organizations, and more than 80 concerned citizens. Our request was ignored, multiple times. We consider that to be unacceptable and believe it calls into question how seriously DEP takes the public participation process when it deprives people the time to learn about the comment period, much less act on it. That this is occurring during a pandemic when our organizing opportunities are limited, it is even more outrageous. The people of Pennsylvania didn't even deserve the courtesy of a response. (33 – 78, 160-162, 164)

Response: The Department responded to the request for an extension to the public comment period that the commenters reference. Please see the Department's responses to Comments #2 and 3.

The Department takes the public participation process seriously and believes the public comment period provided adequate time to provide meaningful input to the Department. The Department felt that public input was necessary enough to warrant a change in the permit application requirements from a Registration to a Determination of Applicability (DOA) to afford the public the opportunity to receive public notice regarding any applications for coverage under WMGR123.

5. **Comment:** The public is not given adequate notice of the applications and public comment period. A search of public notices in newspapers across the state does not indicate that a public notice was published in any local newspapers. The only notification appears to be that made in the Pennsylvania Bulletin, an electronic source most people don't know about, much less read, and one that is impossible to access by people in parts of the state with little to no broadband. (33 – 78, 160-162, 164)

Response: In accordance with 25 Pa. Code § 287.642 (relating to determination of applicability), the Department publishes a notice in the *Pennsylvania Bulletin* for administratively complete applications for a determination of applicability (DOA) that provides instructions for interested persons or municipalities to submit comments, recommend revisions to, or advocate approval or disapproval of the application. Interested persons may also request that the Department hold a public meeting or public hearing on a DOA under a general permit. The *Pennsylvania Bulletin* can be accessed electronically anywhere there is internet access, or for smart phone users, where a cellular signal exists, and citizens can sign up to receive emails that notify them when an application is pending in their county location.

In addition, 25 Pa. Code § 287.641(g) (relating to inclusion in a general permit) states that a person or municipality that applies to the Department for a DOA under a general permit, shall submit a copy of the application to the host municipality and the appropriate county, county planning agency and county health department, if one exists, at the same time that the person or municipality files the DOA with the Department. The host county, municipality, or applicable county planning agency and county health department can also opt to provide information regarding the application to individuals within their respective jurisdictions.

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The Department believes that the current public involvement process for DOAs under a general permit, as required by regulation, provides sufficient notice to residents located near a proposed facility. In addition, this process is consistent with how all general permits requiring DOAs are managed. Please see the Department's responses to Comments #2, 3 and 4.

6. **Comment:** I live in Los Angeles, CA, but I grew up in Susquehanna County and plan to move back there within five years to start a business. I have a lot invested in seeing the fossil fuel game out of the county.

Out here in California, we are suffering from a chronic shortage of water. For the first time in 114 years, farmers in the North will receive no water from the Klamath Canal System. Farmers that grow alfalfa, hay, potatoes are having to question their futures in California. I would hate to see the same happen to Pennsylvania.

The Earth is such a precious, precious life giving gift. It pains me to see humans constantly using our water ways, our Earth, our Sky as a dumping ground for human's misdeeds claiming progress.

I find it offensive that the DEP values public opinion so little that it labels this ruse as a fair and just permit process. Putting a notice in the PA Bulletin, which no one reads? Having the permit be good for 10 years? Not acknowledging the many, many previous violations that each of these facilities have already incurred over their previous 10 year span?

I was working with a group where we asked for an extension of the public comment period, and the DEP never even responded. If you really were the Department of Environmental Protection, you would actually have a desire to Protect the Environment from the constant barrage of abuse from the fossil fuel industries. You would listen to the public with an open ear when they tell you their water is undrinkable, that it's hard to breathe, that their soil is contaminated beyond repair. (162)

Response: Please see the Department's response to Comment #5. The Department believes that the 10-year permit term associated with WMGR123, which is the same timeframe utilized for almost every general permit in the Commonwealth, is appropriate for this general permit.

Regardless of whether this general permit is available in Pennsylvania, oil and gas exploration and production using hydraulic fracturing would still occur in Pennsylvania through the utilization of fresh, non-waste-derived chemicals (as opposed to constituents contained in the oil and gas liquid waste authorized under WMGR123) and freshwater withdrawals. The purpose of this general permit is to encourage the reuse of oil and gas liquid waste generated on oil and gas well sites and associated activities (such as compressor stations) through a closed loop process that allows for the return of processed liquid waste to well sites for reuse, minimizing freshwater withdrawals and reducing impacts to Pennsylvania's water resources with no greater threat of environmental harm than the use of the fresh hydraulic fracturing fluid that it replaces.

Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503)(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose

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partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act *unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.*" The compliance histories of all applicants are thoroughly reviewed during the application review process.

In regard to the request for extension of the March 20, 2021 public comment period, please see the Department's response to Comment #2.

- 7. Comment:** This is not enough time to assess the impacts, contact people nearby and respond. There should be more time allowed for commenting.

Also, though I personally do not live in one of the counties that have one of these waste facilities we know people who do live near one and the downstream world is much larger than just to the county line. These facilities are an abomination - see details below - and should not be 'permitted' to exist in PA where Article 1, Section 27 of the PA Constitution guarantees us clean water and air - these facilities foul the air and water of Pennsylvania. (161)

Response: Please see the Department's response to Comment #2. The Department reviews all applications for coverage under any general permit to ensure the activity can be operated in a manner that complies with the terms and conditions of the general permits and the requirements of the Solid Waste Management Act (SWMA) and the SWMA regulations.

- 8. Comment:** I am a local resident in proximity of one of the waste treatment plants. Although I am not sure of all the details, I am concerned that these sites are being properly supervised. I feel that this is being pushed by us without a lot of requests for public comment. (160)

Response: The Department believes that the current public involvement process for DOAs under a general permit, as required by regulation, provides sufficient notice to residents located near a proposed facility. In addition, this process is consistent with how all general permits requiring DOAs are managed. Please see the Department's responses to Comments #2, 3 and 4.

- 9. Comment:** The public is not provided adequate information on the facilities to make informed comments. The applications are incomplete. Compliance information is either lacking or missing entirely. Descriptions of NOVs are vague when they are present at all. No attempt is made to provide information in a readable format. There is no consistent presentation of the application materials, making it difficult to navigate each document. (33 – 78, 160-162, 164)

Response: The Department disagrees with the commenters' assertion as it applies to all WMGR123 permit applications. In accordance with the notice published in the *Pennsylvania Bulletin* regarding the receipt of an application for coverage under WMGR123, anyone seeking information regarding the proposal, including the entirety of the application and inspections reports, may be requested for review. In the past several years, the Department has greatly expanded the availability of electronic records in this process so that the public can receive the records quickly and without visiting distant Department offices. Information is presented to requesters in the same format by which the Department reviews the information. Concerns over

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the content of an application may be addressed directly with the Department during the permit review process and the public comment period associated with an application.

10. **Comment:** One of the changes that resulted from the recent revision of the permit is that the public must be given notice and an opportunity to comment. The previous version did not require that, so all of the facilities up for renewal were built without notifying the public or giving them a chance to comment. Every renewal granted this time will be good for 10 years. This is the one opportunity for the public to comment. It is the job of the Department to make sure that the people they serve, the people who pay their salaries, have an opportunity to comment on facilities that are so dangerous that the applications contain preparedness plans to deal with the radioactive waste they manage in the event of the kinds of incidents that appear on the NOV pages in the same applications. (33 – 78, 160-162, 164)

Response: All Waste Program general permits contain a standard permit condition that requires the development of a Preparedness, Prevention and Contingency (PPC) plan that is consistent with the most recent edition of the Department's *"Guidelines for the Development and Implementation of Environmental Emergency Response Plans."* (Document No. 400-2200-001). Any general permits that are renewed that did not previously contain this condition are revised to include it.

The Department agrees that all members of the public should have an opportunity to provide comment regarding applications for coverage under WMGR123. The commentators' assertion that the previous version did not include a public comment period is correct; however, the public still had and continues to have the ability to submit public input in the form of inquiries and complaints about permitted facilities. The Department will follow up on that input with inspections and investigations and, when appropriate, take enforcement action to correct conditions that could lead to public concern. Please see the Department's response to Comment #2.

11. **Comment:** I hope you decide to give the public more time to comment on this very important issue and provide the public with clarity and transparency about all the relevant facts which are needed to make such an important decision. Please remember that you are the Department of Environmental Protection. You must take the appropriate amount of time to accomplish your important mission to protect our environment now and for future generations in a way that is clear, understandable and right for all. (29)

Response: Please see the Department's response to Comment #2.

12. **Comment:** Pennsylvanians deserve a fair opportunity to learn what infrastructure is proposed for their community, and time to contemplate the consequences, and time to adequately respond with public comment that should be taken into consideration. Even with a legal win to open public comment, this process has fallen neglectfully short of the practice of giving communities free, prior, and informed consent regarding what happens in their own community. (22)

Response: The Department's recent revisions to WMGR123 incorporated DOA application requirements, which have, and will continue to include an associated 60-day public comment

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period, to ensure the public has a fair opportunity to review and provide input regarding WMGR123 permit applications. These changes went into effect on January 4, 2021.

The Department disagrees that the process employed has fallen short of providing an adequate public comment period regarding these WMGR 123 authorizations. Please see the Department's responses to Comments #2, 3 and 4.

13. **Comment:** Please give us a chance to comment on protecting our air and water. These are more important than corporate profits and once they are destroyed they can not be "bought back". (165)

Response: Please see the Department's response to Comment #2.

14. **Comment:** DEP should prepare a public-facing page when documents are open to public comment. That page should include the kind of pertinent information that would inform the public's comments. For instance, a list of permits granted to the facility in question and a list of permit violations for that facility, in this case, would have alerted the DEP to the fact that the companies applying for permits had done little to provide required information and would have spared the public hours of searching on efacts to find the list companies didn't provide at all, in some cases, or took screenshots of, rendering hyperlinks useless, in others. (33 – 78, 160-162, 164)

Response: The Department's eComment page (<https://www.ahs.dep.pa.gov/eComment/>) provides information to the public regarding regulations, policies, technical guidance, general permits, and other proposals for which the Department is currently soliciting comments. The site provides access to the full text of these documents and allows users to submit comments and see other's comments. Further, as the commenter references, the Department's public facing eFACTS tool (<https://www.ahs.dep.pa.gov/eFACTSWeb/default.aspx/default.aspx>) allows users to search for specific authorizations, clients, facilities, etc., and provides information related to existing permits and permit violations.

The Department does not believe, with all of the aforementioned information readily accessible in an electronic format, that an additional page needs to be developed.

15. **Comment:** Access to relevant materials was not made available in an easy way to the public. (54)

Response: The materials pertaining to WMGR123 applications and authorizations are obtainable in the same manner as for all other general permits. Historically, with hard-copy application files, the Department could scan and copy materials for requestors for a fee or make records available for an in-person file review. In the past several years, the Department has greatly expanded the availability of electronic records in this process so that the public can receive the records quickly and without visiting distant Department offices.

16. **Comment:** After reviewing some of the existing infractions by the companies involved, it has become apparent to me that more review is needed before granting permits to any of them. Please reconsider each permit with an eye to protecting our environment for future

generations. Don't hurry, no matter what these companies tell you. We, the public are trusting you to protect us. Thank you. (36)

Response: The Department acknowledges the comment and reiterates that it reviews all applications for coverage under any general permit to ensure the activity can be operated in a manner that complies with the terms and conditions of the general permits and the regulatory requirements in the Solid Waste Management Act, 35 P.S. §6018.101 *et seq* (SWMA).

Compliance history is a required component of applications for coverage under a general permit, and a standard facet of the Department's review of application materials. The existing facilities included in the March 20, 2021, *Pennsylvania Bulletin* notice have been beneficially reusing this wastewater, in most cases, for five years or more. Very few have been cited for any violations of the WMGR123 permit or Department regulations during their operation. The 49 applications for renewed coverage presented no significant modifications to those existing operations.

Further, the end of the 60-day comment period is not the end of public participation or input regarding these facilities. The Department receives public input in the form of inquiries and complaints about other permitted facilities on a regular basis and follows up on that input with inspections and investigations and, when appropriate, takes enforcement action to correct conditions that could lead to public concern. The Department's records, including applications and inspection reports, are available to the public for review. In the past year couple years, the Department has greatly expanded the availability of electronic records in this process so that the public can receive the records quickly and without visiting distant Department offices.

17. **Comment:** As a former 26-year resident of Susquehanna County PA, I am very concerned that county will be a brownfield in 30 years due all the gas well wastewater projected future production. The four facilities that were automatically renewed have spotty insufficient records and outstanding violations never addressed. PA DEP does not seem to be exercising any oversight, or even have standards to enforce based upon environmental science and public health and safety.

With that being said, it is a good start that there is now transparency about these lack of regulatory standards due to PA DEP's now requiring a Public Comment Period for all WMGR renewals and applications. (63)

Response: The Department appreciates the remarks regarding transparency but disagrees with the commentator's assertion that there exists a lack of regulatory standards. No authorizations issued under any general permit are automatically renewed; the Department reviews all applications, including renewal applications, for coverage or continuing coverage under any general permit to ensure the activity can be performed by the permittee in a manner that complies with the terms and conditions of the general permits and the regulatory requirements in the SWMA.

18. **Comment:** For years I have watched the gas industry be given a green light by PA authorities to pump toxic waste underground, without due process and proper input from people directly affected by these injection wells, like my friends in Clearfield County (WMGR123NC003). (47)

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Response: Please see the Department's response to Comment #2. WMGR123 does not authorize the use of underground injection wells. The only beneficial use authorized under WMGR123 is to develop or hydraulically fracture an oil and gas well.

19. **Comment:** In recent testimony on the introduction of changes to the Solid Waste Management Act and Title 58, reported by Sen. Muth and Rep. Innamorato, it was noted that despite the fact that drilling waste contains proprietary chemical additives, hydrocarbons, heavy metals, radionuclides and salts that can be toxic to humans and the environment, companies have been able to take advantage of loopholes in the state's Solid Waste Management Act and Title 58, which exclude oil and gas companies from the requirement to thoroughly test or treat waste prior to disposal in municipal landfills or wastewater treatment facilities. This testing failure means that toxic and radioactive material present in drilling waste ends up in public water systems and that workers hauling the waste could be exposed to radioactive elements. Recently, researchers discovered accumulations of radium up to 650 times higher in river sediments where treated conventional oil and gas wastewater was discharged than levels detected at sampling locations directly upstream. The legislation proposed by Innamorato in the House & Muth in the Senate would repeal the language under Title 58 that exempts the oil and gas industry from complying with the provisions of the Solid Waste Management Act; and include drilling waste in the definition of "hazardous waste" under the Solid Waste Management Act. (23)

Response: This comment is not relative to WMGR123. WMGR123 authorizes the beneficial use of oil and gas liquid waste to develop or hydraulically fracture an oil and gas well. WMGR123 does not pertain to TENORM disposal protocols applicable to the disposal of TENORM-containing waste at landfills or the management of leachate generated from a landfill. Landfill leachate is treated and discharged under the terms and conditions of permits issued by DEP's Clean Water Program pursuant to the National Pollutant Discharge Elimination System and the Clean Streams Law.

20. **Comment:** Permits for management of fracking waste must not be approved or renewed where there is failure to document the toxicity of this waste and failure to deal with handling and disposal of the waste in a manner identical to other toxins of that type. The loopholes that have allowed the exposure of workers and nearby citizens to toxic chemicals and radioactivity must be closed. The health impacts of these waste products are known and dangerous. All waste should be labelled and the concentration of each type of toxin measured at input and outflow from any storage site. All storage sites should be publicized so that citizens do not get near them accidentally. Random and arbitrary inspections and reporting processes instead of regular inspections and reporting will inevitably lead to failures. Likewise, it is alarming that the DEP does not require operators to timely notify residents within a one-mile radius of such an event and describe the steps that the operator took to contain the spill and mitigate any possible harm. Health harms for previous unconventional shale gas extraction industry harms have neither been adequately addressed, nor compensated for, including previous iterations of the WMG123 permits.

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In our professional opinion, there is ultimately no method of fracking or waste storage that is safe for human health and we, therefore, urge the DEP to reject all of the WMG123(2021) permits, including new applications, renewal applications, and applications for modification. (23)

Response: The Department does not have justifiable reason to deny all WMGR123 permits and disagrees with the assertion the commentators make regarding the utilization of loopholes. Regardless of the exemption in Title 58 that the commentators reference in previous comments, all generators of waste material (that generate more than 2,200 pounds of residual waste per generating location in any single month in the previous year) in the state of Pennsylvania are required to, in accordance with 25 Pa. Code §§ 287.51(b) and 287.54(a)(1), perform a detailed analysis fully characterizing the physical and chemical composition of each type of waste it generates, including radioactivity. In order for a residual waste to be disposed of at a landfill in Pennsylvania, chemical and physical analysis results must be submitted to the Department for review and approval prior to acceptance at the landfill to ensure the waste stream meets the landfill's waste acceptance criteria (most of which utilize hazardous waste criteria in their acceptance limits).

In accordance with the solid waste management regulations in 25 Pa. Code, Chapter 299 (relating to storage and transportation of residual waste), "all containers and storage tanks that contain residual waste, and vehicles that transport residual waste, must be labeled, or display signage, respectively, that designates the material as residual waste."

All applications for coverage under WMGR123, regardless of whether the operation is intended to treat oil and gas liquid waste or to simply store oil and gas liquid waste, are subject to the DOA application requirements and would be publicly noticed in the *Pennsylvania Bulletin*, which would commence a 60-day public comment period.

Operators, in accordance with the terms and conditions of WMGR123 permittees, at a minimum, must perform weekly inspections of all processing and storage areas are to be determine compliance with the general permit, and for evidence of failure. This includes the processing and storage areas for operations permitted under WMGR123 that are located on a well pad that is actively engaged in drilling, casing, cementing, hydraulic fracturing, or flowback operations. For operations permitted under WMGR123 that are located on a well pad and are not actively engaged in processing or transfer, a monthly inspection of all storage areas is adequate. In addition, WMGR123 includes a condition that requires permittees to submit an annual report on the beneficial use activities conducted under WMGR123 by March 1 for the preceding calendar year. This report includes:

- Names of the generators and locations where the oil and gas liquid waste is generated;
- The dates and volumes of oil and gas liquid waste received by the facility;
- The dates and volumes of processed oil and gas liquid waste and wastes produced by the operation of the facility, if applicable;

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- The dates, volumes, and locations, including the names of the facilities to which the processed oil and gas liquid waste is transported for beneficial use, disposal, storage, transfer or processing; and
- The maximum volume of all unprocessed and processed oil and gas liquid waste and other wastes that are managed at the facility each day.

The Department disagrees with the assertions that inspection and reporting is “arbitrary.”

Providing appropriate notification to downstream users of a water source, not just those within a one-mile radius, of a potential impact to that water source is already a regulatory requirement for the person in charge of the substance or owning or in possession of the premises, facility, vehicle, or vessel from which the spill occurred. Please see the Department’s response to Comment #70.

21. **Comment:** A systematic review of the human literature found evidence that exposure to oil and gas activities is associated with increased risk of preterm birth, miscarriage, prostate cancer, birth defects, and decreased semen quality. Animal studies have shown alterations in endocrine and immune function. As discussed in the 7th Compendium of Scientific, Medical and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Oil and Gas Extraction) (Compendium), available on the websites of Concerned Health Professionals of New York (www.concernedhealthny.org) and Physicians for Social Responsibility (www.psr.org), recognized threats to workers in oil and gas extraction are immediate threats to life and limb. The mortality rate in this largely self-regulated industry is four to seven times that of the national average of on-the-job fatalities and interviews with workers have revealed 16-hour workdays, fatigue, exposure to chemicals, and inadequate health and safety training.

Long-term risks are also present for workers. Inhalation risk assessment shows that many wells are associated with higher risks for acute non-cancer and chronic non-cancer health impacts, as well as acute cancer and chronic cancer diagnoses. (23)

Response: The Department’s understanding of this comment is that the intent of the commentator is to highlight occupational concerns with the chemicals used in oil and gas activities. As such, this comment goes beyond the scope of WMGR123 and the public comment period through which this comment was submitted. Regardless of whether this general permit is available in Pennsylvania, oil and gas exploration and production using hydraulic fracturing would still occur in Pennsylvania through the utilization of fresh, non-waste-derived chemicals (as opposed to constituents contained in the oil and gas liquid waste authorized under WMGR123) and freshwater withdrawals. The purpose of this general permit is to encourage the reuse of oil and gas liquid waste generated on oil and gas well sites and associated activities (such as compressor stations) through a closed loop process that allows for the return of processed liquid waste to well sites for reuse, minimizing freshwater withdrawals and reducing impacts to Pennsylvania’s water resources with no greater threat of environmental harm than the use of the fresh hydraulic fracturing fluid that it replaces. If WMGR123 were to be revoked, it stands to reason that oil and gas operators would then rely solely upon freshwater withdrawals and non-waste derived chemicals which would ultimately lead to a substantial increase in the amount of oil and gas liquid waste and increased usage of the chemicals used in

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the oil and gas industry. The increased amount of waste generated by oil and gas activities in the Commonwealth would still need to be properly managed.

Ultimately, permittees under WMGR123 are required to operate in a manner that is protective of human health and safety and the environment. Additionally, employers, in accordance with federal regulations, are required to perform an assessment of workplace hazards and to identify and control any physical and health hazards.

22. **Comment:** There is little public awareness of this enormous waste stream, the disposal of which presents dangers at every step—from being transported along America’s highways in unmarked trucks; handled by workers who are often misinformed and underprotected; leaked into waterways; and stored in dumps and storage units ill-equipped to contain the toxicity. Fracking waste is still used in commercial products sold at hardware stores and spread on local roads as a de-icer. A set of recently settled lawsuits among Louisiana oil and gas workers revealed chronic exposures that led to fatal cancers and historical industry documents expose long-standing inhouse concerns about liability for oil and gas workers’ health from radiation exposures.

At least 43 chemicals used in fracking are classified as known or presumed human reproductive toxicants, while 31 others are suspected human reproductive toxicants. Two dozen chemicals commonly used in fracking have been shown to disrupt organ systems, decrease testosterone and estrogen function, lower sperm counts, and cause reproductive harm. Endocrine disrupting chemicals exist in fracking wastewater in concentrations that have these endocrine-disrupting effects.

Benzene is one of the volatile organic compounds in fracking fluids. Benzene levels in ambient air surrounding drilling and fracking operations are sufficient to elevate risks for future cancers in workers and nearby residents. Benzene is a known carcinogen, with no known threshold of safety. Although the American Petroleum Institute in 1948 stated that “the only absolutely safe concentration ... is zero,” the organization since then undertook an intensive campaign to combat strict exposure limits.

Workers have the opportunity to reduce their exposure to toxins by leaving the work site. People who live near fracking sites and fracking waste disposal sites, however, may be exposed to toxins without their knowledge. They may be unable to leave their homes. The value of the land on which they live is reduced by this industrial contamination. Analysis of fracking sludge samples from Pennsylvania, “... confirmed the presence of alpha, beta, and gamma radiation in the soil and water in reserve pits located on agricultural land.” Total beta radiation exceeded regulatory guideline values by more than 800 percent, and elevated levels of some of the radioactive constituents remained in a vacated pit that had been drained and leveled.” (23)

Response: The Department agrees with the commentator that chemicals employed at some phases of natural gas exploration and development must be regulated to ensure protection to public health, safety and the environment. However, much of the commentator’s concerns go beyond the scope of the public comment period for which these comments were sought, which pertained to the existing and pending authorizations under WMGR123. This comment, in large, appears to address the oil and gas industry as a whole. Regardless of the existence of WMGR123, waste generated in the course of oil and gas operations would still need to be

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appropriately managed, which would involve transportation along Pennsylvania's roadways. The use of oil and gas produced fluid as de-icer is not a beneficial use that is authorized under WMGR123. Please see the Department's responses to Comment #21.

The Department's TENORM study demonstrated that radium content in Oil and Gas wastewater is almost always well below levels which would prevent the facility from accepting such waste. In regard to radiation protection, please see the Department's response to Comment #89.

23. **Comment:** Pennsylvania state records show radium-226 levels in fracking wastewater can be as high as 26,000 picocuries per liter, which is more than 5,000 times the limit for radium in drinking water. An investigative team at the Public Herald found that the Pennsylvania Department of Environmental Protection (DEP) is limiting the amount of TENORM coming into its landfills by limiting the amount of waste the landfill can receive. The DEP is not, however, tracking the amount of TENORM leaving the landfill and heading to water treatment facilities in the form of leachate, and instead treating the transaction between landfill and treatment plant as a private transaction. New state legislation was drafted in 2019 that would prevent TENORM disposal in Pennsylvania public waters. (23)

Response: This comment is not relative to WMGR123. WMGR123 authorizes the beneficial use of oil and gas liquid waste to develop or hydraulically fracture an oil and gas well. WMGR123 does not pertain to TENORM disposal protocols applicable to the disposal of TENORM-containing waste at landfills or the management of leachate generated from a landfill.

24. **Comment:** In April 2016, Duke University researchers who studied oil and gas wastewater ("brine") spills reported that "the water contamination from brine spills is remarkably persistent in the environment, resulting in elevated levels of salts and trace elements that can be preserved in spill sites for at least months to years...." In addition, radioactivity was elevated in soil and sediment sampled at spill sites, indicating that radium had accumulated in the soils of spill-affected areas. The bigger the spill, the higher the soil radioactivity level. 2016 study author Avner Vengosh told InsideClimate News, "We found even if you take away the spill water... you still left behind the legacy of radioactivity in the soils, where it can linger for thousands of years."

Analysis of field data collected by EPA and presented in the January 1987 technical report shows that a portion of oil and gas wastes contain constituents of concern above EPA health or environmental-based standards. For example, wastes at seven percent of the sites generating drilling fluids and 23 percent of the statistically weighted sample sites generating produced water contain one or more of the toxic constituents of concern at levels greater than 100 times the health-based standards. The constituents typically exceeding the standards in drilling fluids are fluoride, lead, cadmium, and chromium. The constituents exceeding the standards in produced water are benzene, arsenic, barium, and boron. In addition, wastes at 78 percent of the sample sites generating drilling fluids, and 75 percent of the sample sites generating produced water, contain chlorides at levels greater than 1,000 times the EPA secondary maximum contaminant level for chloride. Like large-volume wastes, associated wastes contain a wide variety of hazardous constituents. Many associated wastes contain constituents that are similar in chemical composition and/or toxicity to other wastes currently regulated under RCRA Subtitle C. The EPA further notes that "it is clear that some portions of both the large-volume

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and associated waste would have to be treated as hazardous if the Subtitle C exemption were lifted. EPA estimates that approximately 10 to 70 percent of large-volume wastes and 40 to 60 percent of associated wastes could potentially exhibit RCRA hazardous waste characteristics under EPA's regulatory tests. EPA has documented 62 damage cases caused by crude oil and natural gas wastes. Because large-volume wastes and associated wastes are often managed and disposed of together, it is often difficult to isolate the specific waste stream that contributed greatest to the damage."

There are always spills and accidents along the way and these accidents pose severe risks. "Analysis of discharged effluents from three brine treatment sites in Pennsylvania and a spill site in West Virginia show elevated levels of halides (iodide up to 28 mg/L) and ammonium (12 to 106 mg/L) that mimic the composition of OGW and mix conservatively in downstream surface waters. Bromide, iodide, and ammonium in surface waters can impact stream ecosystems and promote the formation of toxic brominated-, iodinated-, and nitrogen disinfection byproducts during chlorination at downstream drinking water treatment plants. Our findings indicate that discharge and accidental spills of OGW to waterways pose risks to both human health and the environment." (23)

Response: The comment, in part, goes beyond the scope of the public comment during which comments were sought for the existing and pending authorizations under WMGR123. Spills of oil and gas liquid waste that might occur outside of the permitted boundaries of a WMGR123 facility are addressed in the Department's *"Guidance on Notification Requirements for Spills, Discharges, and other Incidents of a Substance Causing or Threatening Pollution to Waters of the Commonwealth Under Pennsylvania's Clean Streams Law"* (Document No. 383-4200-003). Additionally, all transporters of residual waste must develop and implement a Pollution, Prevention and Control plan that comports with the Department's guidelines and contains protocols for responding to spills during transportation. Regardless, any generator of waste material must know the chemical and physical characteristics of the waste prior to transportation, including the radiological characteristics of the waste transported within Pennsylvania or United States Department of Transportation (US DOT) jurisdiction (i.e., determining whether the waste must comply with US DOT Class 7 Hazardous Material regulations). Please see the Department's response to Comment #70 for information related to management of spills and releases in the state of Pennsylvania.

25. **Comment:** We cannot overlook that this entire process is about permitting dangerous facilities that are harming communities now and enabling a climate-killing industry that is determined to stay in business without regard to the health, environment, and quality of life issues future generations will face. This degradation can only contribute to Pennsylvania's population continuing to leave the state for safer areas. We urge you to focus on the drawdown of greenhouse gas production, address the issues listed above, and decrease the permit time frame to 5 years." (33 – 78, 160-162, 164)

Response: Regardless of whether this general permit is available in Pennsylvania, oil and gas exploration and production using hydraulic fracturing would still occur in Pennsylvania through the utilization of fresh, non-waste-derived chemicals (as opposed to constituents contained in the oil and gas liquid waste authorized under WMGR123) and freshwater withdrawals. The purpose of this general permit is to encourage the reuse of oil and gas liquid waste generated

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on oil and gas well sites and associated activities (such as compressor stations) through a closed loop process that allows for the return of processed liquid waste to well sites for reuse, minimizing freshwater withdrawals and reducing impacts to Pennsylvania's water resources with no greater threat of environmental harm than the use of the fresh hydraulic fracturing fluid that it replaces.

The Department believes that the 10-year permit term associated with WMGR123, which is the same timeframe utilized for almost every general permit in the Commonwealth, is appropriate for this general permit.

26. **Comment:** There is nothing beneficial for the environment with permitting fracking and its waste products. There is no such thing as beneficial use of fracking waste. There is absolutely no moral or ethical reason to rush these 10-year permits. (28, 35, 66)

Response: Please see the Department's response to Comment #25.

27. **Comment:** Hydraulic fracturing causes dangerous waste that should be properly disposed. (51)

Response: The Department agrees that wastes generated by hydraulic fracturing, along with wastes generated by any other entity, should be appropriately managed, including proper disposal. Properly managing waste material may be accomplished through beneficial use by the authority granted in a general permit, provided the waste material is adequately regulated utilizing standardized conditions without harming or presenting a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth.

28. **Comment:** Fracking waste is toxic, radioactive, carcinogenic and mutagenetic. Already fracking waste that has been dumped in the Neshaminy Watershed Municipal Sewage Treatment has now been banned because they lack the capability to safely treat and dispose of the waste.

Before any new permits are issued or "beneficial use" permits are issued, a safe treatment and waste storage policy program should be established, not a "free market", "unregulated business plan" should be allowed to be implemented.

Radioactive fracking waste along with the radon mixed in with the methane gas, are dangerous to human, animal and plant health. Fracking is too dangerous, too expensive and totally unnecessary for energy needs. (72)

Response: The Department disagrees with the assertions that there aren't already adequate storage requirements imposed by the terms and conditions of WMGR123, that storage of oil and gas liquid waste is a "free market" in the context of the comment, and that permittees implement unregulated business plans. All permittees under any general permit must operate in accordance with the terms and conditions of the general permit and comply with the residual waste storage requirements in 25 Pa. Code § 299 (relating to storage and transportation requirements). Further, applications for coverage under general permits are reviewed to ensure a proposed activity can be operated in a manner that complies with the terms and conditions of the general permits and the regulatory requirements in the Solid Waste Management Act.

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29. **Comment:** The "produced water" is a noxious and harmful product when it is mixed with surface or groundwater. The product that comes back up after being injected is also noxious and harmful and should never be allowed to be collected and reused. These fluids are just more waste that continue to pollute the environment through their reuse and when accidentally spilled, which is not uncommon.

DEP finalized the general permit and issued the approvals for almost all of the fracking waste facilities in Pennsylvania without giving the public a heads-up or opportunity to comment. All of a sudden, 49 facilities had the go-ahead to continue or expand their operations without neighbors or the broader public even having had a chance to review their plans to see if they are flawed or risky. (26)

Response: Please see the Department's responses to Comments #2 and 25.

30. **Comment:** I write because I am extremely worried about the conservation and protection of our healthy air, water and agricultural soils.

We have protected our farm in Montrose since my Uncle arrived by horse and buggy at age one, in 1898. I am now 86. My daughter is producing certified organic, biogenic products and we have the seventh generation ready to take over.

I am worried that the WMG123(2021) ten year renewals of Residual Waste General and Modification permits and the DEP process in which they are approved are not adequate to protect our environment and the health and safety of Pennsylvania citizens.

The only way the DEP can fulfill it's environmental protection obligation is to work with scientific data; facts. Virtually all you need to know is right now at your fingertips. I urge you, it is a part of my request of you, to carefully and seriously read the letter sent to you by the Concerned Health Professionals of Pennsylvania. I believe every person, committee, agency, elected official in this state needs to know these facts and use them conscientiously in their decisions and actions. We citizens of PA need to be able to regain trust in our government agencies and officials, that you will protect us from the dangers and wrongdoings revealed in these facts.

Following is a list of four facilities in Susquehanna County where I live in Montrose. They are asking for 10 year renewal permits and one with an additional modifications permit, all very worrisome to my family.

Montrose is already completely surrounded by well pads, one just approximately 300 feet from our pasture, a pond and a water well.

Cabot WMGR123 NE002 - Springville – renew

Kendra - WMGR123 NE006 - Dimock – renew

Clearwater Tech - WMGR123 NE003 - Jessup – renew

Clearwater Tech - WMGR123 NE003 Jessup - renew and modifications

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I saw Clearwater Tech on the DEP site but not the one I just looked for with the permit numbers. This is only a few miles away, less than a 5 minute drive and prevailing downwinds from our farm and homes. I do not know exactly where the 2nd Jessup facility is. The Dimock and Springville facilities are within a 5 and 10 minute drive.

This is all more of a health risk than we should have to accept. PA must put its environment and citizens before industry profit and cost of doing business. Let them use the subsidies PA gives them to pay for the cost to remove waste chemicals and radium, using technology claimed to be able to do just that. Please know that many of the chemicals we are exposed to are beyond toxic, they are truly hazardous and stated hazardous by the EPA until the Bentsen/Bevill "Halliburton Loophole" was initiated to help the oil and gas industry. If PA is able to pass it's own bill to allow a hazard to be a hazard, it is right to do so for the life and health of every living thing in this State and beyond. (163)

Response: The Department takes the public participation process seriously and believes the public comment period provided adequate time to provide meaningful input to the Department. The Department felt that public input was necessary enough to warrant a change in the permit application requirements from a Registration to a Determination of Applicability (DOA) to afford the public the opportunity to receive public notice regarding any applications for coverage under WMGR123. All comments submitted during the public comment period were reviewed and considered, including those submitted by the Concerned Health Professionals of Pennsylvania.

It is the job of Department to mission is to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens. As such, the Department reviews each permit application for coverage under WMGR123 to ensure to ensure the activity can be conducted in a manner that complies with the terms and conditions of the general permits and the requirements of the Solid Waste Management Act (SWMA) and the SWMA regulations.

31. **Comment:** I object to any permit issuance or extensions for storage of fracking waste without a comprehensive plan for safe processing of the waste to render it completely safe.

What is the long term plan? Store it until the business cease operations, declare bankruptcy, and the storage facilities fail and we have an uncontrolled release of highly toxic and radioactive materials into the environment?

An assessment of the byproducts of fracking has to be performed to determine if fracking is a process that should continue if it's waste products will result in a toxic future for Pennsylvania. Possibly the best solution to the fracking waste storage and disposal problem is to stop fracking altogether and stop the generation of the toxic and radioactive waste.

If the current Fracking operators are violating the current regulatory requirements governing their operations, what makes anyone think that the fracking operators would comply with increase regulatory requirements? (71)

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Response: WMGR123 requires applicants to submit an application for a determination of applicability (DOA) prior to processing or beneficially using oil and gas liquid waste pursuant to the terms and conditions of WMGR123. The DOA includes submission of a robust application in which operating plans, facility maps, documentation of insurance, bonding calculations, and other records documenting the proposed facility's compliance with the residual waste regulations.

WMGR123 contains conditions that prohibit some of the activities cited the commentator. WMGR123 authorizes the storage of waste on a temporary basis in a manner that does not constitute disposal of the waste. It is presumed that containment of waste in excess of 1 year constitutes disposal, unless a permittee can provide clear and convincing evidence to the contrary.

In the event that a permittee would abruptly cease operations, the Department would have the ability to seize the bond that a permittee must execute in order to obtain permit issuance under WMGR123. The bond accounts for the cost to address situations such as this and involves calculations that aim to determine that total cost needed to remove remaining waste material, decontaminate the site, and close the facility.

32. **Comment:** No full scale proper groundwater impact study or ecological impact study has been completed by a third party not affiliated with the industry. (49)

Response: Section E.7 (related to project information) of the Department's Form 20 (Application for a Municipal or Residual Waste General Permit), requires that applicants for coverage under a general permit provide proof that a Pennsylvania Natural Diversity Inventory (PNDI) Project Planning Environmental Review was conducted. The receipt that is generated once the PNDI is completed must be submitted as part of the application. The completed PNDI is reviewed by the Department during the application review process.

33. **Comment:** The granting of thirty (30) WMGR123 permits is problematic. While the use of brine may provide some short-term, economic benefit to those in the natural gas industry, we believe the long-term consequences are hazardous to public health and the environment.

Prior to the approval of these permits, consideration should be given to the following questions.

- What is the composition of the brine? This analysis should include heavy metals, PFAS, PFOS, residue from acid mine drainage, and any and all of the fracking chemicals used in wells from which the wastewater originates.
- What is the level of radioactivity found in the brine?
- How does the brine interact with storm water run-off? What additional permits may be required to address related concerns?
- What precautions are being taken to prevent the proposed beneficial use of brine from contaminating aquifers and ground water?

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- What on-going monitoring will be conducted of the composition of the brine itself, its seepage into the earth, its runoff into local waterways, and its impact on impacted flora and fauna during the ten-year term of the permit?
- What precautions should be enacted for those who transport the brine, live near the brine waste sites, or who reside near the locations where the beneficial use of the brine is provided?

Clean water is essential to life. Brine and waste water, much more salty and contaminated than the ocean that surrounding the ship of the ancient mariner, is not fit to be part of the drinking water of Pennsylvanians today or in the future. Its migration is not confined by county or state boundaries. Please reflect on the questions raised, seek answers to assure the public that the uses of brine are beneficial to all, and protect our health and the environment. (24)

Response: The residual waste regulations require all generators of waste to perform a chemical and physical characterization of wastes generated prior to transportation to a processing or disposal facility. In accordance with 25 Pa. Code §§ 287.51(b) and 287.54(a)(1), a person or municipality that generates more than 2,200 pounds of residual waste per generating location in any single month in the previous year must perform a detailed analysis fully characterizing the physical and chemical composition of each type of waste it generates, including radioactivity. The results of the analysis are submitted to the Department as part of a 26R Form on an annual basis. WMGR123 also includes a condition that requires all records generated by a permittee in accordance with the general permit to be maintained by the permittee for a minimum of five years; be available at the facility; and be made available to the Department upon request.

Additionally, the Department recently added a condition to renewed WMGR123 that requires permittees to submit an annual report on the beneficial use activities conducted under WMGR123 by March 1 for the preceding calendar year. This report shall include:

- Names of the generators and locations where the oil and gas liquid waste is generated;
- The dates and volumes of oil and gas liquid waste received by the facility;
- The dates and volumes of processed oil and gas liquid waste and wastes produced by the operation of the facility, if applicable;
- The dates, volumes, and locations, including the names of the facilities to which the processed oil and gas liquid waste is transported for beneficial use, disposal, storage, transfer or processing; and
- The maximum volume of all unprocessed and processed oil and gas liquid waste and other wastes that are managed at the facility each day.

WMGR123 facilities receiving oil and gas liquid waste must develop a RPAP, which must contain methods by which a facility will detect the presence of radioactivity, identify the type of radioactivity present, measure the radiation emitted, and determine the actions needed to protect workers, the public and the environment from any radiation contained in the waste it

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receives. The RPAP also must include procedures for the monitoring of areas where waste is stored at the facility.

WMGR123 specifically prohibits the point or non-point source discharges of any of the following: residual wastes; liquid waste; combined stormwater runoff and leachate, if generated; or runoff from the staging, processing, and storage areas where solid waste management activities are conducted; to the surface waters of the Commonwealth. Any stormwater that contacts waste material or areas where solid waste activities are conducted must be collected and managed as a waste material.

WMGR123 requires that the storage of oil and gas liquid waste be in accordance with Pennsylvania's residual waste regulations. In accordance with 25 Pa. Code § 299.122 (relating to storage tanks), aboveground tanks are required to have emergency containment structures, such as dike fields or curbing and containment collection systems, which contain releases from overfills, leaks and spills. Emergency containment areas, such as dike fields, shall be able to contain 110% of the capacity of the largest tank in the containment area, and tanks must utilize adequate controls, such as alarms and monitoring points, to ensure protection of human health and safety, and the protection of the environment. The residual waste storage regulations that govern storage tanks include sufficient preventative controls designed to prevent failure of storage tanks and accommodate accidental releases of wastes into the environment in the event of a tank failure.

All waste transportation activities, including wastes transported to or from a facility authorized under a statewide waste general permit issued pursuant to 25 Pa. Code, Chapter 287, Subchapter H (relating to beneficial use), must comply with Pennsylvania's residual waste regulations at 25 Pa. Code, Chapter 299 (relating to the storage and transportation of residual waste). Chapter 299 requires transporters of residual waste to maintain a daily operational record in the cab of each transportation vehicle that includes, at a minimum, information on the type and volume of residual waste being transported, the generator of the waste, the destination of the waste, and handling problems or emergency disposal activities. These records must be maintained by the transporter for five years and provided to the Department upon request. Transporters of the brine material should be aware of the physical and chemical characteristics of the waste material they are transporting.

The activities authorized under WMGR123 must be operated in a manner that is protective of human health and safety and the environment. The residual waste regulations, in combination with the terms and conditions of WMGR123, require specific operational practices that eliminate or mitigate harms to public health, safety and the environment, including persons living near permitted facilities or along haul routes where waste is routinely transported to or from a permitted facility.

34. **Comment:** I believe not enough facts have been presented to the public about the intricacies of the many unique sites being addressed. Which companies are involved? What are their safety track records? What is their technological solution to ensure toxic wastes do not leak into the environment? What is the precise location of these sites and how would the presence of this toxic material affect the human and other life form populations nearby? What are the population densities nearby that could be affected? What is the nearby waterway topography?

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How will you ensure safety standards are being adhered to? What penalties will you levy if they are not adhered to? Who will pay for damage to the environment if the toxic material leaks? Innumerable details need to be made available to the public so that people can understand what the many companies are planning to construct in their neighborhoods. Until such levels of detail are presented, it is impossible for the public to comment intelligently and premature for you to make a reasoned decision about so many sites. (29)

Response: Nearly all of the information that the commenter identifies can be found in the application materials submitted to the Department through a permit application from an entity seeking coverage under WMGR123. This information is be made available to anyone wishing to review it upon request.

All permittees are required to operate in accordance with the terms and conditions of the general permit, the residual waste regulations and the Solid Waste Management Act, which establish standards necessary to ensure the proper management of waste materials in the Commonwealth. The Department performs routine site inspections at permitted facilities within the Commonwealth and reviews permit applications materials and information submitted to the Department as a regulatory or permitting requirement to ensure a permittee can, and continues to, operate in a manner that is protective of human health and safety and the environment.

In situations when an entity does not operate in accordance with the applicable regulations or the terms and conditions of a general permit, the Department has the authority to take enforcement action against any permittees that violate the regulations or any condition of the general permit. Ultimately, if permittee managing waste material does so in a manner that results in negative impacts to the environment, the permittee would be responsible for ensuring those impacts are appropriately addressed.

The Department reiterates that the 49 of the facilities noticed on March 20, 2021, were existing facilities that have been beneficially using oil and gas liquid waste, in most cases, for five years or more. Very few have been cited for any violations of the WMGR123 permit or Department regulations during their operation. The 49 applications for renewed coverage presented no significant modifications to those existing operations. For 23 of the applications, the March 20, 2021, Pennsylvania Bulletin was the third time the public received notice. While the Department understands this is a significant number of applications to review, the majority of the applications reflect operations that are very familiar to the public and that have not changed in any significant way for many years.

35. **Comment:** The subject of the storage of fracking waste is incredibly important to the people (born and unborn) of Pennsylvania. The storage of highly toxic radioactive fracking waste will have a critical effect on the health and welfare of all forms of life on our shared Pennsylvania ground. Sadly this waste continues to be generated by an industry which many now thankfully have come to realize must eventually die. Yet it will continue to generate pollutants for many more years while we slowly yet wisely and inevitably transition to wiser cleaner sources of energy. Until then it is important we address the storage of the tons of previously generated toxic waste and the many future tons to be generated in a wise and safe manner. Decisions about such an important subject should not be made quickly or in the absence of all relevant facts that should definitely be shared with all of Pennsylvania's citizens. (29)

Response: The Department agrees that actions on permit applications should not be made quicker than is necessary to obtain all relevant information relating to a proposed operation under WMGR123 and has taken measures to ensure that appropriate public notice is provided when an application for coverage under WMGR123 is submitted to the Department. It is extremely important that the waste material authorized for processing and beneficial use under WMGR123 be managed in a manner that complies with the terms and conditions of WMGR123, the residual waste regulations, and the Solid Waste Management Act.

36. **Comment:** Due to the number of facilities that are involved (64 WMGR123 applications, including 49 renewals, 6 modifications of existing facilities, and 9 for new facilities) each with its own unique circumstances with unique companies with unique technological solutions, it is not wise to allow only 60 days for public comment. More time is needed so that the facts about these multiple sites can be publicized and examined by a wide variety of citizens with varying degrees and kinds of expertise. Hopefully your ultimate decision will also not be made quickly, but in the proper amount of time so that good decisions can be made which are based on the common welfare of all Pennsylvania's citizens and not just on the interests of industry. Finally, in my opinion, decisions should not be made for ten-year periods unless there will be yearly review processes in place so that strict safety and assessment standards are adhered to and verified on a yearly basis. As this pandemic has revealed, things can change so quickly for businesses in a matter of days and care must be taken to ensure that industry's promises to protect the safety of our environment are adhered to on an ongoing basis. (29)

Response: Please see the Department's response to Comment #2. Additionally, the Department added a condition to the revised WMGR123 general permit that went into effect on January 4, 2021, that requires permittees to submit an annual report on the beneficial use activities conducted under WMGR123 by March 1 for the preceding calendar year. This report shall include:

- Names of the generators and locations where the oil and gas liquid waste is generated;
- The dates and volumes of oil and gas liquid waste received by the facility;
- The dates and volumes of processed oil and gas liquid waste and wastes produced by the operation of the facility, if applicable;
- The dates, volumes, and locations, including the names of the facilities to which the processed oil and gas liquid waste is transported for beneficial use, disposal, storage, transfer or processing; and
- The maximum volume of all unprocessed and processed oil and gas liquid waste and other wastes that are managed at the facility each day.
- If applicable, updated bonding calculations in accordance with 25 Pa. Code, Chapter 287, Subchapter E.

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These annual reports are reviewed on an annual basis and, in conjunction with regular inspections performed by the Department's Regional Offices, aim to ensure permittees are operating in accordance with the terms and conditions of WMGR123, the residual waste regulations and the Solid Waste Management Act.

37. **Comment:** We call on the Pennsylvania Department of Environmental Protection to deny permits for fracking waste management WMG123 (2021) authorizing the processing, transfer and beneficial use of oil and gas liquid waste to develop or hydraulically fracture an oil or gas well. Applicants have failed to show that they, their entire supply chain, and subcontractors are in compliance with existing laws. It is grossly unfair to lock communities into ten more years of suffering from exposure to toxins without knowledge of these exposures and a fair opportunity for input through public comment. (22)

Response: The Department does not have justifiable reason to deny all WMGR123 permits based upon the commenter's assertion regarding compliance with existing laws.

Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***"

The general comment was submitted in conjunction with supporting information that are covered in other comments and responses within this document.

The Department's recent revisions to WMGR123 incorporated Determination of Applicability application requirements, which have, and will continue to include an associated 60-day public comment period, to ensure the public has a fair opportunity to review and provide input regarding WMGR123 permit applications. These changes went into effect on January 4, 2021. Please see the Department's responses to Comments #2, 3 and 4.

38. **Comment:** We support the comments submitted by organizations like the Environmental Integrity Project and the Clean Air Council who cite deficiencies with the applications under consideration. (33 – 78, 160-162, 164)

Response: The Department acknowledges and appreciates the comment.

39. **Comment:** I must reiterate my opposition to the approval of these permits until such time that the Department can ensure the environmental quality and drinking water resources will not be impacted by such activity. I write this comment on the 50th anniversary of the Environmental Rights Amendment to the Pennsylvania Constitution. I simply ask that you uphold your oath of office and enforce Article 1, Section 27 of our shared Constitution and guarantee the people of Pennsylvania pure water. (16)

Response: The Department reviews all applications for coverage under any general permit to ensure the activity can be operated in a manner that complies with the terms and conditions of the general permits and the requirements of the SWMA and the SWMA regulations.

40. **Comment:** Notice of these permits previously was provided for in the Pennsylvania Bulletin. However, the Pennsylvania Department of Environmental Protection has decided to conduct another public comment period on nearly 60 WMGR123 Residual Waste General Permits, despite a public comment period never being contemplated for use of such a general permit. The decision to conduct another public comment period, reached without consultation or awareness to the permittees themselves, has created significant uncertainty within the regulated community. It is imperative that the Department proceed expeditiously so that these permittees can have the certainty that they deserve and envisioned when the Department issued these permits. (14, 19, 31, 146, 152, 153, 154, 166, 167, 168, 169, 170, 171, 173, 174)

Response: In a Stipulation of Settlement agreement executed between the Department and the Environmental Integrity Project, et. al, the Department agreed to publish notice in the *Pennsylvania Bulletin* and to review public comments submitted regarding 49 facilities for which the Department had, at the time, recently issued authorizations to operate under the WMGR123, as well as six applications it had received for modification to the coverage of existing facilities, and nine applications it had received for new coverage under WMGR123. Most of these facilities already had final permit authorizations, as the thirty-day appeal period had expired without an appeal having been filed with the Environmental Hearing Board (EHB). Nothing in the Department's publication of notice to Pennsylvania residents, nor the Department's consideration of concerns raised by residents, altered, impaired, limited or modified any of the authorizations issued. The Department always has the discretion to solicit public input regarding its decisions, and this outreach did not, without a subsequent administrative action by the Department, modify any authorizations issued under WMGR123.

41. **Comment:** The March 20, 2021, issue of the Pennsylvania Bulletin identifies the commencement of a 60-day public comment period for 64 general permit application up for renewal, proposing modifications, or applying for new coverage under the WMGR123 general permit. This public comment period includes facilities with approved WMGR123 permits that have been operating in an environmentally responsible manner for more than seven (7) years. It is disheartening that the Pennsylvania Department of Environmental Protection decided to publish these permits for public comment in a secret settlement agreement with special interest groups without input from the permittee nor the regulated community. (19, 145, 149 – 153)

Response: Please see the Department's response to Comment #40. By entering into the Stipulation, the Department avoided appeals to the Environmental Hearing Board of all existing 49 authorizations based on public notice grounds. With this settlement the Department endeavored to reduce the uncertainty for the existing 49 authorizations while providing the public with additional time to review and provide comments.

42. **Comment:** During the 10-year renewal process for this General Permit, the Department properly provided notice of proposed changes to the General Permit in the Pennsylvania Bulletin. No further notice concerning the individual permit holders was required by law, or otherwise necessary. However, due to a lawsuit by numerous environmental groups, the Department

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entered into a Stipulation Agreement to conduct another public comment period concerning nearly sixty (60) WMGR123 individual permit holders. This decision was made by and among the PADEP and a number of special interest groups, without any input from the individual permit holders themselves. This decision has created significant uncertainty among the individual permit holders and within the regulated community, and is setting a dangerous precedent for holding public comment periods when not required by law, but instead because of political considerations. It is imperative that the Department proceed expeditiously to approve these applications so that these permittees have the certainty that they deserve and that was envisioned when the Department issued the general permit. (25)

Response: Please see the Department's responses to Comments #40 and 41.

43. **Comment:** Each wastewater treatment and/or storage facility already went through a rigorous application and permitting process when it applied for their permit. The changes made to the WMGR123 for future applicants may require a public comment period depending on individual circumstances. It was not contemplated that existing facilities would have a public comment period due to the recent changes in the general permit. All WMGR123 facilities go through regular PA DEP inspections and require regular reporting that is part of the permit conditions. To subject these facilities to further unreasonable attacks by anti-fossil fuel groups to delay the use of these reasonable and beneficial permits is not just, but unjust.

Response: Please see the Department's responses to Comments #40 and 41.

44. **Comment:** I want to express my concern regarding the path the Department has decided to take in offering a public comment period regarding this very important permit to the oil and gas industry and to the Commonwealth following discussions and negotiations with special interest groups. The actions that the Department has taken with this comment period on WMGR123 has created a lot of uncertainty regarding the future of water management for the unconventional part of the industry. In addition, there are already limited options and significant water management issues for conventional oil and gas operations. It is imperative that the Department moves this process along quickly to ensure permit renewals are achieved and these operators can continue to provide environmental benefit to their areas of operation. (31)

Response: Please see the Department's responses to Comments #40 and 41.

45. **Comment:** In 2011 the unconventional natural gas industry voluntarily stopped taking wastewater to wastewater facilities for treatment and discharge. The WMGR123 permit, therefore, is critical to facilitating the reuse and recycling of flowback and produced water from unconventional natural gas facilities. Operators' use of these permits has enabled the industry at large to recycling more than 90% of its flowback and produced water, with some companies recycling an even greater percentage as they process and recycle water from their industry colleagues. Using recycled water means operators are able to use less fresh water for their operations. (14, 19, 25, 31, 146, 152, 153, 154, 166, 167, 168, 169, 170, 171, 173, 174)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123.

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46. **Comment:** In addition to significantly reducing the amount of freshwater used in natural gas operations, successful operation of these residual waste facilities reduces truck traffic on local roads, resulting in enhanced safety for local residents as well as improved air quality from fewer vehicle emissions while also reducing the potential for accidents. (14, 19, 25, 146, 152, 153, 154, 166, 167, 168, 170, 171, 173, 174)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123.

47. **Comment:** The best system to date to manage produced water is the storage and reuse of wastewater which is permitted by WMGR123. The use of these residual waste facilities reduced truck traffic which in turn reduces emissions. This may sound odd that a trucking company is encouraging this solution, but the main objective is to obtain the resources we need but make as small of an environmental impact as possible. These permits are beneficial to the operators, the environment, and the community. I support the WMGR123 Residual Waste General Permit. (30)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123 and the commenters support of WMGR123.

48. **Comment:** In 2020 my company was involved in hauling water for the first 100% reuse water frac in Central PA, since then the company has drilled and fraced another four wells with success using 100% reuse water. This eliminated the need to use any fresh water from our local freshwater facilities. The reuse of wastewater has been the largest advancement. This reduces the number of trucks hauling to deep well injection sites in Ohia and limiting the amount of discharge water into our streams and rivers. (30)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123.

49. **Comment:** The WMGR123 permit is named “General Permit WMGR123 Processing and Beneficial Use of Oil and Gas Liquid Waste,” as it authorizes the processing, transfer and beneficial use of oil and gas liquid waste in Pennsylvania. This general permit not only facilitates beneficial reuse but also states that the permittee must beneficially recycle/reuse oil and gas liquid wastes in well development activities as a permit condition. Below are some of the benefits supported by the WMGR123 permit authorization:

- Water recycling/reuse is critical to natural gas operations. The WMGR123 permit provides framework for proper processing and storage of liquid wastes while simultaneously encouraging its reuse.
- Water recycling/reuse reduces reliance on freshwater sources.
- Water recycling/reuse reduced the amount of water disposed/removed from the hydrologic cycle.

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- A WMGR123 facility's ability to be centrally located significantly reduces the volume of truck traffic on PA roadways, resulting in enhanced safety for local residents and less wear and tear on roadways.
- Water recycling/reuse reduces vehicular emissions (the 2nd largest categorical source of GHG in PA).
- WMGR123 facilities create jobs both at the facility and for companies that provide support/supplies to these facilities.
- WMGR123 permitted facilities are bonded facilities, assuring proper funding is in place if a permittee becomes incapable of maintaining the facility. (19, 145, 149 – 153)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123.

50. **Comment:** As the Department's own permit name implies, the WMGR123 general permit facilitates the beneficial reuse of wastewater. These permits are beneficial for the operator, for the environment, and for the local community. For these reasons, we express our support for these important and critical permits. (14, 25, 154)

Response: The Department acknowledges the commenters' support of the WMGR123 authorizations.

51. **Comment:** The benefits of water recycling are far reaching, from minimizing water disposal to reducing reliance on freshwater resources to source water for operations to significantly reducing the number of water trucks needed to transport water. Significantly, the benefits from reducing this volume of traffic include reduced miles on the road, improved traffic conditions in and around well sites, community roads and avoided trucking related emissions. (1)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123.

52. **Comment:** The environmental benefits of recycling produced water in natural gas operations are clear. This aspect of the activity reduces reliance on freshwater sources for operations, reduces the disposal of water, and reduces emission from increase truck traffic driving increases roadway miles. Although the state legislature as well as the Pennsylvania Supreme Court has made it clear the operations must be permitted to occur in the Township, the local governments have the power to limit the potential impact of these activities. More often than not the primary issue of concern for the residents of the municipalities I represent is the amount of truck traffic and the impact of truck traffic on local infrastructure. To that end, I work with the municipalities I represent to ensure compliance with local ordinances. These have proven to be successful and effective efforts. (2)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123 and appreciates the contribution made by the commentator.

53. **Comment:** The WMGR123 permit is issued under the authority of the Solid Waste Management Act. Specifically, it permits the storage, recycling, and reuse of water in natural gas operations. The environmental benefits of recycling produced water in natural gas operations are clear:

- Water recycling reduces reliance on freshwater sources for operations.
- Water recycling reduces the disposal of water.
- Water recycling significantly reduces the volume of truck traffic and truck traffic miles on roadways.
- Water recycling reduces wear and tear on infrastructure.
- Water recycling reduces noise from water transportation truck traffic.
- Water recycling reduces vehicular emissions.

Furthermore, the employment benefit that we see from WMGR facilities provides long lasting benefits to workers, including those we employ at Keystone, and the local economy. (8, 11, 13)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123.

54. **Comment:** PIOGA supports a useable and reasonable general permit for the treatment and storage of oil and gas wastewater as contemplated and authorized by the provisions of the Solid Waste Management Act (SWMA) and the PA Department of Environmental Protection's (PA DEP or Department) Chapter 287 regulations. (25)

Response: The Department acknowledges the commenters support of the WMGR123 authorizations and the Chapter 287 regulations.

55. **Comment:** Please consider this correspondence as public comment in support of each and every one of the WMGR123 Residual Waste General Permits in question. I would like to express my support for these vital permits which encourages the beneficial use of wastewater for operators, the environment, and the local community. With an ever-increasing focus on environmental, social, and governance matters in the industry, it is more important than ever to facilitate the responsible use of water throughout the natural gas development process.

This permit is critical to facilitating the reuse and recycling of flowback and produced water from unconventional natural gas facilities. These permits have been working for the industry and communities for the past decade and since that time, the industry at large has used these permits to recycle approximately 90% of its flowback and produced water. These permits also reduce:

- Reliance on freshwater sources for operations
- Disposal of water
- Volume of truck traffic and miles on roadways

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- Wear and tear on local infrastructure
- Truck traffic noise
- Vehicular emissions

The failure to approve these permits in a timely manner could have significant consequences on townships and citizens across Pennsylvania. Please expedite WMGR123 Residual Waste General Permit and provide the permittees with the certainty they deserve. (27, 83 – 148)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123. The Department will continue to adhere to the established time frames in the regulations, the Governor’s Permit Decision Guarantee policy (“PDG Policy”), and the Department’s internal General Permit Standard Operating Procedures (“GP SOP”).

56. **Comment:** The WMGR123 permits are beneficial for oil and gas operators, for the environment, and for the local community. For these reasons, I not only support these permits but also convey that PADEP should continue to encourage oil and gas operators to utilize there permits to facilitate beneficial reuse of liquid wastes. These recent changes have created uncertainty around what was once a relatively straightforward “General Permit.” A permit that is overly burdensome and timely to obtain may discourage the recycling/reuse of liquid wastes by the oil and gas industry. (8, 19, 145, 149 – 153)

Response: The Department acknowledges the commenters’ support of the WMGR123 authorizations. The Department believes the current terms and conditions of WMGR123 are not overly burdensome, are necessary to ensure permittees can operate in accordance with the regulations and the Solid Waste Management Act, affords the public the necessary notice and opportunity to comment on proposed operations, and will not preclude the Department from processing permit applications in a timely manner. While the revisions to WMGR123 that went into effective on January 4, 2021, included the change in the application requirement for perspective permittees from a Registration to a Determination of Applicability (DOA), the Department believes the change was necessary. DOA applications require a 60-day public comment period that would increase the permit processing timeframe for the applications, but the change affords the public the opportunity to provide input on a proposed operation under WMGR123. The changes to WMGR123 do not alter established time frames in the regulations, the Governor’s PDG Policy, or the Department’s internal General Permit Standard Operating Procedures (“GP SOPs”). As stated in the WMGR123 Memo: “During the public comment period, staff will undertake and continue the review of the application as a DOA, in accordance with the procedures in the GP SOP.

57. **Comment:** Critical to success of water recycling, are the authorizations, pursuant to the existing General Permits (and any future WMGR123 applications), to support Range’s and the Commonwealth’s leadership in water recycling in connection with natural gas development. Consequently, a consistent and timely approach to reviewing applications by DEP for future general permit authorizations is an essential element to continuing water recycling and the numerous environmental benefits associated with it. Indeed, this approach is supported by the plain language intent of the Solid Waste Management Act to “encourage the development of resource recovery as a means of managing solid waste, conserving resources, and supplying

energy” and to “provide flexible and effective means to implement and enforce the provisions of this act. . . .” 35 P.S. § 6018.102. (1)

Response: The Department will continue to adhere to the established time frames in the regulations, the Governor’s Permit Decision Guarantee policy (“PDG Policy”), and the Department’s internal General Permit Standard Operating Procedures (“GP SOP”).

58. **Comment:** In the absence of the timely approval of WMGR123 permits, the oil and gas industry would likely be required to rely on additional truck transportation of produced water to support their operations. The increase in truck traffic through and around the townships I represent would be significant – potentially tens of thousands, if not hundreds of thousands, of additional miles from heavy truck traffic will use the roads and infrastructure in these municipalities. Diesel emission would conversely increase dramatically. It would be untenable for this to occur, and it is unfathomable that certain organizations and officials are advocating for the delay or rejection of these permits. The citizens of many of the municipalities I represent would be the ones to unnecessarily feel these consequences. (2, 11, 13, 15)

Response: The Department will continue to adhere to the established time frames in the regulations, the Governor’s Permit Decision Guarantee policy (“PDG Policy”), and the Department’s internal General Permit Standard Operating Procedures (“GP SOP”).

59. **Comment:** We as owner and operator of facilities operating under the WMGR123 permit are extremely concerned with the permit review period changes and the associated uncertainty. We are concerned that this will reduce the ability to recycle the water and the added reporting requirements associated with the current WMGR123 are extremely onerous. We request that these additions to the WMGR123 program be scaled back to the original level. We are responsible facility operators and have maintained all permit requirements and see these new additions of extended public comment and additional reporting requirements as onerous and unnecessary. The PA DEP should be promoting the recycle reuse program, instead appears to be hindering all the operators across the board. (27)

Response: Please see the Department’s response to Comment #56.

60. **Comment:** The WMGR123 permit is a permit issued under the authority of the Solid Waste Management Act. Specifically, it permits the storage, recycling and reuse of water in natural gas operations. As the industry has grown and matured, these permits are not only increasingly critical to natural gas operations, but they are critical to local government’s role in providing for public safety and infrastructure. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

61. **Comment:** I am writing to thank the Department for the opportunity to provide public comment on the recent renewal of the following 17 WMGR123SW permits: WMGR123SW010, 015, 019, 020, 024, 026, 027, 028, 031, 032, 036, 037, 038, 039, 040, 041, and 044. Public notice and the opportunity to comment ensures that communities have a voice in the environmental decisions that affect them.

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I would also like to thank the Department for agreeing to publicly notice for comment all future applications for coverage under WMGR123, including new applications, renewal applications, and applications for modification. This will allow me and my community to be notified and to participate in the permitting process for all WMGR123 permits moving forward. (23, 155 – 159)

Response: The Department acknowledges the comment.

62. **Comment:** I appreciate the Department's commitment to promptly investigate any complaints it receives from concerned residents about facilities that fall under the WMGR123 permit, and to communicate the results of such investigation to the complainant. The fact that the Department will investigate and communicate the results of such investigation shows that the Department is actively listening to our concerns. (23, 155 – 159)

Response: The Department acknowledges the comment.

63. **Comment:** It is my concern that waste disposal sites created by issuing WMGR123 permits for processing and "beneficial" use of oil and gas liquid waste will endanger public health by being permitted around rural properties especially near homes, farms, schools, parks, Game Lands and especially water sources. The DEP should revoke all WMGR123 permits until the Department makes all requested changes and supplies all requested data to ensure the health, safety and welfare of the Commonwealth. DEP should not overlook a company's compliance history and reward habitual permit violators such as Range Resources Appalachia LLC in Washington County. DEP should take steps to restore public transparency about this enormous and dangerous waste stream. (21)

Response: The Department has made appropriate changes to WMGR123 to ensure adequate public transparency and afford the public the ability to provide comment on proposed operations in the Commonwealth. The general permit provides setback criteria consistent with the requirements of the residual waste regulations. Areas where residual waste processing facilities are prohibited are stated in 25 Pa. Code § 297.202; these same setback criteria are also incorporated into the terms and conditions of WMGR123. Pennsylvania's waste management regulations do not preclude the permitting of processing and beneficial use operations in rural areas; however, the Department must review general permit applications to ensure the activity can be operated in a manner that complies with the terms and conditions of the general permit, the regulatory requirements, and the Solid Waste Management Act.

Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added). The Department has the authority to determine that a

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permittee's compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

64. **Comment:** Range submits these public comments while fully reserving its rights, particularly in regard to the lawfulness of the newly established comment period pursuant to a Stipulation of Settlement on February 16, 2021 executed by DEP and a third-party, Environmental Integrity Project. Range specifically objects to the lawfulness of the Stipulation of Settlement impacting its previously issued General Permits, and having had no prior notice or opportunity to participate in any of the communications or decisions leading up to the execution of the Stipulation of Settlement involving its General Permits. Range further fully reserves its rights with respect to the improprieties created by the Stipulation of Settlement in connection with the underlying laws and regulations effectuating its General Permits and any future WMGR123 applications submitted to DEP by Range. (1)

Response: Please see the Department's responses to Comments #40 and 41.

65. **Comment:** Range maintains its leading water recycling program by temporarily storing the produced water in tanks pursuant to the lawfully issued General Permits before transferring it to an active well site to support completion of new wells. These tanks, used on a temporary basis, are situated in our field by a team of water logistics professionals to ensure the efficient and safe transport of significant amounts of water. Each temporary location is sited in accordance with applicable ordinances from local municipalities and pursuant to separate contractual arrangements with landowners. In order to reduce any inconveniences to the local community associated with these activities, largely trucking that is involved with bringing water into the temporary location, Range provides 24-hour security onsite during operations, utilizes multiple vendors to provide 24/7 data, traffic and flow monitoring and recording, and will often work with local governments and school districts to coordinate our traffic during times of bus travel. Range also maintains a Response Center to address any concerns from these operations (or any of our operations). Notably, Range has not received any significant complaints from the community regarding its operations pursuant to the General Permits, nor had any material spills. Range has taken appropriate measures to ensure that these incidents are prevented, mitigated and, if needed, timely and fully addressed. (1)

Response: The Department acknowledges the comment.

66. **Comment:** The renewed WMGR123 general permit and its modification from a registration application to a "determination of applicability" was not warranted and failed to comply with the DEP's regulations concerning such a modification. (1)

Response: WMGR123 was to expire on January 4, 2021. On April 18, 2020, the Department published notice of its proposed extension of the general permit for another ten years with certain revisions, including use of "determinations of applicability" rather than "registrations" for new applications. The associated 60-day public comment period closed on June 16, 2020. The Department received no comments from the industry on this proposed change. Consequently, upon issuance of the revised WMGR123, applications for coverage under WMGR123 would require public notice upon receipt of a complete application, and once a

decision on coverage was issued. The Department followed the necessary procedures for publicly noticing the proposed changes to WMGR123 and disagrees with the commenter assertion that the change failed to comply with the Department's regulations.

67. **Comment:** The success of Range's water recycling program has in large part been linked to the timely approvals of WMGR123 general permits to support the temporary storage of reuse water. The determination of applicability process unnecessarily involves many more additional steps and the likelihood of lengthy delays, which has been further complicated by recent "instructions" issued to the DEP Regional Offices that conflict with the regulations (and where DEP never sought feedback from the regulated community). 25 Pa. Code §§ 287.641, 287.642. These instructions should be rescinded. (1)

Response: The WMGR123 Memo provided to the Department's Regional Offices implements the Department's previous decision to provide additional opportunities for public comment when issuing determinations of applicability on new applications for coverage, and applications to modify coverage, under WMGR123. The Department's intention to accept public comment was proposed as part of the reissued WMGR123, referenced in the Pennsylvania Bulletin notice for the reissued WMGR123, and was further explained in the Department's responses to comments on the reissued WMGR123. Thus, extensive public notice was given of the Department's intent to receive public comment on applications; public comments were received in response to that public notice and the Department responded to them.

The memo expressly does not alter established time frames in the regulations, the Governor's PDG Policy, or the Department's internal General Permit Standard Operating Procedures ("GP SOPs"). As stated in the WMGR123 Memo: "During the public comment period, staff will undertake and continue the review of the application as a DOA, in accordance with the procedures in the GP SOP. The time frame in the PDG Policy for DOAs will apply." When reissuing the WMGR123, the Department included the public comment period while keeping in mind that these restrictions would apply.

The Department appreciates the need to process applications for WMGR123 coverage consistently and in accordance with applicable permit processing timeframes to promote the industry's wastewater recycling. The Department recognizes the benefit of not having this wastewater disposed unnecessarily into the environment. The Department also believes public input in the application process will result in better applications, more complete and faster technical reviews, and less public concern for facilities operating under the general permit.

68. **Comment:** Range remains committed to safely developing sustainable natural gas in Pennsylvania while protecting the environment and the communities where we live and work. Water recycling is a key element of this commitment. We fully support identifying a more efficient and timely process for any necessary approvals for the temporary storage of water to maintain the continued environmental benefits of water recycling. (1)

Response: The Department acknowledges the comment.

69. **Comment:** The current version of the WMGR123 permit is not automatically available on the DEP's website. This issue was reported in March via a phone conversation and, like our written

communication, was ignored. A search of WMGR123 will pull up the version of the permit that expired in 2020. The current version is accessible via DEP Greenport, the industry's portal to documents and forms. The public should be given priority when changes are made to permits. At minimum, it should be provided with current versions of permits at the same time the industry is. (33 – 78, 160-162, 164)

Response: The current version of WMGR123 was updated and is available on the Department's website. The version was also made available on the Department's eComment website, which is accessible by all members of the public and industry alike.

Spills or Discharges of Oil and Gas Liquid Waste:

70. **Comment:** Upon review of general permit applications, I identified a number of extremely concerning provisions that create significant risk to environmental quality and public health. For example, the untreated waste that is being processed at these facilities is extremely harmful and can pose a significant risk to environmental quality and public health. Produced water from the oil and gas industry is highly carcinogenic, contains numerous heavy metals, and has extremely high levels of radioactive material. In the event of a spill or unanticipated release of unprocessed waste, the contamination of our public waterways would be catastrophic. (16)

Response: Permittees issued coverage under WMGR123 must include sufficient information in the permit application to demonstrate that oil and gas liquid waste will be stored in a manner that complies with the residual waste storage requirements in 25 Pa. Code, Chapter 299. Pennsylvania regulations require immediate notification to the Department when a spill, discharge, or other incident results in a substance that would endanger downstream users, result in pollution, create a danger of pollution, or damage property being discharged to waters of the Commonwealth or being placed such that the substance might discharge, flow, be washed, or fall into waters of the Commonwealth.

In accordance with 25 Pa. Code § 91.33(a), if, because of an accident or other activity or incident, a toxic substance or another substance which would endanger downstream users of the waters of this Commonwealth, would otherwise result in pollution or create a danger of pollution of the waters, or would damage property, is discharged into these waters, including sewers, drains, ditches, or other channels of conveyance into the waters, or is placed so that it might discharge, flow, be washed or fall into them, it is the responsibility of the person at the time in charge of the substance or owning or in possession of the premises, facility, vehicle, or vessel from or on which the substance is discharged or placed to immediately notify the Department by telephone of the location and nature of the danger and, if reasonably possible to do so, to notify known downstream users of the waters.

Further, 25 Pa. Code § 91.33(b) describes additional requirements. In addition to the notices in 25 Pa. Code § 91.33(a), a person shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition thereto, within 15 days from the incident, shall remove from the ground and from the affected waters of this Commonwealth to the extent required by 25 Pa. Code, the residual substances contained thereon or therein.

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The regulatory requirements in 25 Pa. Code § 91.33 apply to spills, discharges, and other incidents that would cause, or threaten to cause, pollution of waters of the Commonwealth, endanger downstream users, or threaten property whether the spill, discharge, or other incident occurs at a facility or during an activity permitted or unpermitted by the Department. Such accidents, activities, and incidents can include spills, leaks, overflows, line breaks, existing pollution that is newly discovered, and any other manner of unauthorized discharge of a substance that would cause or threaten pollution of waters of the Commonwealth, endanger downstream users, or threaten property, including transportation related incidents.

71. **Comment:** The discharge of Department approved 'de-waste' into waters of the Commonwealth creates inherent risk to the entire downstream ecosystem. While the discharge permit identifies point-in-time sampling of discharged waste, it does not reflect the cumulative impacts associated with continuous discharge of contaminated and radioactive wastewater. For example, the maximum daily concentrations permitted include an allowance for certain levels of Arsenic, Barium, Benzene, lead, Bromide, Methanol, Uranium, Radium 226, and Radium 228. Prior to discharge, samples may be taken however the permit authorizes direct discharge of these toxic and radioactive chemicals into our drinking water resources for a period of 10 years. What impacts will the cumulative effects of this contamination have on drinking water resources for millions of families and farmers throughout our Commonwealth over the next decade? Simply put, the approval of this permit places Pennsylvanians at risk, further contaminates our environmental resources, and creates significant public health concerns. (16)

Response: WMGR123 specifically prohibits the discharge of any residual waste into the waters of the Commonwealth. Any material that meets the dewatering criteria set forth in the general permit must be used in accordance with the authorized beneficial use of the general permit, which is stated as the use of oil and gas liquid waste to develop or hydraulically fracture an oil or gas well; not for direct discharge to waters of the Commonwealth.

Condition C. 18 states:

"The permittee shall not cause or allow a point or non-point source discharge of any of the following: residual wastes; liquid waste; combined stormwater runoff and leachate, if generated; or runoff from the staging, processing, and storage areas where solid waste management activities are conducted; to the surface waters of the Commonwealth, unless permitted by DEP. This does not include rainwater or stormwater that is collected in a containment area that has not been mixed with a residual waste."

Any discharge of processed oil and gas liquid waste to waters of the Commonwealth would have to be permitted in accordance with another permit from the Department's Clean Water Program as the discharge is not an authorized beneficial use under WMGR123.

72. **Comment:** I have one recommendation for the Department. In the event of a spill at any of these facilities, the Department should require operators to timely notify residents within a one-mile radius of such an event and describe the steps that the operator took to contain the spill and mitigate any possible harms. (23, 37, 155 – 159)

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Response: Providing appropriate notification to downstream users of a water source, not just those within a one-mile radius, of a potential impact to that water source is already a regulatory requirement for the person in charge of the substance or owning or in possession of the premises, facility, vehicle, or vessel from which the spill occurred. Please see the Department's response to Comment #70.

73. **Comment:** As a citizen with property close to compressor stations on feeders to the Mariner East pipeline, I am concerned because if i had any choice in this matter I would not want to have such serious pollution anywhere close to the aquifer that is the source of health to my family, my neighbors and the protected trout stream and forest near us. Fracking waste is 'forever toxic'. If there was to be a spill, as there have been from some of these facilities that request repermitting, our health and the value of our land would be ruined. (33)

Response: Please see the Department's response to Comment #70.

Appendix A Standards/Sampling and Analysis Requirements:

74. **Comment:** Waste characterization data fails to comply with the pollutant limits or sampling requirements of Appendix A. The application materials contain numerous additional deficiencies that should have warranted DEP's denial of the application renewal request for failure to comply with the application requirements and/or because the proposed activities have the potential to harm or pose a threat of harm to public health, safety, or welfare of the people and environment of the Commonwealth.

The foremost of these is that General Permit WMG123 includes operating conditions in section C that establish that the processed oil and gas waste must, unless it meets the requirements of Condition C.1.a, meet the concentration limits in Appendix A of WMGR123 in order to be de-wasted, prior to initial de-wasting and storage of oil and gas liquids, and in order to continue storing de-wasted material. See WMGR123, Condition C.1.b, C.2, C.3. That compliance must be based on certain daily or weekly sampling results. Compliance with WMGR123 under Condition C.1.b requires both that initial and continued storage of de-wasted material under this general permit requires the submission of analytical data to the DEP demonstrating compliance with the concentration limits contained in WMGR123's Appendix A. Continued storage of de-wasted material requires that the permittee demonstrate that its oil and gas liquid waste continues to meet the limits in Appendix A by collecting daily samples of strontium, barium and TDS and weekly samples of all other Appendix A pollutants except for four. WMGR123, Condition C.3.d expressly provides that "[i]f the results of any future sampling taken to satisfy this condition fail to meet the concentration limits in Appendix A, the permittee must immediately notify the DEP and manage the processed oil and gas liquid waste as a residual waste. The processed oil and gas liquid waste is not de-wasted under Condition C.1.b until the permittee demonstrates to DEP's satisfaction that the limits in Appendix A are met."

A number of permittees failed to establish that they satisfied the requirements for coverage under WMGR123 under either Condition C.1.a or C.1.b because the permittees failed to provide any information proving that it satisfied the requirements for C.1.a and also failed to comply with the requirements required under C.1.b.

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The waste characterization data provided by some of the permittees fail to meet the requirements for WMGR123 for several reasons, including that many pollutants exceed the maximum concentrations in Appendix A, which would render the applications ineligible for approval under WMGR123. (4, 5, 9, 10)

Response: The commentators appear to misinterpret the requirements of Conditions C.1.a. and C.1.b. (related to dewatering) by suggesting that permittees under WMGR123 must treat to the standards in Appendix A of WMGR123, and unless the Appendix A standards can be met, permittees would not qualify for coverage under the general permit.

First and foremost, Condition C.1.a. is applicable to all permittees under WMGR123 and states that the waste shall be managed as a residual waste until it is used to develop or hydraulically fracture an oil or gas well. Permittees do not need to specifically state in their permit application materials that they intend to operate under Condition C.1.a because it applies to all permittees automatically. The purpose of Condition C.1.a is to convey, as is the case with all waste materials that are ultimately beneficially used in accordance with the terms and conditions of any general permit, that upon beneficial use, the material ceases to be a waste. Although this dewatering provision is not explicitly stated in all general permits, in the case of WMGR123, the Department felt it necessary to include the language to ensure that it was clear the oil and gas liquid waste that is not treated to Appendix A standards must be managed as a waste material from the point of generation until it is used to develop or hydraulically fracture an oil or gas well. This dewatering provision applies only until the oil and gas liquid flows back out of the well, at which point it is a residual waste and must be managed accordingly.

Alternatively, Condition C.1.b., which few if any facilities qualify to operate under, authorizes permittees under WMGR123 to treat oil and gas liquid waste to the water quality standards in Appendix A of the general permit, provided the sampling and analysis requirements in Conditions C.2. and C.3. are satisfied. Demonstrating compliance with these requirements allows the storage of processed water prior to use at an oil or gas well to take place in a facility that does not need to meet the residual waste storage requirements because the processed water would not dangerously impact the surface or groundwater if a spill or release were to occur. If oil and gas liquid waste does not meet the Appendix A standards, or the permittee does not fulfill the sampling and analysis requirements in Conditions C.2. and C.3., the oil and gas liquid waste may still be beneficially used under WMGR123; however, only the dewatering provision in Condition C.1.a. would apply.

Even though it was not necessary for applicants to specify whether they intended to operate under Condition C.1.a, the Department is taking efforts to encourage that permit application materials from new applications and existing permittees under WMGR123 contain language that indicates to the public whether or not the operator intends to utilize the dewatering provision in Condition C.1.b. by treating to Appendix A standards and fulfilling the sampling and analysis requirements in Conditions C.2. and C.3.

75. **Comment:** Exceedances of maximum pollutant concentration limits. First, the results provided a number of permittees show that some pollutants were measured at concentrations far exceeding the maximum concentrations contained in Appendix A of WMGR123. Some of the

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pollutants far exceeded their applicable Appendix A maximum concentrations. The waste characterization data submitted also fails to satisfy WMGR123's requirements because several of the pollutants required to be sampled and submitted to DEP were not included in the sampling data or anywhere else in the application. Several permittees failed to provide any waste characterization sampling data for all or some of the twenty-two required Appendix A pollutants, including TDS, for which WMGR123 expressly requires a permittee to collect "daily" samples. (4, 5, 9, 10)

Response: Please see the Department's response to Comment #74.

76. **Comment:** The waste characterization data submitted by several permittees fails to comply with the WMGR123 requirements for continued storage because the only data provided was from old sampling events, which are not current, or do not meet the required sampling frequencies required for continued storage. Old sampling events or too few sampling events are not sufficient to show current concentrations or compliance with Appendix A limits. In addition, too few sampling events violate WMGR123's requirements for either initial or continued storage of de-wasted oil and gas liquids under WMGR123, both of which require a permittee to collect and submit to DEP daily and weekly sampling of many Appendix A pollutants and an analysis of those results. Application materials for some permittees also use values that were measured with quantitation limits ("QLs" or "detection level") that exceed the maximum concentrations in Appendix A. Several parameters that were sampled were unable to be compared with the Appendix A thresholds because the QLs were higher than the thresholds, so it is impossible to determine whether the thresholds were exceeded without additional sampling. Pollutants were also not measured with the right units. (4, 5, 9, 10)

Response: The commenter appears to misinterpret the sampling and analysis requirements in WMGR123 by asserting that permittees have not provided up to date analyticals for their oil and gas liquid waste and fail to fulfill ongoing sampling and analysis requirements to demonstrate compliance with the limits contained in Appendix A of WMGR123. Condition C.1.b., which few if any facilities qualify to operate under, authorizes permittees under WMGR123 to treat oil and gas liquid waste to the water quality standards in Appendix A of the general permit, provided the sampling and analysis requirements in Conditions C.2. and C.3. are satisfied. Treating to Appendix A standards in order to beneficially use the oil and gas liquid waste is not required for permittees that are not seeking the ability to utilize the dewasting provision in Condition C.1.b. Please see the Department's response to Comment #74.

Further, according to 25 Pa. Code §§ 287.51(b) and 287.54(a)(1), a person or municipality that generates more than 2,200 pounds of residual waste per generating location in any single month in the previous year must perform a detailed analysis fully characterizing the physical and chemical composition of each type of waste it generates.

Section B.2. of the Form 26R (Chemical Analysis of Residual Waste Annual Report by the Generator) Instructions identifies the parameters that must be sampled and analyzed for in wastewaters produced by the drilling, completion, and production of a Marcellus Shale or other shale gas well. These parameters include gross alpha, gross beta, Radium-226, Radium-228, Uranium, and Thorium.

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The results of the analysis are submitted to the Department as part of a 26R Form on an annual basis. WMGR123 also includes a condition that requires all records generated by a permittee in accordance with the general permit to be maintained by the permittee for a minimum of five years; be available at the facility; and be made available to the Department upon request. Additionally, the Department has added a condition to renewed WMGR123 that requires permittees to submit an annual report on the beneficial use activities conducted under WMGR123 by March 1 for the preceding calendar year. This report shall include:

- Names of the generators and locations where the oil and gas liquid waste is generated;
- The dates and volumes of oil and gas liquid waste received by the facility;
- The dates and volumes of processed oil and gas liquid waste and wastes produced by the operation of the facility, if applicable;
- The dates, volumes, and locations, including the names of the facilities to which the processed oil and gas liquid waste is transported for beneficial use, disposal, storage, transfer or processing; and
- The maximum volume of all unprocessed and processed oil and gas liquid waste and other wastes that are managed at the facility each day.

Permittees that process or transfer solely their own oil and gas liquid waste are relieved from the requirement to provide information in the annual report that is otherwise provided to the Department in accordance with unconventional monthly Oil and Gas Reporting Electronic (OGRE) requirements, which is available on the Department's website. As with all general permits, records relating to the permitted operation and the wastes authorized for processing or beneficial use may be requested and made available to the public.

77. **Comment:** DEP did not require any additional testing for pollutants beyond the WMGR123 Appendix A list despite the fact that other pollutants that could pose threats of harm to the health, safety, or welfare of humans or the environment are present in oil and gas liquid waste and should have been required to be tested.

Oil and gas liquid waste, defined in WMGR123 as "liquid wastes from the drilling, development and operation of oil and gas wells and pipeline facilities..." contains a variety of toxic chemicals. The chemicals used by the oil and gas industry include a variety of chemicals used to drill and frack wells, including methanol, 2- butoxyethanol, and ethylene glycol, the three most commonly used chemicals as reported by a 2011 report by the Minority Staff of the U.S. House of Representatives Committee on Energy and Commerce. That report also specifically identified 29 chemicals used by companies that are known or possible human carcinogens, regulated under SDWA for risks to human health, and/or listed as hazardous air pollutants ("HAPs") under the Clean Air Act, including diesel, naphthalene, xylene, hydrochloric acid, toluene, ethylbenzene, and formaldehyde.

Initial drilling of the wells also uses a variety of muds and fluids that contain toxic chemicals. Drilling muds can include barite, which contains primarily barium sulfate but also a host of toxic

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metals, such as mercury, cadmium, and chromium. Other chemicals used in drilling and well development practices that can contaminate liquid waste from these processes include additional toxic constituents such as propargyl alcohol, a common corrosion inhibitor; heavy naphtha, a lubricant that contains the toxic BTEX compounds; and Duratone HT, a filtration control agent for drilling that contains nonylphenol.

Furthermore, there are toxic chemicals already present in the gas formation that get mobilized as drill cuttings and flowback water, which, in the Marcellus shale formation, can include lead, arsenic, barium, chromium, uranium, radium, radon, and benzene. "Drill cuttings can also contain naturally occurring radioactive materials ("NORMs"), which have proven to be a problem for the disposal of these wastes in landfills not capable of handling them."

Many of these pollutants that are used or produced during fracking and can be present in oil and gas liquid waste are toxic or otherwise dangerous. According to Earthworks' "Hydraulic Fracturing 101" page and sources cited therein:

- "Many fracturing fluid chemicals are known to be toxic to humans and wildlife, and several are known to cause cancer. Potentially toxic substances include petroleum distillates such as kerosene and diesel fuel (which contain benzene, ethylbenzene, toluene, xylene, naphthalene and other chemicals); polycyclic aromatic hydrocarbons; methanol; formaldehyde; ethylene glycol; glycol ethers; hydrochloric acid; and sodium hydroxide.
- "Very small quantities of some fracking chemicals are capable of contaminating millions of gallons of water. According to the Environmental Working Group, petroleum-based products known as petroleum distillates such as kerosene (also known as hydrotreated light distillates, mineral spirits, and a petroleum distillate blends) are likely to contain benzene, a known human carcinogen that is toxic in water at levels greater than five parts per billion (or 0.005 parts per million).
- "Other chemicals, such as 1,2-Dichloroethane are volatile organic compounds (VOCs). Volatile organic constituents have been shown to be present in fracturing fluid flowback wastes at levels that exceed drinking water standards. For example, testing of flowback samples from Texas have revealed concentrations of 1,2-Dichloroethane at 1,580 ppb, which is more than 316 times EPA's Maximum Contaminant Level for 1,2-Dichloroethane in drinking water.
- "VOCs not only pose a health concern while in the water, the volatile nature of the constituents means that they can also easily enter the air. According to researchers at the University of Pittsburgh's Center for Healthy Environments and Communities, organic compounds brought to the surface in the fracturing flowback or produced water often go into open impoundments (frac ponds), where the volatile organic chemicals can off-gas into the air."

In fact, pollution caused by mismanagement of oil and gas liquid (and solid) waste was recently even the subject of criminal charges in Pennsylvania.

All of these pollutants should have been required to be tested for prior to this facility's activities

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being authorized to process, transport, and storage this oil and gas liquid waste material. Failure to test for these pollutants means the facility cannot ensure that a spill or leak during transport or storage would not threaten health or the environment. (4, 5, 9, 10)

Response: The water quality standards in Appendix A were developed in full consideration of potential pollutants that may be found in oil and gas wastewater and in consideration of the distillation technology in use at the time the WMGR123 was established.

Only permittees that intend to utilize the dewatering provision in Condition C.1.b. must treat to Appendix A standards and fulfill the sampling and analysis requirements in Conditions C.2. and C.3. Regardless, any generator of residual waste must comply with the requirements of § 287.54(a)(1), which states that persons or municipalities (that generate more than 2,200 pounds of residual waste per generating location in any single month in the previous year) must perform a detailed analysis that fully characterizes the physical properties and chemical composition of each type of waste that is generated. This analysis shall include available information from material safety data sheets or similar sources that may help characterize the physical properties and chemical composition of the waste. Please see the Department's responses to Comments #74 and 76.

Regardless of whether this general permit is available in Pennsylvania, oil and gas exploration and production using hydraulic fracturing would still occur in Pennsylvania through the utilization of fresh, non-waste-derived chemicals (as opposed to constituents contained in the oil and gas liquid waste authorized under WMGR123) and freshwater withdrawals. The purpose of this general permit is to encourage the reuse of oil and gas liquid waste generated on oil and gas well sites and associated activities (such as compressor stations) through a closed loop process that allows for the return of processed liquid waste to well sites for reuse, minimizing freshwater withdrawals and reducing impacts to Pennsylvania's water resources with no greater threat of environmental harm than the use of the fresh hydraulic fracturing fluid that it replaces.

If there are additional parameters that can be adequately demonstrated as needing to be included in Appendix A of WMGR123, the Department will consider that information and subsequently modify the limits, if warranted.

78. **Comment:** Given these failures of several WMGR123 permittees' application materials to comply with the technical and application requirements of WMGR123's Appendix A, it appears that the requirements of Condition C.1 of WMGR123 have not been satisfied. Commenters specifically, and most importantly, request that the Department identify any materials in the applications or otherwise that confirm whether these applicants meet the requirements of either Condition C.1.a or C.1.b of this permit. Commenters did not find any materials in the applications or otherwise to show that the activities meet these requirements.

Unless DEP can establish that the identified permittees' application materials and operations meet the requirements of Condition C.1 of the permit, the activities are not consistent with the requirement of WMGR123 and further may have the potential to harm the health, safety, or welfare, of the people or environment of the Commonwealth, in violation of 25 Pa. Code § 287.642(e). Consequently, DEP must suspend or revoke these authorizations until such time as the permit requirements can be met and health and safety ensured. (4, 5, 9, 10)

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Response: Please see the Department's response to Comment #74. Condition C.1.a. automatically applies to all permittees issued coverage under WMGR123. Most, if not all permittees, do not utilize the dewatering provision in Condition C.1.b. and therefore, do not need to treat to Appendix A standards in order to beneficially use oil and gas liquid waste. Unless a permittee is seeking to utilize the dewatering provision in Condition C.1.b., application materials do not need to contain analyticals that demonstrate compliance with Appendix A.

79. **Comment:** Several permittees' applications claimed dewatering requirements do not apply without any proof or explanation. There appears to be no legal basis in the application materials for the permittees being excluded from having to comply with Appendix A limits.

DEP should explain or have the permittees explain what is meant by the statement that the dewatering requirements do not apply. Commenters also specifically request an explanation of why that is, whether DEP agrees, and whether that disqualifies these permittees from coverage under WMGR123. (4, 5, 9, 10)

Response: Please see the Department's responses to Comments #74 and 78.

80. **Comment:** Condition C.1 of WMGR123 sets forth two ways that oil and gas liquid waste can be de-wasted. Condition C.1.a allows oil and gas liquid waste to be de-wasted when used to develop or hydraulically fracture an oil and gas well. Until it is used for that purpose, the processed or stored oil and gas liquid waste must be managed as a residual waste. Condition C.1.b. allows processed oil and gas liquid waste to be de-wasted once it meets the concentration limits in Appendix A of WMGR123.

It is at best unclear how the Department determined compliance with Condition C.1.a based on the information submitted as part of the renewal applications. Unless the application materials (and the ongoing operations) meet the requirements of Condition C.1, the activities are not consistent with WMGR123 and further may have the potential to harm the health, safety or welfare of the people or environment of the Commonwealth, in violation of 25 Pa. Code § 287.642(e). CCJ respectfully requests that the Department identify the materials in the applications or otherwise that it relied upon to determine that the above referenced facilities comply with Condition C.1.a of WMGR123. (6, 7)

Response: Please see the Department's response to Comment #74.

81. **Comment:** Condition C.1.b. allows processed oil and gas liquid waste to be de-wasted once it meets the concentration limits in Appendix A of WMGR123. Prior to the initial storage and de-wasting of processed oil and gas liquid waste in accordance with Condition C.1.b, the permittee must "demonstrate that the processed oil and gas liquid waste meets the limits in Appendix A by submitting analytical data to the DEP Regional Office serving the county in which the facility is located for approval." WMGR123 C.2.

CCJ has reviewed the permit application files for 17 WMGR123 permittees. The analytical data required by Condition C.2 was either missing or insufficient. If the application contained any sampling data at all, the data included was often from a single sampling event and for a limited number of pollutants. A single sampling event violates WMGR123's requirement for the initial

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storage of de-wasted oil and gas liquids, which requires the permittee to collect daily and weekly sampling of many Appendix A pollutants and submit analytical data to the Department. See WMGR123 C.2.a-c. Obviously, one sampling event is also not sufficient to show current concentrations or continued compliance with Appendix A limits. See WMGR123 C.3.

CCJ requests that the Department identify any materials in the applications or otherwise that it relied upon to determine whether these facilities meet Conditions C.1.b and C.2. To the extent that any of the above referenced facilities rely on Condition C.1.b. to de-waste the oil and gas liquid waste and have not complied with WMGR123 Condition C.2, CCJ respectfully requests that the Department suspend or revoke the permit until the operator demonstrates compliance with the limits contained in Appendix A. (6, 7)

Response: Please see the Department's response to Comment #74.

82. **Comment:** CCJ appreciates the Department's commitment to including the surrounding communities in the decision making process for all WMGR123 applications moving forward, including new applications, renewal applications, and applications for modification, and appreciates the Department's review of these comments and any other comments that it receives regarding these facilities. CCJ also appreciates the Department's commitment to investigate any complaints it receives from concerned residents and communicate the results of such investigation to the complainant.

CCJ respectfully requests that the Department identify the materials in the applications or otherwise that it relied upon to determine whether these facilities meet the requirements of Conditions C.1.a or C.1.b. To the extent that any of the above referenced facilities rely on Condition C.1.b. to de-waste the processed oil and gas liquid waste and have not complied with WMGR123 Condition C.2. (6, 7)

Response: The Department acknowledges the comment. Regarding permittee compliance with Conditions C.1.a and C.1.b, please see the Department's response to Comment #74.

83. **Comment:** I specifically and most importantly, request that the Department identify any materials in the application or otherwise that confirm whether these applications meet the requirements of either Condition C.1.A or C.1.B of the permits. I did not find any materials in the applications or otherwise to show that this activity meets these requirements. Unless the Department can establish that Range's application materials and operations meet the requirements of Condition C.1.A or C.1.B of the permit, the activities are not consistent with the requirements of WMGR123 and consequently, DEP must suspend or revoke the referenced permits until such time as these permits' requirements can be met and health and safety ensured. (21)

Response: Please see the Department's response to Comment #74.

Submission of Sample Data:

84. **Comment:** DEP must amend permits to require that all sampling data be promptly submitted to the Department. Given the difficulties the public has had with obtaining waste characterization data, DEP must amend this permit to require that all waste characterization data be promptly submitted to the DEP. DEP's failure to require such submissions to date has made waste characterization and other data *de facto* inaccessible by the public, including nearby neighbors with concerns about the characteristics of the toxic materials entering their neighborhoods.

While General Permit WMGR123 establishes requirements for sampling of all Appendix A constituents prior to initial storage (see Condition C.2) and then requires ongoing daily and/or weekly sampling of all Appendix A constituents to continue storing processed oil and gas well liquid waste (Condition C.3), the Permit fails to require reporting of this ongoing sampling data to DEP unless requested. The permit states:

All records required in this general permit shall be maintained by the permittee for a minimum of five years, shall be available at the facility (either in hard copy or in an electronic format), and shall be made available to DEP upon request.

The authorizations must specifically be amended to both require the ongoing sampling for Appendix A constituents and to require all sampling and analytical results required by Conditions C.2 and C.3 be submitted to DEP promptly and on a regular basis, such as monthly, rather than only on request. Without this requirement, this safety data will continue evade public review and prevent DEP from having the data in hand necessary to properly evaluate and ensure compliance and take timely and appropriate enforcement, when necessary.

As written, the permit would block the public from having access to required sampling data, as the public would not be able to obtain from the permittee the sampling data required by Condition C.3 and would only be able to access it if and after the DEP requested and obtained such data from the permittee. Because the permittee is *never* required to otherwise submit this data to DEP, and because there is no provision stating that the data would be made available to the public upon request, the public has no way of obtaining that data unless DEP has asked for it, which is a subjective decision by the DEP. Moreover, the DEP has no way of determining compliance with permit conditions unless there is a site inspection or request by the Department for accumulated sampling data. This prevents both the public and the regulating agency from timely evaluating compliance. All permittees approved for coverage under WMGR123, including this one, should be required to submit all data collected pursuant to Condition C.3 on at least a monthly basis so DEP can confirm the waste meets the required limits and so that this data would be available in the public files for the public to review either through an informal request or pursuant to the Right to Know Law. Without this data in hand, these permits in practicality are unenforceable. Commenters specifically request a response from DEP to this request justifying its failure to require submission of such data. (4, 5, 9, 10)

Response: Only permittees that intend to utilize the dewatering provision in Condition C.1.b. must treat to Appendix A standards and fulfill the sampling and analysis requirements in Conditions C.2. and C.3. Most, if not all, permittees do not utilize the dewatering provision in Condition C.1.b. In accordance with Condition C.2. of WMGR123, permittees utilizing the

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dewasting criteria in Condition C.1.b. by meeting the concentration limits in Appendix A must, prior to the de-wasting of the processed oil and gas liquid waste, submit analytical data to the appropriate Department Regional Office that demonstrates the oil and gas liquid waste meets the Appendix A limits and contains the following:

- A minimum of 14 consecutive daily flow proportional composite samples analyzed for strontium, barium and total dissolved solids (TDS).
- A minimum of 2 weekly flow proportional composite samples which are taken a minimum of 7 days apart analyzed for all constituents listed in Appendix A except ammonia, benzene, methanol and toluene.
- A minimum of 2 grab samples taken a minimum of 7 days apart analyzed for ammonia, benzene, methanol and toluene.

Per Condition C.3., to continue storing dewasted material in accordance with Condition C.1.b., permittees must continue to perform collection of samples and analysis on a daily and weekly basis depending on the constituents. Even though these ongoing sampling and analysis results are not required to be provided to the Department unless requested, permittees are required to immediately notify the Department and manage the de-wasted material as a residual waste if any ongoing sampling and analysis shows an exceedance of one of the Appendix A limits.

The commentator notes difficulties obtaining chemical analysis data (referring to data that would be generated in accordance with Conditions C.2. and C3.) from the Department. In all likelihood, this is because the permittee or permittees in question are not required to perform the sampling because they are not dewasting their material pursuant to Condition C.1.b. Any analytical data for a specific authorization would be contained within their application materials.

85. **Comment:** Condition C.3 of WMGR123 requires permittees to demonstrate that the de-wasted material continues to meet the limits in Appendix A in order to continue storing the de-wasted material under Condition C.1.b. Permittees must collect daily and weekly samples and analyze them for the constituents listed in Appendix A. See Conditions C.3.a-c. Condition C.3.d. requires the permittee to immediately notify the Department if the results of such sampling fail to meet the concentration limits in Appendix A. The permittee must demonstrate to the Department's satisfaction that the limits in Appendix A are met before the processed oil and gas liquid waste is de-wasted under Condition C.1.b. See Condition C.3.d. Condition C.3 requires a permittee to demonstrate that the de-wasted material continues to meet the limits in Appendix A but does not expressly require permittees to submit the results of sampling conducted under Conditions C.3.a-c. However, WMGR123 Condition D.3 requires that all records required by the general permit be maintained for a minimum of five years. The records must "be available at the facility (either in hard copy or in an electronic format) and shall be made available to DEP upon request."

CCJ understands that the Department must rely on permittees to report violations in all of its permitting programs to a degree. The Department cannot be everywhere all of the time. So, the Department often relies on permittees and the public to report violations or other issues on site.

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This reliance is not unreasonable by itself. However, CCJ believes that exclusively relying on permittees to report violations of the Appendix A limits is both unreasonable and unnecessary.

To the extent that any of the above referenced facilities rely on Condition C.1.b. to de-waste the oil and gas liquid waste, CCJ urges the Department to amend those permits to include a requirement that the permittees submit the analytical data collected pursuant to Condition C.3 on at least a quarterly basis. The data collected under Condition C.3 is necessary for the Department to properly evaluate and ensure continued compliance, and take timely and appropriate enforcement action when necessary. Prior to the initial storage and de-wasting of processed oil and gas liquid waste in accordance with Condition C.1.b, the Department must determine that the processed liquid waste meets the limits in Appendix A. The Department's obligation to implement and enforce the waste regulations and the general permit do not end when the Department makes its initial determination in accordance with Conditions C.1.b and C.2. The Department cannot exclusively rely on permittees to determine continued compliance with Appendix A. In addition, without this requirement, nearby residents with concerns about the characteristics of the liquid waste that is being stored and transported in their community will not have reliable access to the analytical data. Dependable access to information is critical to the ability of community members to know what environmental risks they may face or are currently facing in their communities.

CCJ respectfully requests that the Department suspend or revoke the permit until the operator demonstrates compliance with the limits contained in Appendix A. With respect to ongoing monitoring and compliance with the limits set forth in Appendix A, CCJ urges the Department to require permittees to submit sampling results on a quarterly basis. (6, 7)

Response: Please see the Department's response to Comment #74. Only permittees that intend to utilize the dewasting provision in Condition C.1.b. must treat to Appendix A standards and fulfill the sampling and analysis requirements in Conditions C.2. and C.3. Most, if not all, permittees do not utilize the dewasting provision in Condition C.1.b.

Should any permittees wish to pursue dewasting in accordance with Condition C.1.b., the commenter is correct that a permittee must demonstrate that their processed oil and gas waste meets the limits in Appendix A to the appropriate Department Regional Office for review and, if warranted, approval. Ongoing sampling and analysis data is not required to be submitted to the Department but must be maintained by the permittee for a minimum of 5 years and be made available to the Department upon request. Even though these ongoing sampling and analysis results are not required to be submitted unless requested, these are records that the Department would review during routine inspections at the facility. Should data indicate that a permittee managed material pursuant to the dewasting provision in C.1.b. and exceeded a constituent limit in Appendix A, the permittee would be required to manage the material as a residual waste until compliance with the Appendix A limits can be re-established. The Department does not believe that a modification to the reporting requirements for ongoing sampling and analysis data is necessary at this time.

86. **Comment:** All WMGR123 permit authorizations should be amended to require that all sampling data be submitted monthly to the Department instead of only upon request by the DEP after the initial application. Data reporting should continue monthly during the life of the permit. How

else will the Department be able to monitor the site and the waste stream they have allowed to be stored in Washington County and elsewhere in Pennsylvania? (21, 33 – 78)

Response: Please see the Department’s response to Comment #85.

Compliance History Reviews:

87. **Comment:** It is unclear how the Department evaluated or considered the permittees’ compliance with the applicable statutes and regulations during its review of renewal permit applications. The compliance history submitted as part of the applications indicate that the permittees’ operation of these facilities could harm the health, safety, or welfare of the people of environment of this Commonwealth. By way of example, Range Resources Appalachia, LLC’s compliance history shows over 200 self-reported spills at various facilities or sites that it operates. CCJ respectfully suggests that this history of ongoing and repeated violations by the permittee demands that the Department do more than take a check-the-box approach. (6, 7)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department’s satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: “Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***” (Emphasis added). The Department has the authority to determine that a permittee’s compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

88. **Comment:** Some applications referred to NOVs that remain open or are described as being unresolvable. If problems are unresolvable, those facilities should be considered unpermissible. DEP should, at minimum, leverage its power to deny renewals to force companies to resolve violations that remain open after several years. (33 – 78, 160-162, 164)

Response: The Department reviews the compliance history, including all violations, open or closed, for a permittee as part of the permit application review process. The Department makes a determination as to whether an open violation is significant enough to warrant withholding of a permit issuance until the violation is corrected. The Department is interested in any information pertaining to specific facility, and that information should be forwarded to the appropriate Regional Office that has jurisdiction over that facility.

Transportation and Storage of Oil and Gas Liquid Waste

89. **Comment:** In its Comment Response Document to the 1/4/2021 revision to WMGR12310, DEP stated:

“The only instances where WMGR123 permittees receive oil and gas liquid waste via pipelines are those in which the WMGR123 permittee and the generator of the oil and gas liquid waste are the same entity. As a result, the generator *can determine* whether the oil and gas liquid waste can be accepted by the WMGR123 facility before it is pumped from the well site, so rejection of oil and gas liquid waste conveyed to the WMGR123 facility via pipeline is unlikely to occur.” [Emphasis added.]

The generator can determine if radioactivity levels are too high at the well pad, but are they required to? There is no language in WMGR123 or in 25 PA Code § 78a.58 that ensures this will happen. The naivete implied in DEP’s argument that because the generator and WMGR123 site operator are “the same entity”, surely the generator wouldn’t want to pipe waste that the WMGR123 site couldn’t handle and so would simply take care of it at the point of origin is breathtaking. The DEP must put a condition on any WMGR123 that well pads connected via pipeline should treat material sent via that pipeline as “residual waste processing” under the terms of 25 PA Code § 78a.58(d), and that no well pad may be connected via pipeline without the operator submitting an RPAP for the well pad originating the residual waste. Such an RPAP must clearly describe what will happen to prevent sending residual waste through the pipeline in excess of standards for what would be delivered by truck. (20)

Response: Pennsylvania’s Waste Regulations do not address the transportation of waste material via pipelines that extend beyond the permitted boundary of a facility. The Department does not have the authority to require a permit for an off-site pipeline, nor does the Department have the authority to prohibit a facility permitted under WMGR123 from receiving waste material by pipeline if the facility can demonstrate that the waste received by pipeline can be adequately managed. Any pipelines located within the permitted boundaries of a WMGR123 facility that are directly associated with the WMGR123 activities, are evaluated as part of WMGR123 authorization.

Any generator of residual waste, including oil and gas operators generating residual waste on a well pad, is required by regulation to chemically and physically characterize the waste in accordance with 25 Pa. Code § 287.54, and as part of such, would have evaluated the expected concentrations of Ra-226 and Ra-228 to determine if any federal regulations under Title 49, Subtitle B, Chapter I – Pipeline and Hazardous Materials Safety Administration, Department of Transportation apply.

As provided in the response referenced by the commenter, WMGR123 facilities receiving oil and gas liquid waste must develop a RPAP, which must contain methods by which a facility will detect the presence of radioactivity, identify the type of radioactivity present, measure the radiation emitted, and determine the actions needed to protect workers, the public and the

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environment from any radiation contained in the waste it receives. The RPAP also must include procedures for the monitoring of areas where waste is stored at the facility.

The permitted WMGR123 facility is required to develop and maintain a RPAP is reviewed and approved by the Department. In those instances, the well operator generating the waste is also the permittee of the receiving facility. Therefore, the same entity is evaluating the waste for concentrations of Ra-226 and Ra-228 before it is placed into the pipeline making it unlikely that the permittee would need to reject incoming waste.

The Department would require an evaluation of the waste's radioactivity to occur, and a determination made as to the applicability of Title 49 prior to introducing the waste into the pipeline and transferring it to the WMGR123 permittee. However, if the permittee receives oil and gas liquid waste by pipeline that exhibits radiological properties that so are high the facility rejects it for processing, the generator would need to arrange for it to be returned to the point of generation or transported to an alternative facility authorized to accept or dispose of it. The generator would need to contact the Department's Bureau of Radiation Protection to obtain a DOT exemption before a vehicle could leave the site.

90. **Comment:** All storage sites must be publicized so that citizens are aware of this danger. Adequate time for education and outreach was not only not granted by the DEP but the state-wide request for an extension was ignored. The DEP and the residents the agency is intended to protect have not been and will not be able to establish a certainty of protection for environmental and human health and we therefore urge the DEP to reject all of the WMG123 permit applications and renewals. (22, 37)

Response: The premise on which the commentators assert all WMGR123 applications and renewal should be rejected is unfounded. All applications for coverage under WMGR123, regardless of whether the operation is intended to treat oil and gas liquid waste, to simply store oil and gas liquid waste, are subject to the determination of applicability (DOA) application process and requirements, and therefore, would be publicly noticed in the Pennsylvania Bulletin, which would commence a 60-day public comment period.

The Department did respond to the request for an extension to the public comment period that the commenters reference. Please see the Department's response to Comment #2.

91. **Comment:** Workers who come into contact with fracking wastewater, by trucking it, pumping it, cleaning up spills, or other means, are exposed to multiple volatile organic compounds and sources of radiation. Uranium, radium, and other naturally occurring radioactive materials (NORM) are released from shale by fracking and, therefore, are in flowback and produced water from unconventional wells. TENORMs (technologically enhanced naturally occurring radioactive materials) are concentrated in the sludge that results from treatment of flowback water and are present in landfills that receive fracking waste sludge and sediment. Residual solids include drill cuttings, debris and materials that settle out from wastewater and remain following evaporation from open storage pits. A local newspaper in Greene County, PA reported that a truckload of fracking waste triggered a radioactivity alarm at a disposal site, because it contained nine times the standard for radium 226. Many carcinogens are concentrated in fracking waste and the risks of disease are greater in those workers exposed to waste.

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Truckers are not required to wear protective gear or wear dosimeters to measure radiation exposure, and they frequently become soaked in the wastewater they are disposing of. Conducting hundreds of interviews, Rolling Stone's investigation uncovered "a sweeping arc of contamination—oil-and-gas waste spilled, spread, and dumped across America, posing understudied risks...." (23)

Response: Any generator of residual waste is required by regulation to characterize the waste chemically and physically in accordance with 25 Pa. Code § 287.54, and as part of such, would have evaluated the expected concentrations of constituents, including certain radiological isotopes. The Department requires an evaluation of the waste's chemical and physical properties to occur prior to it being transferred to a WGMGR123 permittee.

All generators and shippers of radioactive materials offering such materials for conveyance on a public road are required to characterize the waste, including identification of radioisotopes and quantifying the concentration of radioactivity, prior to shipment and follow federal DOT requirements in 49 CFR.

WMGR123 facilities receiving oil and gas liquid waste must develop a RPAP, which must contain methods by which a facility will detect the presence of radioactivity, identify the type of radioactivity present, measure the radiation emitted, and determine the actions needed to protect workers, the public and the environment from any radiation contained in the waste it receives. The RPAP also must include procedures for the monitoring of areas where waste is stored at the facility.

The applicable laws and regulations in the Commonwealth, as well as the Department's *Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal Facilities* (Document Number 250-3100-001), are designed to protect public health, safety and welfare and the environment in the Commonwealth. The Department conducted an extensive TENORM study and published the results in June 2016 and has not yet identified any activity where a worker would exceed the annual public dose limit of 100 mrem/year.

Much of the language in the submitted comment go beyond the scope of the public comment period for which these comments were sought and appear to address the oil and gas industry as a whole. Even so, the Department believes it is important to mention that there are uses of highly regulated radioactive sources in the oil and gas industry that have potential to cause workers to exceed 100 mrem/yr; and those activities are strictly regulated and licensed to maintain worker exposure as low as reasonably achievable.

Portions of the comment that pertain to personal protective equipment (PPE) for employees in the workplace go beyond the scope of the WMGR123 and deal more directly with the federal regulations in-place that require employers to identify necessary PPE and provide it to their employees.

92. **Comment:** New waste storage practices increase concerns for multiple reasons, including that, "Hydraulic fracturing operations provide bacterial species with many habitats favorable to their (unwanted) growth and proliferation. The major sources of bacterial contamination are (1)

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drilling mud, (2) water, (3) proppants, and (4) storage tanks. Prolonged storage of water prior to use, typically in lined or unlined earthen pits, can lead to mass proliferation of microorganisms. Likewise, bacteria can thrive in stored produced water that was recycled for use in future fracturing operations.” The practice of storage of waste for industry reuse assumes a continuous need without addressing the possibility of a decrease in demand which could leave waste in temporary containers beyond capability of their intended safety measures. “Across all years of data, approximately one-third of all liquid waste does not have a reported final destination, either because no destination was provided at all, or more commonly because the destination provided is an intermediary site such as a surface impoundment, treatment plant, or processing facility, and it is unclear where the waste goes afterwards. This is one trend that has not improved over time, and in fact in 2017 this percentage rose to 40.8% of the liquid waste volume generated in that year reported with no intermediary endpoint location. We recommend that PADEP and other oil and gas regulatory agencies nationwide implement a comprehensive cradle-to-grave waste tracking program, which would provide much more detailed information on where waste ends up. Hill, et. al. noted that such data would enable researchers and regulatory agencies to better evaluate spatially-explicit impacts to water and environmental quality and potential hazards, risks and impacts to human health.” (23)

Response: Regardless of whether the demand for reuse of oil and gas liquid waste declines, permittees under WMGR123 are limited in regard to the maximum amount of waste material they can store onsite by their application materials and associated bond. This would include any waste material they accept from sources within Pennsylvania or out-of-state. Permittees are required to use the oil and gas liquid waste in accordance with the terms and conditions of WMGR123, which includes preventing the storage of waste material on-site for longer than 1-year, constituting disposal, unless clear and convincing evidence to the contrary can be provided. WMGR123 does not authorize disposal of oil and gas liquid waste, but the facilities may generate waste in the course of operations, which would require disposal at a permitted facility, such as sediments from the storage of oil and gas liquid waste, solids removed via processing, or waste material that can no longer be beneficially used under the terms and conditions of the general permit. Permittees are already required to maintain documentation that describes the total amount of waste generated by the WMGR123 operation and where it was ultimately sent for disposal. This would continue to apply, regardless of disposal method. Oil and gas liquid waste stored in accordance with an authorization issued under WMGR123 would not ultimately be stored beyond the capability of their intended safety measures as facilities are permitted for 10-year terms and the designs and specifications for the facilities, which includes the methods and equipment for storage, are reviewed for that duration. WMGR123 now includes a robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application.

In regard to a cradle-to-grave tracking program, please see the Department’s response to Comment #94.

93. **Comment:** We support accurate labelling of radioactive and other toxic waste throughout the entire chain of custody. (37)

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Response: In accordance with the residual waste management regulations at 25 Pa. Code, Chapter 299 (relating to storage and transportation of residual waste), “all containers and storage tanks that contain residual waste, and vehicles that transport residual waste, must be labeled, or display signage, respectively, that designates the material as residual waste.” All waste transported to or from a facility operating under WMGR123 must comply with the requirements of Chapter 299.

94. **Comment:** PADEP should implement a comprehensive cradle-to-grave waste tracking program, which would provide much more detailed information on where waste ends up. (37)

Response: The Unconventional Oil and Gas Well regulations at 25 Pa. Code, § 78a.121. and conventional Oil and Gas Well regulations at 25 Pa. Code, § 78.121 (both relating to production reporting), require each operator of an unconventional well to submit a monthly production and status report, and each operator of a conventional well to submit an annual production report for each well on an individual basis through the Department’s OGRE database. Production reports must include information on the amount and type of waste produced and the method of waste disposal or reuse, including the specific facility or well site where the waste was managed. This information is publicly available through the Department’s website.

All waste transportation activities, including wastes transported to or from a facility authorized under a statewide waste general permit issued pursuant to 25 Pa. Code, Chapter 287, Subchapter H (relating to beneficial use), must comply with Pennsylvania’s residual waste regulations at 25 Pa. Code, Chapter 299 (relating to the storage and transportation of residual waste). Chapter 299 requires transporters of residual waste to maintain a daily operational record in the cab of each transportation vehicle that includes, at a minimum, information on the type and volume of residual waste being transported, the generator of the waste, the destination of the waste, and handling problems or emergency disposal activities. These records must be maintained by the transporter for five years and provided to the Department upon request.

Permittees operating under WMGR123 must maintain documentation that includes the names of the generators of oil and gas liquid waste and the locations where the oil and gas liquid waste is generated; the dates and volumes of oil and gas liquid waste received by the facility; the dates and volumes of processed oil and gas liquid waste and wastes produced by the operation of the facility; and the dates, volumes, and locations, including the names of the facilities to which the processed oil and gas liquid waste is transported for beneficial use, disposal, storage, transfer or processing.

The Department believes that the systems that are currently in place provide an adequate accounting of waste material from its point of generation to its ultimate disposition, subsequent to processing or storage at a WMGR123 facility.

AUTHORIZATION-SPECIFIC COMMENTS AND RESPONSES

Please Note that many of the comments submitted during the public comment periods for the individual authorizations under WMGR123 were directed to the WMGR123 base permit or to all authorizations under WMGR123. In these instances, the Department has considered these comments to be general comments that would apply to all permittees under WMGR123 and have been consolidated into the preceding section of the document.

WMGR123NC003

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Seneca Resources Company under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123, and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

2. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123NC004

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Chesapeake Appalachia, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

2. **Comment:** The fact that when the ESCGP permit expired in 2016 that post construction stormwater management structures required by the permit were not installed should disqualify approval outright. (16)

Response: The ESCGP permit pertained to the operation of the Oil and Gas well pad and not for the activity related to the WMGR123 permit that was under review. The Department conducted a review of the compliance history of this site, and no outstanding violations were on-going at the time of permit issuance. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

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3. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenters support of the referenced WMGR123 authorization.

WMGR123NC005

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Eureka Resources, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

2. **Comment:** The permit itself does not specify if violations are site specific or companywide. This lack of transparency is incredibly concerning and limits sincere public participation related to this permit. (16)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a

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related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: “Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***” (Emphasis added).

The Department acknowledges that there were violations at this site, but none were on-going at the time of permit issuance. The violations for the entire company were disclosed in the compliance history review (Form HW-C) of the application package as required by the residual waste regulations. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

WMGR123NC009

1. **Comment:** On behalf of Diversified Gas & Oil, I am writing to express our support for WMGR123NC009. Diversified supports recycling and reuse of wastewater, which has dramatically reduced the use of fresh water, and reduced trucking. Reopening the comment period, negotiating with special interest groups, and establishing stricter standards does not support recycling and reuse. (18)

Response: The Department acknowledges the commenter’s support of the referenced WMGR123 authorization. Please see the Department’s responses to General Comments #40 and 41.

2. **Comment:** As the Department’s own permit name implies, the WMGR123 general permit facilitates the beneficial use of wastewater. These permits are beneficial for the operator, for the environment, and for the local community. For these reasons, I am pleased to express my support for WMGR123NC009. (18)

Response: The Department acknowledges the commenter’s support of the referenced WMGR123 authorization.

WMGR123NC010

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Hydro Recovery under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter’s opposition to the referenced authorization but disagrees that approval of this permit with further denigrate the environment

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and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

2. **Comment:** The fact that over 6,000 gallons of treated wastewater was released at this facility due to a pipe break highlights the fact that undue environmental harm can and has occurred and the permit should not be renewed. (16)

Response: The Department recognizes that there was a pipe break at this site. Both the Department's Waste Management Program and the Environmental Cleanup & Brownfields (ECB) Program responded and provided over-sight of corrective actions. ECB worked with the permittee to clean up the impacts and review and verify that soil and water samples met appropriate cleanup standards. All environmental impacts from the pipe break have been remediated. WM worked with the permittee to redesign the piping system and reconstruct it with necessary upgrades. Both the original design and the reconstructed piping system were designed in accordance with the regulatory requirements in 25 Pa. Code § 299.122 (relating to storage tanks)..

3. **Comment:** On behalf of Diversified Gas & Oil, I am writing to express our support for WMGR123NC010. Diversified supports recycling and reuse of wastewater, which has dramatically reduced the use of fresh water, and reduced trucking. Reopening the comment period, negotiating with special interests groups, and establishing stricter standards does not support recycling and reuse. (18)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization. Please see the Department's responses to General Comments #40 and 41.

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- Comment:** As the Department's own permit name implies, the WMGR123 general permit facilitates the beneficial use of wastewater. These permits are beneficial for the operator, for the environment, and for the local community. For these reasons, I am pleased to express my support for WMGR123NC010. (18)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123NC011

- Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Eureka Resources, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

- Comment:** The permit itself does not specify if violations are site specific or companywide. This lack of transparency is incredibly concerning and limits sincere public participation related to this permit. (16)

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Response: The Department recognizes that this facility has had violations in the past; however, at the time of permit issuance the facility did not have any on-going violations. The violations for the entire company were disclosed in the compliance history review (Form HW-C) of the application package, as required by the residual waste regulations.

WMGR123NC012

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Highland Field Service, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

2. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123NC018

1. **Comment:** Tracking of Wastes - Annual report does not show that waste was actually processed or how. The WMGR123 updated definition of “processing” includes “transfer” or “storage”.

The WMGR123 (BUREAU OF WASTE MANAGEMENT DIVISION OF MUNICIPAL and RESIDUAL WASTE 2540-PM-BWM0522 GENERAL PERMIT WMGR123 PROCESSING AND BENEFICIAL USE OF OIL AND GAS LIQUID WASTE, 1.4.21-1.4.31) gives definitions (emphasis added).

Processing – A method or technology used for the purpose of preparing oil and gas liquid waste for beneficial use to develop or hydraulically fracture an oil or gas well. The term includes the transfer or storage of oil and gas liquid wastes.

Transfer – Receiving and processing, or storage of, 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. The term includes a facility that uses a method or technology to convert part or all of the waste materials for beneficial use.

Storage – The containment of waste on a temporary basis in a manner that does not constitute disposal of the waste. It shall be presumed that containment of waste in excess of 1 year constitutes disposal. This presumption can be overcome by clear and convincing evidence to the contrary.

- If there was “disposal”, the report does not show how and where it was disposed.
- The summary report does not reconcile the difference between the In and the Out.
- It does not show for what purpose wastes are being moved among the three Eureka WMGR123 facilities.
- Among the Jan. 4, 2021 revisions to the WMGR123 were “clarification to the proposed definitions for “processing,” “transfer” and “oil and gas liquid waste.” Yet, these clarified terms, including “storage” and “disposal” do not seem to have been translated into reporting requirements as displayed by Standing Stone for 2020.
- Recommendation: We are aware that the annual report by March 1st of each year is a new WMGR123 requirement. It will be important for DEP to develop a report format that has much greater data granularity and reconciles In and Out. (12)

Response: Certain information identified by the commenter, such as explanations for how waste material is processed by a permittee, would be information that is included in a permittee’s application materials and not necessarily part of the annual operation report. Due to the fact that the annual operation report requirements in the current version of WMGR123 went into effect on January 4, 2021, and the reports are supposed to be provided by March 1st of the same year, the Department did not anticipate receiving annual operation reports that complied with the revised language in the current version of WMGR123 until the 2022 calendar year due to time constraints. In regard to the report format, the Department does not feel at this time that the amount of time and resources that would need to be invested into ensuring that there is a specific report format for not only WMGR123, but all general permits (for which the

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Department has over 100, and which can each differ in terms of what information is required to be reported), is warranted. The permittees determine the format that they use to report the required information, but their report does need to include all information required by the general permit.

2. **Comment:** Bonding - The WMGR123 general permit stipulates under Record Keeping:

e. The maximum volume of all unprocessed and processed oil and gas liquid waste and other wastes that are managed at the facility each day to demonstrate that the volumes used to calculate the bond are not exceeded. This includes all materials generated, received, processed and stored at the facility;

The WMGR123 general permit stipulates under Reporting:

e. The maximum volume of all unprocessed and processed oil and gas liquid waste and other wastes that are managed at the facility each day. f. If applicable, updated bonding calculations in accordance with 25 Pa. Code, Chapter 287, Subchapter.

The most recent bonding worksheet is 8/4/2017. The units (CY) are different than the units in the Annual Report (barrels). One can look-up a conversion of 1 cubic yard (cu yd) = 6.41187384barrelsliquid (bbl liquid). The bond covers 21,777 CY; Thus, the bond covers 120,948 barrels. The In vs. Out discrepancy, as noted above, is 490,919 barrels.

- Was 490,919 stored onsite at a point in time?
- Why does the existing bond seem to not relate to the 2020 volume? Where did the figure of 21,777 CY come from?
- With a permit duration of ten years, what is the duration of the bonding permit? Costs typically escalate. We don't see a clause in the permit to increase the amount of the bond to match expected cost increases (e.g., labor, materials) over a decade. (12)

Response: The bond forms used for entities applying for coverage under a general permit are also used for all types of waste facilities, not just those authorized under WMGR123. As a result, the forms display units in "cy". The Department often accepts the use of other volume measurements if it makes sense for the facility and involves the use of conversion factors. The actual permit application materials govern how much flow is permitted for the facility. Additionally, the new permit requires an annual operation report which evaluates the bond annually to determine if any adjustments are needed. This facility is bonded for the total volume of storage and treatment capacity as permitted by the Department.

3. **Comment:** Duration of permit - The WMGR123 authorizes operations for 10 years. This is a very long period of time.

- What happens if the demand for fracking water reuse declines and the business enterprise accepts out of area waste?

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- What happens if the State Legislature passes legislation enabling fracking waste fluids to be disposed of in different ways; will record-keeping and reporting requirements detail this?
- What happens when previously unknown harmful components are identified in fracking waste; will record keeping and reporting requirements be strengthened? (12)

Response: Regardless of whether the demand for reuse of oil and gas liquid waste declines, permittees under WMGR123 are limited in regard to the maximum amount of waste material they can store onsite by their application materials and associated bond. This would include any waste material they accept from sources within Pennsylvania or out-of-state. Permittees are required to use the oil and gas liquid waste in accordance with the terms and conditions of WMGR123, which includes preventing the storage of waste material on-site for longer than 1-year, which would constitute disposal, unless clear and convincing evidence to the contrary can be provided. Generally speaking, the permittee is responsible for management of waste material in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA).

There are already multiple avenues by which oil and gas liquid waste can be disposed of. WMGR123, however, only authorizes the processing and beneficial use of oil and gas liquid waste to develop or hydraulically fracture an oil and gas well. WMGR123 does not authorize disposal of oil and gas liquid waste but does not mean that waste generated in the course of operations would not need to be sent for disposal, such as sediments from the storage of oil and gas liquid waste, or solids removed via processing. Permittees are already required to maintain documentation that describes the total amount of waste generated by the WMGR123 operation and where it was ultimately sent for disposal. This would continue to apply, regardless of disposal method.

In regard to the constituents in oil and gas liquid waste, please see the Department's response to Comment #77.

4. **Comment:** Public Nuisance - The WMGR123 under Operating conditions:

The processing, storage and transfer of the oil and gas liquid waste authorized by this permit, and any other wastes that are generated, shall not cause or allow conditions that are harmful to the environment, public health or safety, including but not limited to, odors, noise, or other public nuisances.

- The annual report shows (per a casual inspection of the annual report) there could be 19 (e.g., 10/25) In and 32 Out (e.g., 2/11/20) at all hours of day and night.
- The permit does not state any boundaries on the origin of the waste. Will-out-of-state and international waste (has already happened in U.S. Gulf states) be trucked into PA, affecting communities far and wide with truck traffic and exposure to waste?
- As the Standing Stone facility has the possibility to expand, as noted in the press for a lithium-related business plan, we do not see a trigger for renewed public comment. (12)

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Response: The permit does not limit the time of operation, or the source of material authorized for processing and beneficial use under the terms and conditions of the general permit. However, the contents of a permittee's applications materials are incorporated by reference into the terms and conditions of the permit, meaning that if the facility deviates from the information supplied at the time of application without first obtaining approval by the Department, the permittee is in violation of the permit terms and conditions. If the facility wishes to expand or modify their operation, a permit modification application would be required to be submitted and approved prior to making any changes. Certain permit modifications, such as an increase in permitted acreage for a facility, would be considered a major permit modification that would coincide with a notice in the Pennsylvania Bulletin and a 60-day public comment period.

5. **Comment:** The fact that there are violations for this facility citing 'Person or municipality dumps solid waste unlawfully' and 'a violation of Act 97,' are especially troubling and should disqualify approval of the permit. (16)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

The Department acknowledges that there were violations at this site, but none were on-going at the time of permit issuance. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

6. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Eureka Resources, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

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The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

WMGR123NC022

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Seneca Resources Company under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit

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application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

2. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123NC034

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of JKLM Energy. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

3. **Comment:** As the Department's own permit name implies, the WMGR123 general permit facilitates the beneficial use of wastewater. These permits are beneficial for the operator, for the environment, and for the local community. For these reasons, I am pleased to express my support for the above-referenced permit and the WMGR123 permit in general. (14, 19, 146, 152, 153, 166 - 173)

Response: The Department acknowledges the commenters' support of the referenced WMGR123 authorization and the WMGR123 general permit.

4. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for JKLM Energy, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the

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terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

5. **Comment:** The nine pages of violations since 2015 included with this permit should disqualify the facility from approval in perpetuity. (16)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

The Department acknowledges that there were violations at this site, but none were on-going at the time of permit issuance. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

WMGR123NC035

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for SWN Production Company under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our

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Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

2. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

3. **Comment:** API PA supports Southwestern Energy's WMGR123 Residual Waste General Permit.

As you are aware, Southwestern Energy's facility is a 1.6 million gallon, double-walled storage system with contained loading and offloading equipment in Tioga County. As you are also aware, this system undergoes quarterly inspections by PADEP Waste Management personnel, with all inspections in 2020 showing it to be following all permit terms and conditions and having no violations.

Although notice of this permit was previously published in the Pennsylvania Bulletin, PA DEP has opened an additional public comment period, generating uncertainty across the regulated community as permit applicants like Southwestern Energy successfully met all required conditions and timeframes of the permit renewal application process. Accordingly, it is

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extremely important that DEP quickly resolve this matter so that Southwestern is able to continue their record of safe operation of this facility.

Moreover, this permit allows for the beneficial reuse of water used in industry's operations. PA's unconventional natural gas industry boasts a proud record of recycling more than 90% of its produced and flowback water through the use of these permits, reducing freshwater usage, significantly cutting truck traffic on local roads, and enhancing public safety, improving air quality, and protecting our environment.

Accordingly, API PA supports Southwestern Energy's WMGR123 renewal application so that it can continue with its record of beneficial water reuse operations as well as its record of compliance in managing wastewater from its operations. (175)

Response: The Department acknowledges the positive impacts resulting from the beneficial use of oil and gas liquid waste authorized under WMGR123, and the commenter's support of the referenced WMGR123 authorization. Please see the Department's responses to General Comments #40 and 41.

WMGR123NC036

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Rockdale Marcellus, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the

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Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

2. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123NC037

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of JKLM Energy. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

3. **Comment:** As the Department's own permit name implies, the WMGR123 general permit facilitates the beneficial use of wastewater. These permits are beneficial for the operator, for the environment, and for the local community. For these reasons, I am pleased to express my support for the above-referenced permit and the WMGR123 permit in general. (14, 19, 146, 152, 167, 168, 169, 171, 172, 173)

Response: The Department acknowledges the commenters' support of the referenced WMGR123 authorization and the WMGR123 general permit.

4. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for JKLM Energy, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

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The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

WMGR123NC038

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of JKLM Energy. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

3. **Comment:** As the Department's own permit name implies, the WMGR123 general permit facilitates the beneficial use of wastewater. These permits are beneficial for the operator, for the environment, and for the local community. For these reasons, I am pleased to express my support for the above-referenced permits and the WMGR123 permit in general. (14, 19, 146, 152, 153, 167, 168, 169, 170, 171, 172, 173, 174)

Response: The Department acknowledges the commenters' support of the referenced WMGR123 authorization and the WMGR123 general permit.

4. **Comment:** The application waste characterization analysis data only provided a sample of data from production fluid, whereas the application also contemplates flowback as a component of the oil and gas liquid waste. To the extent the sampling was not representative of the oil and gas liquid covered by this application, DEP's approval was deficient and the application failed to provide the requisite data. (4, 5, 9, 10)

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Response: The Department's experience in regulating these materials and practices has led the Department to conclude that the chemical analysis data submitted with the application was adequate to ensure that the permittee could comply with the terms and conditions of the general permit. The Department's revisions to the residual waste codes in 2016 culminated in the consolidation of produced fluid and flow-back fluid into the same code, RWC 802, because the two waste streams do not need to be characterized or managed separately.

5. **Comment:** Upon information and belief, and according to the Department's "eFacts" database, this facility has no other permits aside from WMGR123NC038. (4, 5, 9, 10)

Response: While there have not been any other permits issued that were associated with the WMGR123NC038 activities, there are other permits that exist within the same parcel of land that the WMGR123 activities occur, such as oil and gas well construction and development permits.

6. **Comment:** General Permit WMGR123 requires that a permittee must have a "Radiation Protection Action Plan" ("RPAP") and that "[t]he 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." It also requires "[t]he processing, storage and transportation of the oil and gas liquid waste and any other wastes that are generated shall be conducted in a manner that will not create a nuisance or be harmful to the public health, safety or the environment of this Commonwealth."

Upon information and belief, the JKLM's Radiation Protection Plan for the site, which notes the radioactive nature of the waste, does not include protocols or notification procedures for spills that may happen off-site or during transportation.

Appellants' members who live near JKLM's Sweden Valley Tank Farm have observed a significant increase in truck traffic, but, upon information and belief, WMGR123NC038, does not require trucks to keep waste manifests in trucks detailing constituents of the waste in the event of a spill or protocols for notifying area residents who rely on any affected waterways for drinking water.

Commenters request that the Department identify precisely where JKLM's application materials include protocols for a spill during transportation and Commenters also request that DEP identify where in the application materials JKLM requires that a manifest detailing all transported water constituents be maintained on trucks during transfers. Otherwise, DEP should respond stating how the public can be assured that this permit's activities do not "have the potential to harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth" under 25 Pa. Code § 287.642(e). If DEP cannot do either of these things satisfactorily, Commenters request the amendment, suspension, or revocation of this permit until such time as the permitting requirements are met. (4, 5, 9, 10)

Response: The transportation of wastes to or from a facility authorized to process or beneficially use waste under a general permit is not expressly covered under the authorization granted to

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the facility that is issued coverage under a statewide waste general permit. Likewise, the coverage issued to a permittee under WMGR123 does not extend to entities that transport waste to or from the facility. However, all waste transportation activities, including wastes transported to or from a facility authorized under a statewide waste general permit issued pursuant to 25 Pa. Code, Chapter 287, Subchapter H (relating to beneficial use), must comply with Pennsylvania's residual waste regulations at 25 Pa. Code, Chapter 299 (relating to the storage and transportation of residual waste). Chapter 299 requires transporters of residual waste to maintain a daily operational record in the cab of each transportation vehicle that includes, at a minimum, information on the type and volume of residual waste being transported, the generator of the waste, the destination of the waste, and handling problems or emergency disposal activities. These records must be maintained by the transporter for five years and provided to the Department upon request. In regard to spill response and management, please see the Department's response to General Comment #70.

- 7. Comment:** JKLM's Application Fails to Address Truck Traffic Nuisances or Take Measures to Minimize the Nuisance Conditions Caused by the Permitted Activity. WMGR123 also requires that the "processing, storage and transfer of the oil and gas liquid waste authorized by this permit . . . shall not cause or allow conditions that are harmful to the environment, public health or safety, including but not limited to, odors, noise, or other public nuisances." The significant increase in truck traffic since this site was first permitted has resulted in traffic effects including traffic, noise, and odors, that constitute a public nuisance, and DEP's approval of this renewal failed to address this nuisance or take measures to minimize the specific nuisances created by the activities of this site.

DEP should explain how the increased traffic caused by this permitted activity does not constitute a public nuisance or require additional measures to mitigate the effects of the increased traffic and its effects on the community. Otherwise, DEP should respond stating how the public can be assured that this permit's activities do not "have the potential to harm or present a threat of harm to the health, safety or welfare of the people or environment of this Commonwealth" under 25 Pa. Code § 287.642(e). If DEP cannot do either of these things satisfactorily, Commenters request the amendment, suspension, or revocation of this permit until such time as the permitting requirements are met. (4, 5, 9, 10)

Response: Trucks transporting wastewater to and from a facility operating under WMGR123 are not regulated differently than any other licensed commercial vehicle that is hauling waste, and therefore must comply with applicable requirements under the motor vehicle code in addition to the requirements of 25 Pa. Code, Chapter 299 (relating to the storage and transportation of waste). Any vehicle on the road must comply with Department of Transportation regulations and incidents that may occur must be addressed by the regulation relevant to the incident. The volume of truck traffic is governed by the Highway Occupancy Permit for the driveway and the loading on the local roads. Please see the Department's responses to General Comment #70 and WMGR123NC038 Comment #6. The Department respectfully requests that information or complaints concerning trucking be directed to the Northcentral Regional Office for appropriate follow-up.

- 8. Comment:** There are several quizzical statements and anomalies in JKLM Energy, LLC's renewal application that the Department should have required to be clarified or rectified as the

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application is deficient otherwise. For example, the application states, “[a]s previously stated in the cover letter portion of the application package, JKLM understands that the ‘dewasting’ requirements including analytical testing as presented in Appendix A of the General Permit WMGR123 requirements do not apply to this facility.” JKLM Energy, LLC, Sweden Valley Tank Farm WMGR123 Renewal Application (Dec. 12, 2019), Narrative, at 8. The “cover letter portion” does not mention this at all. (4, 5, 9, 10)

Response: Please see the Department’s response to General Comment #74.

9. **Comment:** JKLM’s Application Admits that its Activities Constitute Disposal, Not Storage. DEP’s approval of this application is also deficient because the application does not establish that this facility is a storage facility as defined by WMGR123. For example, WMGR123 defines “storage” as “containment in a manner that does not constitute disposal,” and explains that it “shall be presumed that containment of waste in excess of 1 year constitutes disposal.”

At the JKLM Energy, LLC Sweden Valley Tank Farm, the application states there is a storage capacity of 72,000 barrels (not including the “Draft” application to expand the facility). The application further states that a quantity of 2,000 barrels per month is anticipated to be transported to hydraulic fracturing locations. At that rate, that would only move the contents of one of the three 24,000-barrel above-ground storage tanks (“ASTs”) over the course of a year, meaning the majority of the oil and gas liquid waste would be presumed to be disposed, and not stored. As such, this oil and gas liquid waste at this site should be regulated as residual waste in regulated disposal units. Commenters request that DEP revoke this permit accordingly, or suspend the permit until such time as the requirements for coverage are no longer violated at this facility. (4, 5, 9, 10)

Response: The WMGR123 general permit only authorizes processing and beneficial use of oil and gas liquid waste to develop or hydraulically fracture an oil or gas well. No disposal is permitted to occur, and the oil and gas liquid waste is to be used beneficially. If for some reason the material cannot be utilized, the material is to be sent offsite to a permitted disposal facility. The volume of waste material accepted, processed and/or stored under WMGR123 is information that permittees under WMGR123 must document and submit to the Department in accordance with the annual operation report language for the revised WMGR123 permit that went into effect on January 4, 2021.

10. **Comment:** DEP Needs to Clarify That the Permit Did Not Include Approval of the “Draft” Expansion that Was 25 Pages of the Application Materials. The application materials also included a “Draft” expansion narrative that would *double* the number and storage capacity of ASTs on site, but it is unclear whether these additional tanks are included in the permit renewal. The cover sheet for the renewal application states, “JKLM plans to expand the storage capacity of this facility in 2020 and will be submitting a permit modification in the near future. Attached to this renewal application are the draft narrative and draft facility design drawings associated with the permit anticipated modifications for the PADEP’s information.” Then, the last 25 pages of the renewal application materials are a “draft” expansion narrative. The expansion would increase the number of 24,000 barrel storage tanks from three to six and increase on-site storage capacity from 72,000 barrels of oil and gas liquid waste to 144,000 barrels. While the DEP’s Renewal Final Memo states “[n]o changes to the existing facility were reviewed or

approved,” and while that seems to indicate the expansion was not approved in this renewal, Commenters request clarification confirming that the expansion was not yet approved. (4, 5, 9, 10)

Response: No expansion of the facility was approved with the permit renewal. Any changes or upgrades to the facility would need to be approved via a permit modification application. The information submitted for the draft expansion was not reviewed or approved in this renewal. If the permittee pursues expansion in the future, the modification would be noticed through a separate public comment period in the *Pennsylvania Bulletin*.

11. **Comment:** JKLM’s List of Many Violations, including 24 at the Sweden Valley Tank Farm, as well as its Omission of Recent Violations, Indicate a Potential to Harm the Health, Safety, or Welfare of People or the Environment. The Department also issued this permit without an adequate investigation of the facility’s compliance with the applicable statutes and regulations. For example, the permit application’s section regarding the relevant compliance history includes a list of 130 violations, at least 24 of which were violations that occurred at JKLM Energy, LLC’s Sweden Valley site. These violations include pollution of the waters of the Commonwealth on multiple occasions, spills of frack fluid and other hazardous substances, failures to properly manage and contain waste, and failures to report well defects such as defective casing or cementing.

These violations individually, and in the context of the large cumulative number of violations, indicate the potential to harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth.

The history of compliance submitted by JKLM Energy, LLC, also was deficient because it omitted several instances of noncompliance. For example, there were at least two missing outstanding violations, including those from October 8, 2019 (2946478) & October 17, 2019 (2946517). By the time the permit was issued more than a year after the application was submitted, the compliance history was over a year old, and therefore also did not include additional violations that occurred on May 26, 2020 (3036589 & 3036573). These omitted violations only exacerbated the scope and extent of the compliance issues at this site and further indicate that DEP’s approval of this application could present a threat of harm to health or the environment from a history of ongoing and repeated violations.

Commenters request that the Department justify granting authorization despite this compliance history replete with examples of JKLM’s failure to comply with legal requirements, or to amend, suspend, or revoke this permit in order to ensure there is not ongoing threat of harm to the people or environment of the Commonwealth. (4, 5, 9, 10)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department’s satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503)(d), provides: “Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent

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corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***” (Emphasis added).

The Department acknowledges that there were violations at this site, but none were on-going at the time of permit issuance. The violations for the entire company were disclosed in the compliance history review (Form HW-C) of the application package as required by the residual waste regulations. Accordingly, the compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

12. **Comment:** DEP Failed to Provide Citizen-Requested Waste Characterization Analyses for this Site in 2020 Following Citizen Concerns About Spills and Must Provide that Data. DEP authorized this permit despite a Clean Air Council and Earthworks member having been denied two requests she made to DEP to obtain the waste characterization analyses for this site in 2020. Specifically, On April 6, 2020, Earthworks and Clean Air Council member Melissa Troutman requested DEP provide the waste characterization (lab analyses) of the waste stored and transported to and from Sweden Valley Tank Farm and all inspections, CO&As, and correspondence regarding violations. On April 10, 2020, the Department replied via email that the records were not available electronically at the time. On May 1, 2020, Ms. Troutman emailed the Department again, asking if they would obtain the lab analyses required by the permit from the companies holding them, per permit requirements, and provide them to her family. Commenters request that the requested information be provided now to Commenters. (4, 5, 9, 10)

Response: The Department provided the requestor with all analytical data that was in the Department’s possession, which included data submitted with the permittee’s application, as well as data obtained during inspections and incident reports.

13. **Comment:** JKLM’s Application Was Incomplete, Containing Errors, Omissions, and Anomalies. The application also includes several omissions that DEP failed to explain and for which Commenters request clarification of whether a requirement was met or not and request that DEP require JKLM to provide missing data or correct inaccuracies.

First, the application’s Form B, the professional certification, was missing signatures from a soil scientist and a geologist.

Next, there is no evidence that JKLM Energy, LLC has obtained Storage Tank Site Specific Installation Permits for its ASTs. JKLM Energy, LLC, appears to have incorrectly checked the “no” box that the project will not include installation of an aboveground storage tank with a capacity of more than 21,000 gallons at an existing facility despite the fact that it has three 24,000-barrel-capacity ASTs and the facility was previously permitted. It did check that it is a new facility with AST storage capacity that exceeds a 21,000-gallon capacity, which appears to have been an error for an existing facility. However, in either of these cases, the permit application states that a Storage Tank Site Specific Installation Permit may be needed. Commenters request clarification regarding whether the site has the required permits and, if not, why not. (4, 5, 9, 10)

Response: The regulatory requirement for the signature of a Professional Engineer is found in 25 PA Code 287.122 (d) which states, “Each application for a permit shall be prepared by, or under the supervision of, a Pennsylvania registered professional engineer. The design section of the application shall bear the seal of a Pennsylvania registered professional engineer. The soils, geology and groundwater sections of a permit application shall be completed by experts in the fields of soil science, soil engineering, geology and groundwater. The geology and groundwater sections of a permit application also shall be completed under the supervision of a registered professional geologist licensed in this Commonwealth.” The WMGR123 permit applications do not require soils, geology or groundwater information, so a soil scientist or licensed geologist’s signature is not needed on the Form B. Additionally, these tanks are waste tanks and do not require a permit from the Bureau of Environmental Clean-ups and Brownfield’s Storage Tank Program.

14. **Comment:** Commenters appreciate the DEP’s review and consideration of these comments. Commenters request that the Department provide the requested information and clarifications, and amend, suspend, or revoke this permit as required to ensure compliance with Pennsylvania law and regulatory requirements. (4, 5, 9, 10)

Response: The Department appreciates the commenters’ sentiments and believes that the requested information and clarifications, in accordance with the comments submitted by this commentator, have been addressed through the responses contained in this document.

WMGR123NC039

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Highland Field Service, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter’s opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate

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bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

2. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123NC042

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Beech Resources, LLC under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a

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spill, should one occur, please see the Department's responses to General Comments #33 and 70.

WMGR123NC043

1. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Hydro Recovery - Blossburg, LP under consideration by the Department of Environmental Protection (DEP) Northcentral Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

WMGR123SW001

1. **Comment:** Renewal application materials are insufficient and inaccurate. This renewal application should never have been accepted by the Department because it is egregiously incomplete. The following documents are not included in the renewal materials provided by the Department:

- Preparedness, Prevention and Contingency (PPC) Plan 1,
 - It appears that when asked for a PPC plan, AWS provided a link to DEP. However, the link is not accessible by the public. An up-to-date PPC plan must be included in the renewal application and provided to the public,
- Form X, and Radiation Protection Action Plan (RPAP),
- MRW-C-Compliance History,
- Bonding Worksheet

If the DEP possesses these documents but erroneously failed to provide them to the public, then the comment period for this site should be formally extended, or re-opened, in order for the public to review the materials and comment on them substantively. Otherwise, the public will be again denied their right to participate in the notice and comment process for this facility.

Inaccuracies pervade the application and can be found through a wide range of topics and in an array of permit sections. Some of the substantive mistakes will be addressed later on in this comment but even the myriad smaller mistakes show a lack of attention and diligence that should caution the DEP against Ronco's continued operation. For example, in the General Information Form, when asked to indicate what type of waste be treated, (i.e., hazardous, municipal, residual) AWS merely answered, "water". If, as they have indicated, there is only 3,000,000 gallons of fresh water being stored at the site, then there is no need for this application. If that is not the case, then AWS should be made to answer this properly, as well as the many other questions it failed to address adequately or accurately. Because there are so many issues throughout the materials, AWS should be made to completely revise and re-submit this alarmingly inadequate application. (176)

Response: On September 4, 2020, DEP issued a modification to the registration under WMGR123 for Appalachian Water Services, LLC., to construct three additional aboveground storage tanks. This modification application contained and updated Preparedness, Prevention and Contingency (PPC) Plan, Form X - Radiation Plan and updated bond calculations which were all reviewed and approved. Because these documents had been submitted, reviewed and approved in the previous 6 months of the renewal application being submitted, DEP did not require the applicant to resubmit them as part of the permit renewal application. These documents are part of DEP's complete permit renewal file.

2. **Comment:** Site is unacceptably located in a floodplain. Section C(5)(a) of the General Permit states that a facility shall not be located, "in the 100-year floodplain of waters of this

Commonwealth.” Yet much of the facility clearly exists in the 100-year floodplain. The application seems to even propose new additional development into the plain.

There is an exception to this prohibition, which is when, “DEP approves in the permit a method for protecting the facility from a 100-year flood consistent with the Flood Plain Management Act (32 P.S. §§ 679.101 - 679.601) and the Dam Safety and Encroachment Act (32 P.S. §§ 693.1 - 693.27).” There is no mention in the renewal application of a proposed method of protection, much less approval by the DEP. For this reason, activity under this permit should be suspended until the DEP has sufficient documentation that AWS has met this requirement. If operations are allowed to continue without these protections that the permit rightly requires, it will likely be a matter of time before a flood event threatens catastrophic damage that results in 3,000,000 gallons of wastewater being released into the Monongahela River. (176)

Response: The site is not located in the 100-year floodway. The site plan submitted during the technical review of the original permit application shows the 100-year floodway of the Monongahela River and the facility is not within the 100-year floodway. The drawing was submitted under cover letter dated October 29, 2012, labeled as Sheet 2 of 6, Partial Site Plan with a revision date of September 19, 2012, and signed and sealed by Professional Engineer Hugh Archer. The 100-year floodway is also marked on the site plan drawings with the Water Quality Permit, dated September 20, 2012, signed and sealed by a professional engineer from K2 Engineering, and it shows that that the facility is not located within the 100-year floodway.

3. **Comment:** Failure to properly identify wetlands. This permit application fails to properly identify the wetlands on the permit site and fails to provide sufficient information for the DEP to make a determination as to whether operations could irrevocably impact wetlands. AWS erroneously answers “no” to the following GIF question regarding the projects proximity to wetlands:

“Does the oil- or gas-related project involve...placement of a structure, located along, across or projecting into a watercourse, floodway or body of water (including wetlands)?”

As was addressed previously, this application clearly proposes placement of structures in floodways, as well as wetlands. So the incorrect answer fails on two counts.

The General Permit also requires that a facility shall not be located within 300 feet of an exceptional value wetland. There is one mention of wetlands in the application, found buried in technical site drawings showing proposed construction. The drawing shows large swaths of area that are described as “designated wetland”. However, there is no mention in the application of what the designation is. Given the lack of information in the application, it is impossible for the DEP to determine whether the operation threatens EV wetlands. AWS must revise and resubmit their materials to include a wetland classification report. (176)

Response: The Department agrees with the commentator that the renewal permit application did not include specific identification of wetlands. However, since this is an existing facility that was seeking renewal authorization to continue its operations under the terms and conditions of a revised WMGR123, the potential impact associated with the facility’s operation to nearby wetlands was evaluated before the facility was constructed, when the facility sought its original

coverage under WMGR123. To that end, a Wetland Delineation and Stream Identification report, dated January 2013, was submitted during review of the original permit application for this site. This report was reviewed by the Department's Water Pollution Biologist in the Waterways and Wetlands program who confirmed that the layout of the facility would not produce a direct impact on the wetlands and that none of the four wetlands identified are exceptional value wetlands. The Department acknowledges that this wetland delineation report should have been resubmitted with the permit renewal application.

4. **Comment:** In a deficiency letter dated August 19, 2020, DEP specifically addresses that AWS failed to provide a compliance history, "as is required of them by 25 Pa. Code Sections 287.124 and 287.125 and as requested by DEP in General Permit Application Form 20". Yet there is still no compliance history to be found in the application materials. Neither the Form MRW-C-Compliance History nor Form C1 Compliance History Certification, that DEP specifically requested are included. DEP went so far as to tell AWS that, "[their] application may be denied for failure to resubmit with the required information within thirty (30) days of receipt of this letter."

Because it appears the materials were never included, the application should be denied, as was rightly suggested by the Department's initial comments. If the compliance history was provided to DEP and the DEP failed to provide this to the public, then an additional public comment period should be implemented, so the public can access and comment on the documents. (176)

Response: The compliance history Form HW-C had been submitted with the permit renewal application submitted under K2 Engineering cover letter dated July 29, 2020. In August 2020, our offices were closed due to COVID-19, and paper submittals were scanned for distribution to the reviewing engineers who were working from home. The compliance history form was inadvertently omitted when the permit renewal application was scanned which resulted in the August 19, 2020, deficiency letter. A compliance review was conducted by the Department prior to issuing the permit modification on September 4, 2020, and the renewal. Further, the public has access to the applicant's compliance history through the Department's eFacts portal. The Department deemed the applicant's compliance history to be satisfactory with regard to this facility application.

5. **Comment:** The application language oscillates between describing the application as a "renewal" of existing activity and then also as a proposal for wholly new construction. For example, in the document titled, "AWS-DEP Comment Letter", AWS's subject is, "Proposed Storage Tanks, Loading/Un-Loading Pads and Direct Water Line". In this and other documents the materials in the permit are unclear. If the construction has not yet occurred, it is inappropriate to be considered under a renewal permit. This should be (or should have been) considered under a new permit application, or even a major modification application. AWS should clarify and resubmit their application. (176)

Response: A permit modification application for this facility was submitted to DEP in December 2019, and was under review during 2020, when the permit renewal application was prepared. The permit modification for three additional tanks was issued on September 4, 2020, after the permit renewal application was due. The permit renewal application was submitted on July 30, 2020. Construction could not begin until the permit modification was issued, so the language in

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the permit renewal application reflected the fact that the construction had not yet occurred. This was the reason for the differing language in the renewal application.

6. **Comment:** MWA appreciates the DEP's review and consideration of these comments. MWA requests that the Department provide the requested information and clarifications, and amend, suspend, or revoke this permit as required to ensure compliance with Pennsylvania law and regulatory requirements. (176)

Response: The Department appreciates the commenter's sentiments and believes that the requested information and clarifications, in accordance with the comments submitted by this commenter, have been addressed through the responses contained in this document.

WMGR123SW005

1. **Comment:** The waste characterization data submitted also fails to satisfy WMGR123's requirements because the application failed to include any chemical analysis for at least thirteen of the pollutants required to be sampled and submitted to DEP. These include ammonia, boron, bromide, butoxyethanol, ethylene glycol, gross alpha, gross beta, MBAS (surfactants), methanol, nitrite-nitrate nitrogen, pH, radium-226 + radium-228 combined, strontium, and uranium. (4, 5)

Response: Please see the Department's response to General Comment #74. While RES does process the waste it receives at the facility, it does not do so for the purpose of dewatering. Therefore, the oil and gas liquids may exceed the concentration limits in Appendix A, provided that they are stored onsite in a manner that complies with 25 Pa. Code Chapter 299. (see WMGR123, Conditions C.4 and C.23).

Since the treated effluent from the processing system at the RES New Stanton Plant is stored onsite in a 10,000,000-gallon impoundment designed, constructed and operated in accordance with 25 Pa. Code §§ 299.141 -299.145, RES was not obligated to demonstrate compliance with Conditions C.1.b, C.2 and C.3 in order to store oil and gas liquids onsite. For the same reason, the assertion that the waste characterization data renders the application ineligible for approval under WMGR123 due exceedance of the Appendix A concentrations levels is moot since the operation is not required to meet the Appendix A standards.

2. **Comment:** The Department issued this permit without an adequate investigation of the facility's compliance with the applicable statutes and regulations. Specifically, the permit application's section regarding the relevant compliance history does not list any violations at the New Stanton Facility or other sites operated by Reserved Environmental Services, LLC. However, information on eFACTS states that there have been multiple violations at the facility over its years of operation, with at least 21 entries with violations noted and/or outstanding violations, including those for "noncompliance with storage and transportation requirements." See https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleSite.aspx?SiteID=735130.

Permittee's failure to include these violations in its compliance history renders the application incomplete and also is dishonest at best. The Department's failure to conduct an adequate investigation of these violations or why RES's application was untruthful is also problematic and troubling. The failure of RES to disclose these instances of noncompliance indicate that issuance

of the permit poses a potential to harm or presents a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth.

Commenters request that the Department justify granting authorization despite the fact that RES failed to disclose its history of noncompliance with legal requirements, or to amend, suspend, or revoke this permit in order to ensure there is not ongoing threat of harm to the people or environment of the Commonwealth. (4, 5)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

There were no open violations of the waste regulations for the applicant at the time of permit issuance, which would be deemed the most serious compliance issues in the application review. Previous violations were also reviewed, but the violations did not indicate a lack of intention or inability to comply with the applicable statutes and regulations. Accordingly, the compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

Further, as part of the compliance evaluation, other DEP program areas were consulted as to whether the issuance of renewed coverage under WMGR123 should be held because of open violations, and no such request was made to hold this permit renewal due to non-compliance.

3. **Comment:** The Department issued this permit without an adequate review of the facility's Pollution Prevention Control Plan ("PPC Plan"). While the application states that the PPC Plan is revised as of March 19, 2020, the PPC Plan appears to be written for a proposed facility, as if it has not been updated since its original 2012 drafting. For example, the PPC Plan states that "[t]here is no pollution incident history for this site." And the latest date in the implementation timeline is "Impoundment Certification - January 2012." (4, 5)

Response: The Department appreciates that commentators' have raised this comment and agrees that the facility's PPC Plan requires further evaluation. While the Department may determine that revisions to the facility's PPC Plan are warranted, it does not believe that the public nor operations at the facility are currently endangered.

4. **Comment:** Commenters appreciate the DEP's review and consideration of these comments. Commenters request that the Department provide the requested information and clarifications, and amend, suspend, or revoke this permit as required to ensure compliance with Pennsylvania law and regulatory requirements. (4, 5)

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Response: The Department appreciates the commenters' sentiments and believes that the requested information and clarifications, in accordance with the comments submitted by this commenter, have been addressed through the responses contained in this document or will be addressed in the near future. The Department does not believe that the public nor operations at the facility are currently endangered.

5. **Comment:** The application is incomplete. Before a WMGR123 permit renewal is approved, an application must include the following: (1) General Information Form, (2) Form B, (3) Form 20, (4) Form 27R, (5) Bonding Worksheets (6) Form X, and (7) Application Fee.

After review of all of the submitted application materials, Form X appears to be missing from the submitted renewal application. This facility operates on a facility which used to operate using highly radioactive materials. In addition to this, water produced by hydraulic fracturing is a radioactive substance, therefore this facility is required to obtain and submit with its application for renewal a DEP-approved Radiation Protection Action Plan (RPAP) that addressed management of technologically enhanced naturally occurring radioactive material during all phases of operations at the facility. Failure to comply with this requirement is a failure to maintain the responsibility to protect the environment and public health in regard to the facility. (176, 177)

Response: The RPAP was submitted on June 8, 2020, after being requested by the Department's incompleteness letter dated June 1, 2020. The plan was written in August 2010 and revised four times with the most recent revision dated October 2018. The plan was deemed acceptable.

6. **Comment:** There is no mention or documentation of an Environmental Site Assessment Phase I or Phase II Reports before this commercial property previously housing hazardous waste material was purchased from the previous owner.

The facility is located on the former property of the American Video Glass manufacturing plant. This plant was owned and operated by Sony Corp. and manufactured television tubes. This process entailed the use of high temperature furnaces to heat up millions of tons of sand to produce the glass for these television tubes. Due to these cathode tubes containing lead, they are considered a hazardous waste according to the Resource Conservation and Recovery Act (RCRA) under Title 40 of the Code of Federal Regulations (CFR) section 261.4(a)(22). In accordance with these regulations, an assessment should have been completed prior to purchase due to the fact that the previous facility housed hazardous materials. (176, 177)

Response: RES's application for continued operation under WMGR123SW005 was reviewed with respect to the existing operation's compliance with the terms and conditions of the renewed version of WMGR123. Documentation relating to activities that occurred prior to RES's operation of the facility was not necessary to evaluate the existing operation's compliance with the renewed permit conditions.

7. **Comment:** No documentation of compliance history was listed. The company or company entities that are now in possession of this property may have infractions pertaining to noncompliance regarding practice standards set forth by the government agencies that

oversee the safety and well-being of human health, as well as violating rules set forth by the Clean Water Act, the Clean Air Act, RCRA, and the Endangered Species Act. These records are imperative to the surrounding communities to give a sense of complacency when the uninformed residents are situated in an area that could be affected by the release or leeching of hazardous wastes if an unforeseen situation should arise. These public records are available through <https://echo.epa.gov/>. Properties surrounding this facility include both an educational facility as well as a medical facility. Community members are rightfully entitled to a compliance history of the company operating within the area. (176, 177)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "**Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act *unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

There were no open violations of the waste regulations for the applicant at the time of permit issuance, which would be deemed the most serious compliance issues in the application review. Previous violations were reviewed, but the violations did not indicate a lack of intention or inability to comply with the applicable statutes or regulations. Accordingly, the compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

Further, as part of the compliance evaluation, other DEP program areas were consulted as to whether the issuance of renewed coverage under WMGR123 should be held because of open violations, and no such request was made to hold this permit renewal due to non-compliance.

8. **Comment:** There is an open air 10-million-gallon storage impoundment for the recycled water in accordance with WQM Permit No. 6596201-A2. There are no specs mentioned on the construction materials nor the estimated longevity of these materials before replacement concerns should be addressed. The PA code §87.112. Hydrologic balance: dams, ponds, embankments, and impoundments—design, construction and maintenance describes the state regulations that must be addressed when any type of dam, pond or obstruction to waterways are constructed. Under this code, each impoundment that requires a permit under Chapter 105 or when impoundments meet or exceed the MSHA (Mine Safety and Health Administration) size classification or other criteria of 30 CFR 77.216(a) relating to water sediment or slurry impoundment and impounding structures is necessary. Impoundments subject to 30 CFR 77.216-1 and 77.216-2 (relating to water, sediment or slurry impoundments and impounding structures; identification; and water, sediment, or slurry impoundments and impounding structures; minimum plan requirements; changes or modifications; certification) shall have duplicate plans submitted to the District Manager of MSHA and to the Department. The

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Department may consider MSHA's review for impoundments. However, the Department will review impoundments under the requirements of subsection (a).

The issue of excess stormwater entering this storage impoundment may raises concerns. Safety and overflow protocols were noted and documented under the stormwater section, but there are no back up plans in effect if the pumps should fail or if the amount of rainfall should exceed past the two-foot freeboard safety precaution (two feet to the water surface shall be always constant). A safety plan should also be put into place as a back-up in the instance that any type of mechanical failures occur regarding the pump trucks that are relied upon to remove this excess fluid before it overflows. In the case of excess precipitation and the storage tanks are at full capacity, there are no alternate options documented as a back-up plan.

According to records kept by the National Oceanic and Atmospheric Administration (NOAA), precipitation levels in Pennsylvania have been on the rise. In 2019 Pennsylvania had broken a record for the wettest four years ever on record. The original permit for this facility was granted in 2016. Since then, rain levels have risen significantly in the region. On behalf of the Mountain Watershed Association, we are proposing that a new plan for excessive rain and overflow be implemented before the permit is approved. (176, 177)

Response: The 10,000,000-gallon storage impoundment installed at the New Stanton Plant was designed and constructed in accordance with 25 Pa. Code §§ 299.141 - 299.145. Areas immediately adjacent to the perimeter berm are sloped away from the crest to minimize runoff into the structure during rainfall events. The facility's NPDES Permit No. PA0254185 authorizes discharge from an emergency spillway provided at the southeast corner to prevent uncontrolled releases from the structure. The Department believes that the design and safeguards incorporated into the facility permitting and regulations are adequate, and that the cited mining regulations are not applicable.

9. **Comment:** The verbiage of the permit is at times presented vaguely. Multiple aspects of the original permit presented for renewal are not clarified. In the Pollution Prevention and Control Plan section D., "Countermeasures and Fluid Screening" there is mention of how truckloads will be sampled by a technician to assure compliance before unloading, however, there is no mention of where the water being carried by the truck will go if the sample of water taken from inside classifies the water as unable to be unloaded.

Additionally, much of the permit is reliant on the fact that the grounds of the facility are made out of concrete, however, there is no mention of concrete maintenance or upkeep to maintain the integrity of the surrounding concrete to avoid soil leaching in the instance of a spill over cracked concrete. In addition to the missing plan of concrete upkeep and integrity, there is no mention of a back-up plan if a spill were to exceed the boundaries of the concrete facility and reach the surrounding soils.

The concern with these issues is associated with the lack of effort being taken to prevent adverse impacts to the environment and the public health and safety of the public and site staff. These issues of adverse impacts are a cause for concern and we propose that the

permits be further reviewed and updated and preferably transferred from a general to an individual permit to maintain environmental and human health that may be harmed by facility operations participating in the storage, transfer and reuse of residual waste created by hydraulic fracturing. (176, 177)

Response: The WMGR123 permit was offered for public comment prior to its issuance, and the Department believes that the final permit benefited from public input and represents a careful and protective permit. No permit, even individual permits, can entirely anticipate all operational scenarios, and circumstances such as concrete deterioration are addressed by each operator's general maintenance responsibilities, enforced via Department inspections. Please see the Department's response to Comment #70.

WMGR123SW015

1. **Comment:** Range's list of many violations indicates a potential to harm the health, safety, or welfare of people or the environment. The Department issued this permit without an adequate investigation of the facility's compliance with the applicable statutes and regulations. For example, the permit application's section regarding the relevant compliance history includes a list of 469 violations spanning 18 pages of documentation. These violations include many incidences of spills and permit requirement violations. These violations individually, and in the context of the large cumulative number of violations, indicate the potential to harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth.

Commenters request that the Department justify granting authorization despite this compliance history replete with hundreds of examples of Range's failure to comply with legal requirements, or to amend, suspend, or revoke this permit in order to ensure there is not ongoing threat of harm to the people or environment of the Commonwealth. (4, 5)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

There were no open violations of the waste regulations for the applicant at the time of permit issuance, which would be deemed the most serious compliance issues in the application review. Previous violations were reviewed but did not indicate a lack of intention or inability to comply with the applicable statutes and regulations. Accordingly, the compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

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Further, as part of the compliance evaluation, other DEP programs were consulted as to whether the issuance of renewed coverage under WMGR123 should be held because of open violations, and no such requests was made to hold this permit renewal due to non-compliance.

- Comment:** The application also includes several omissions that DEP failed to explain and for which Commenters request clarification of whether a requirement was met or not and request that DEP require Range to provide missing data or correct inaccuracies. Specifically, the application's Form B, the professional certification, was missing signatures from a soil scientist and a geologist. (4, 5)

Response: The regulatory requirement for the signature of a Professional Engineer is found in 25 PA Code 287.122 (d) which states "Each application for a permit shall be prepared by, or under the supervision of, a Pennsylvania registered professional engineer. The design section of the application shall bear the seal of a Pennsylvania registered professional engineer. The soils, geology and groundwater sections of a permit application shall be completed by experts in the fields of soil science, soil engineering, geology and groundwater. The geology and groundwater sections of a permit application also shall be completed under the supervision of a registered professional geologist licensed in this Commonwealth." The WMGR123 permit applications do not require soils, geology or groundwater information, so a soil scientist or licensed geologist's signature is not needed on the Form B.

- Comment:** Range failed to provide how its processing and use of drilling mud meets the requirements of WMGR123. Range included a significant quantity of drilling mud in this permit authorization, but neither the Department nor the applicant appear to have provided information on how drilling mud meets the definition of oil and gas liquid waste.

Commenters request a response from DEP regarding whether drilling mud is properly covered and how it meets the definition of "oil and gas liquid waste." (4, 5)

Response: General permit WMGR123 authorizes the processing, transfer and beneficial use of oil and gas liquid waste. Oil and gas liquid waste is defined in WMGR123 as liquid wastes generated from oil and gas operations as defined in 25 Pa. Code § 78a.1, which would include drilling muds.

- Comment:** Commenters appreciate the DEP's review and consideration of these comments. Commenters request that the Department provide the requested information and clarifications, and amend, suspend, or revoke this permit as required to ensure compliance with Pennsylvania law and regulatory requirements. (4, 5)

Response: The Department appreciates the commenters' sentiments and believes that the requested information and clarifications, in accordance with the comments submitted by this commenter, have been addressed through the responses contained in this document.

- Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

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Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

- Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

- Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW020

- Comment:** Range's list of many violations indicates a potential to harm the health, safety, or welfare of people or the environment. The Department issued this permit without an adequate investigation of the facility's compliance with the applicable statutes and regulations. For example, the permit application's section regarding the relevant compliance history includes a list of 469 violations spanning 18 pages of documentation. These violations include many incidences of spills and permit requirement violations. These violations individually, and in the context of the large cumulative number of violations, indicate the potential to harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth.

Commenters request that the Department justify granting authorization despite this compliance history replete with hundreds of examples of Range's failure to comply with legal requirements, or to amend, suspend, or revoke this permit in order to ensure there is not ongoing threat of harm to the people or environment of the Commonwealth. (4, 5)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

There were no open violations of the waste regulations for the applicant at the time of permit issuance, which would be deemed the most serious compliance issues in the application review.

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Previous violations were reviewed but did not indicate a lack of intention or inability to comply with the applicable statutes or regulations. Accordingly, the compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

Further, as part of the compliance evaluation, other DEP program areas were consulted as to whether the issuance of renewed coverage under WMGR123 should be held because of open violations, and no such request was made to hold this permit renewal due to non-compliance.

- Comment:** The application includes several omissions that DEP failed to explain and for which Commenters request clarification of whether a requirement was met or not and request that DEP require Range to provide missing data or correct inaccuracies. Specifically, the application's Form B, the professional certification, was missing signatures from a soil scientist and a geologist. (4, 5)

Response: The statutory requirement for the signature of a Professional Engineer is found in 25 PA Code 287.122 (d) which states "Each application for a permit shall be prepared by, or under the supervision of, a Pennsylvania registered professional engineer. The design section of the application shall bear the seal of a Pennsylvania registered professional engineer. The soils, geology and groundwater sections of a permit application shall be completed by experts in the fields of soil science, soil engineering, geology and groundwater. The geology and groundwater sections of a permit application also shall be completed under the supervision of a registered professional geologist licensed in this Commonwealth." The WMGR123 permit applications do not require soils, geology or groundwater information so a soil scientist or licensed geologist's signature is not needed on the Form B.

- Comment:** Range failed to provide how its processing and use of drilling mud meets the requirements of WMGR123. Range included a significant quantity of drilling mud in this permit authorization, but neither the Department nor the applicant appear to have provided information on how drilling mud meets the definition of oil and gas liquid waste.

Commenters request a response from DEP regarding whether drilling mud is properly covered and how it meets the definition of "oil and gas liquid waste." (4, 5)

Response: WMGR123 authorizes the processing, transfer and beneficial use of oil and gas liquid waste. Oil and gas liquid waste is defined in WMGR123 as liquid wastes generated from oil and gas operations as defined in 25 Pa. Code § 78a.1, which would include drilling muds.

- Comment:** Commenters appreciate the DEP's review and consideration of these comments. Commenters request that the Department provide the requested information and clarifications, and amend, suspend, or revoke this permit as required to ensure compliance with Pennsylvania law and regulatory requirements. (4, 5)

Response: The Department appreciates the commenters' sentiments and believes that the requested information and clarifications, in accordance with the comments submitted by this commenter, have been addressed through the responses contained in this document.

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5. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

6. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

7. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW025

1. **Comment:** The permit should be amended, suspended, or revoked because DEP issued the permit to an entity that does not exist. On information and belief, the Department improperly issued the permit to Chevron Appalachia, LLC, despite the fact that such an entity did not exist at the time of the permit issuance, does not exist at the present time, and/or is not the corporate entity currently operating the facility, and despite the fact that no change in ownership forms appear to have been submitted, even to the present day. For example, when Commenters were filing the permit appeal of this permit, February 22, 2021, the phone and fax numbers for Chevron Appalachia, LLC, were found by Commenters to be disconnected or otherwise nonfunctional. Furthermore, news articles indicate that EQT Corp. acquired Chevron Appalachia, LLC's assets in the fourth quarter of 2020, and yet Chevron Appalachia, LLC is the permittee listed on the Department's issuance letter and the permittee under Permit No. WMGR123SW025. The Department should require the actual entity that owns or operates this permit to submit the appropriate documentation and amend the permit to correct the current permittee, or the Department should immediately revoke this permit as it was improperly issued to a non-existent corporation. (4, 5)

Response: The corporate entity which is the permittee of the Dogbone Facility has not changed, though its name has changed from Chevron Appalachia, LLC., to EQT Chap, LLC., and the entity's equity structure has changed. Such a change does not require a major permit modification to be approved by the Department, nor would it invalidate the current operating permit. The Department will evaluate whether an application for a minor modification to the permit, to reflect the change of name, should be submitted by the permittee.

2. **Comment:** EQT CHAP's list of many violations indicate a potential to harm the health, safety or welfare of people or the environment. The Department issued this permit without an adequate investigation of the facility's compliance with the applicable statutes and regulations. For

example, the permit application's section regarding the relevant compliance history lists dozens of violations at Permittees' production facilities in Pennsylvania, as well as West Virginia and Ohio. These violations individually, and in the context of the large cumulative number of violations, indicate the potential to harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth. Commenters request that the Department justify granting authorization despite this compliance history replete with hundreds of examples of EQT CHAP's failure to comply with legal requirements, or to amend, suspend, or revoke this permit in order to ensure there is not ongoing threat of harm to the people or environment of the Commonwealth. (4, 5)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

There were no open violations of the waste regulations for the applicant at the time of permit issuance, which would be deemed the most serious compliance issues in the application review. Previous violations were reviewed, but the violations did not indicate a lack of intention or inability to comply with the applicable statutes and regulations. Accordingly, the compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

Further, as part of the compliance evaluation, other DEP program areas were consulted as to whether the issuance of renewed coverage under WMGR123 should be held because of open violations, and no such requests were made to hold this permit renewal due to non-compliance.

3. **Comment:** DEP approved this permit despite the fact that the facility includes open-top tanks, in violation of operating condition C.27. On information and belief, the Department issued the permit in spite of the fact that the Facility includes open-top tanks, without the Permittee having made the required demonstration under Operating Condition C.27 that the tanks are "in compliance with 25 Pa. Code, Subpart C, Article III, pertaining to air emissions." (4, 5)

Response: WMGR123 Condition C.27 allows for open-top tanks when compliance with air emission standards are met. Chevron requested a determination from DEP's Bureau of Air Quality for an exemption for open top tanks at the Dogbone facility, which was granted. The Dogbone facility was authorized to construct and temporarily operate, test at a certain frequency, collect data, and report this information so that the Department's Air Quality program can make a decision of whether to require an operating permit based on the test data. See Technical Guidance Document No. 275-2101-003, Air Quality Permit Exemptions.

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- Comment:** EQT CHAP's application was deficient because the permittee installed at least two storage tanks on site without the required secondary containment. On information and belief, the Department issued this permit in spite of the fact that Permittee has installed at least two storage tanks on site without the required secondary containment. Commenters request that DEP provide inspection results indicating that they have confirmed whether all storage tanks have the required secondary containment and, if necessary, taken steps to require such measures. (4, 5)

Response: The two other storage tanks on the Dogbone site store freshwater. Because these tanks were not built for the processing, transfer and beneficial use of oil and gas liquid waste, they were not required to conform to the WMGR123 standard permit conditions to have secondary containment. Further, these tanks were constructed following the issuance of an NPDES permit for stormwater discharges associated with construction activity in 2017, and amended in 2019.

- Comment:** EQT CHAP's application was deficient, incomplete, or inaccurate in myriad ways. The application materials for WMGR123SW025 contain numerous omissions or deficiencies that should have warranted DEP's denial of the application renewal request for failure to comply with the application requirements and/or because the proposed activities have the potential to harm or pose a threat of harm to public health, safety, or welfare of the people and environment of the Commonwealth. Although the Department properly flagged certain deficiencies in Permittee's original May 2020 application, Permittee's revised August 2020 application is still deficient and fails to comply with the regulatory requirements in a number of ways. Commenters request clarification of whether a requirement was met or not and request that DEP require EQT CHAP to provide missing data or correct inaccuracies. (4, 5)

Response: The comment does not refer to any specific omission or deficiency which remained unaddressed by the applicant. The Department has determined that the renewal application submitted in May 2020, and additional information received in August 2020, was sufficient and in compliance with regulatory requirements and consequently issued the permit renewal for the Dogbone facility in January 2021.

- Comment:** EQT CHAP referred to the previous (2017) application and failed to provide current information. Even though the Department specifically flagged in its initial deficiency letter for this application that Permittee could not merely fill in the fields in Form 20 with the statement "refer to previously approved application," many of Permittee's revised submissions are just wholly recycled or barely updated documents from its 2017 application. These include but are not limited to: (a) the Project Description Narrative (Attachment 20-1), which still discusses the Facility as if it is proposed and under construction rather than in operation; (b) the Pennsylvania Natural Diversity Inventory Project Planning Environmental Review (Attachment 20-2), which is the very same document from 2017; (c) the Construction Quality Assurance/Quality Control Plan, (Attachment 20-5), which is the very same document from 2017; (d) the Geotechnical Report (Attachment 20-9), which is the very same document from 2017; and (e) the Wetland and Stream Delineation Report (Attachment 20-10), which is also the very same document from 2017 (with data dating back to 2016).

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Following the Department's deficiency letter, Permittee included the Bonding Worksheet in the August 2020 revised application. But the Bonding Worksheet is the very same document from 2017, with bonding calculations based on projected volumes at that time (rather than actual volumes, which the Permittee surely knows by now) and the rate of inflation based on the three years prior to 2017 rather than the present.

The Preparedness, Prevention, and Contingency Plan (PPC Plan) states "revised July 2020," but overall appears to be a barely updated version of the 2017 submission. For example, the PPC Plan is written from the perspective of a proposed facility where construction will commence, rather than a facility in operation. (4, 5)

Response: The Dogbone Centralized Water Facility has not been constructed yet. The assumption that information regarding the facility and its operation fails to be current on basis of the date of preparation is not valid. Information prepared in 2017 can be accepted as current if it accurately describes the facility's design and operation at the time when the application for permit renewal was submitted. The Department reviewed the application materials, and deemed the information contained to be sufficiently accurate and up-to-date to warrant approval.

- 7. Comment:** EQT CHAP failed to provide required noncompliance data from 2015 through 2020. Section 1.4 of the PPC Plan does not contain the data necessary for the Department to properly review and authorize the application. The requirement of Section 1.4 of the PPC Plan is for the applicant to "[l]ist the previous pollution incidents, the date, the material or waste spilled, approximate amount spilled, environmental damage, and action taken to prevent a recurrence." And yet, Permittee only lists accidents and spills from the years 2012 to 2015 and provides a statement that "[a] full summary of Chevron Appalachia's pollution incident history is recorded and maintained in Chevron's files and can be provided upon request." This is not sufficient. (4, 5)

Response: The Department acknowledges that the contents of PPC Plan Section 1.4 and Appendix C, only includes incidents from 2012 to 2015; however, this information was provided to show the types of incidents that have occurred as a result of their overall operation in the oil and gas drilling industry and is not a list of previous pollution incidents at this specific facility. Because this facility is not constructed and operating, there is no Pollution Incident History to report in Section 1.4 of the PPC Plan. The PPC Plan submitted is acceptable.

- 8. Comment:** The Form X (the Radiation Protection, Monitoring, and Action Plan) is also lacking in a number of ways. These deficiencies include that it merely appears to be the rehashed December 2017 submission (e.g., each page lists "December 2017" at the bottom) and that it does not account in any way whatsoever for the frac water that is transported to the Facility via pipeline, referring only to truck transport of frac water. (4, 5)

Response: The Department appreciates the commentators' raising this comment and agrees that the permittee's Radiation Protection Action Plan requires further evaluation. Generally, for WMGR123 facilities, the Radiation Action Plan's primary concern is to ensure proper management of sediment, sludge and filters which may have elevated radium levels due to the particulate matter trapped in these materials. This facility's approved Radiation Action Plan accounts for the handling of these materials. Further, any wastewater that is conveyed to this

facility via pipeline originates from generators, primarily the applicant, who are obligated under 25 Pa. Code § 287.54 to properly characterize the waste streams, and therefore should be aware at the point of generation of the radiological characteristics of the wastewater. While the Department may determine that additional monitoring of wastewater conveyed to the facility via pipeline is warranted, it does not believe that the public nor operations at the facility are endangered, as the Department's TENORM study demonstrated that radium content in Oil and Gas wastewater is almost always well below levels which would prevent the facility from accepting such waste.

9. **Comment:** The Form 27R (Acceptance of General Permit Conditions) is deficient, as it refers to the outdated version of WMGR123, which was issued in October 2010, and is no longer in effect. (4, 5)

Response: The Form 27R submitted in the renewal application references the October 4, 2010, date of issuance of WMGR123, which was the current version at time the renewal application was submitted in May 2020. Since the Form 27R was submitted in the context of the permit renewal, the form adequately represents the applicant's acceptance of the renewed permits conditions. Further, the Department's approval to operate under WMGR123 obligated all permittees to operate under the terms and conditions of the renewed version of the permit, dated January 4, 2021.

Comment: Given these myriad deficiencies, Commenters request that this permit be suspended or revoked until such time as the accurate and complete application materials have been received and approved by the Department, or otherwise revoked for failure of the application materials to establish compliance with the requirements of WMGR123.

Commenters appreciate the DEP's review and consideration of these comments. Commenters request that the Department provide the requested information and clarifications, and amend, suspend, or revoke this permit as required to ensure compliance with Pennsylvania law and regulatory requirements. (4, 5)

Response: The Department appreciates the commenters' sentiments regarding the review and consideration of comments. As explained in the previous responses to comments, the Department does not believe that a suspension or revocation of the facility's authorization is warranted or necessary at this time.

10. **Comment:** The entirety of the assets of Chevron Appalachia have been sold to EQT, with a closing date of November 30, 2020. Apparently, EQT formed a wholly owned subsidiary called EQT CHAP, LLC to act as the owner / operator of these assets. The closing date for the sale of Chevron Appalachia intervened between the Received date and the Issued date for the DCWF renewal, Authorization ID 1313955; so there should have been a Transfer authorization prior to the renewal, but there was not. DEP must require any WMGR123 renewals originally submitted by Chevron Appalachia and issued on 1/4/2021 to be resubmitted to reflect EQT practice, not Chevron practice.

In recent permit applications for "Previously Approved Waste Management Practices" at former Chevron Appalachia sites, EQT CHAP has pointed to EQT's own prior practice applications rather

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than Chevron's. However, for the Dogbone Centralized Water Facility ("DCWF") in this current case, EQT CHAP seems to be relying on Chevron's filings rather than its own practice. EQT is more than aware of the need to file a Radiation Protection Action Plan ("RPAP") in connection with both WMGR123 and certain OG-71 applications. In particular, EQT CHAP has relied on Chevron's seriously deficient RPAP instead of submitting one of its own consistent with EQT practice. (20)

Response: The Department believes that the commenter is mistaken regarding the assertion that the operator of the facility changed. The corporate entity, which is also the permittee of the Dogbone Facility, has not changed, though its name has changed from Chevron Appalachia, LLC., to EQT Chap, LLC. A name change would not affect the operational practices of the facility.

11. **Comment:** On 1/9/2019, Chevron announced a change of plans to scale back DCWF to 2 tanks instead of 5, and to have only "fresh" water contained in the tanks. A significant pattern of activity followed that was consistent with this announced plan change, but not consistent with WMGR123SW025.

In addition to WMGR123SW025, Chevron was obliged to get an E&S / PCSM NPDES permit from the Fayette County Conservation District (Permit number PAC260008) and a Special Exception as a Public/Private Works from the Fayette County Zoning Hearing Board ("ZHB") (Case number ZHB 17-41). At the first public hearing under ZHB 17-41, several objectors spoke, and subsequent to the meeting formed a group known as Freedom From Fracking ("FFF"). That hearing was continued, and following the second hearing (at which FFF was represented by counsel and granted Standing), ZHB failed to issue a signed resolution in ZHB 17-41, whereupon Chevron invoked a clause in the Pennsylvania Municipalities Planning Code and claimed a Deemed Approval for their Special Exception. FFF subsequently appealed the Deemed Approval to the Fayette County Court of Common Pleas, Docket Number 1108 of 2018 GD3 ("ZHB 17-41 Appeal"). On 1/9/2019 Chevron held a meeting with FFF (at which counsel for FFF was present) in which they announced that their plans for DCWF had changed significantly, and that:

- Capacity was being scaled back from 5 one-million-gallon tanks to 2.
- DCWF would contain no residual waste, only "fresh" water.

Such a plan change would completely obviate the need for a WMGR123 permit⁴. In the interim, Chevron engaged in an extensive pattern of activity that was completely consistent with the announced plan change and not consistent with WMGR123SW025 filings. As originally presented to the ZHB, DWCF was designed to support 3 nearby well pads: Stewart, Yoder, and Siegel. Here is what has happened concerning these well pads:

- A. Chevron announced at the second ZHB 17-41 hearing that they thought they would need to complete Stewart before DCWF could be completed. Stewart 6H has been plugged. All the remaining wells on the Stewart Well Pad have been completed. All the remaining wells except for Stewart 7H are in production.
- B. All the wells on the Yoder Well Pad have been completed and are in production.

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- C. Just on 05/06/2021, EQT CHAP applied⁸ for Temporary Storage at the Siegel Well Pad.
- D. The two tanks as described at the 1/9/2019 meeting have been constructed and are operational. There seems to be no record that Chevron ever informed DEP that construction at DCWF had begun. According to nearby residents, the two tanks do not have any secondary containment, and would be unacceptable under WMGR123. This alone should cause the denial of WMGR123SW025 renewal. The two tanks have open tops. Neither Chevron nor EQT CHAP has applied to DEP for an air quality authorization for DWCF.
- E. At oral argument in ZHB 17-41 Appeal, the attorney for Chevron mentioned and confirmed the change in plans as announced at the 1/9/2019 meeting, indicating that Chevron had renounced its plan to store residual waste at DCWF.

Taken together, these facts on the ground confirm that Chevron / EQT CHAP has no intended use for storing residual waste at DCWF and therefore the renewal of WMGR123SW025 should be denied. If circumstances have changed and EQT CHAP can demonstrate that it has need to change plans again compared to its intention as stated in the 1/9/2019 meeting, then EQT CHAP should submit an entirely new amended WMGR123 application.

Chevron clearly and unequivocally acted in bad faith in applying to renew WMGR123SW025. EQT CHAP has clearly and unambiguously failed to exercise due diligence in understanding the activities that Chevron already undertook at DCWF. DEP must deny this renewal. (20)

Response: General Permit authorization WMGR123SW025 approved the installation of up to five aboveground tanks in which to store oil and gas liquid wastes for beneficial use. The permit set a cap, but not a floor, on the number of tanks and volume of waste approved. If the permittee chose to only install two of the tanks, or not to store residual waste in such tanks, the Department would not consider such changes as meriting the denial of the authorization or its renewal. Please see the Department's responses to other comments regarding construction of freshwater tanks at this facility.

12. **Comment:** DCWF no longer qualifies for a WMGR123 since it uses open-top tanks and there was no demonstration of compliance with 25 Pa. Code, Subpart C, Article III. Condition C.27 of WMGR123 (as amended effective 1/4/2021 states:

Permittees are not authorized to use open-top storage tank(s) or any other air contamination source(s) under the terms of this general permit unless the facility demonstrates that the open top tank(s) or source(s) are in compliance with 25 Pa. Code, Subpart C, Article III, pertaining to air emissions.

There has been no such demonstration in any of the application materials for WMGR123SW025 renewal, but the tanks are described as open-top. In fact, during the litigation over ZHB 17-14 Appeal, covering the tanks was a principal requirement for FFF. However, this was described by Chevron as "impossible". Accordingly, WMGR123SW025 must be denied as failing to meet Condition C.27. (20)

Response: Condition C.27 of WMGR123 allows for open-top tanks when compliance with air emission standards is met. Chevron requested a determination from the Department's Bureau of Air Quality for an exemption for open top tanks at the Dogbone facility, and it was granted. The Dogbone facility was allowed to construct and temporarily operate, test at a certain frequency, collect data, and report this information so that DEP's Air Quality program can make a decision of whether to require an operating permit based on the test data. Please see Technical Guidance Document No. 275-2101-003, Air Quality Permit Exemptions.

13. **Comment:** The RPAP submitted for WMGR123SW025 renewal does not cover material delivered via pipeline. There are numerous deficiencies in the RPAP Chevron submitted for WMGR123SW025 renewal. Chevron claimed that any piping "outside of the facility" would be regulated under 25 PA Code Chapter 78, with no specific citation. This claim seems to be false. There is no specific regulation of residual waste pipelines in 25 PA Code Chapter 78a. However, residual waste processing at well sites is covered in 25 PA Code § 78a.58. The usual approach to residual waste delivered via truck which has more radiation than allowed is to refuse the shipment. However, in the case of residual waste delivered via pipeline, this is not practical. So, what should happen to material delivered via pipeline which has too much radiation? In this case, WMGR123SW025 renewal must be denied. Thus far in this section we have been considering only RPAPs submitted by Chevron. However, as mentioned above, Chevron is now out of the picture. The party responsible for RPAPs in this case is EQT CHAP. It just so happens that recent permit activities by EQT CHAP can give us a view of how they would handle this problem. On 05/04/2021, EQT CHAP applied via Authorization ID 1352805 for "Previously Approved Alternative Waste Management Practices" at Jackson Farms 37H, 38H, and 39H in Redstone Twp, Fayette County (this site was acquired from Chevron) — namely the use of defoamer. The previous application giving the actual details was for a well pad called Oliver East, and at page 43 of that application, remarkably, what do we find but an RPAP for the use of defoamer at Oliver East. There are a number of remarkable features about this document:

- It appears to be a company-wide RPAP specifically geared to compliance with 25 PA Code § 78a.58(d).
- It demonstrates that EQT CHAP is fully aware of its obligations under 25 PA Code § 78a.58(d).
- In spite of the fact that pipelines are widely considered to be transportation under the law, in section 16.0 it shows no awareness whatever that transportation includes pipelines, and what measures should be in place if residual waste is transported to a WMGR123 site via pipeline.

So, this is not encouraging that EQT CHAP will really manage this issue properly via an RPAP at the well pad end. Nonetheless, DEP must require that any well pad connected via pipeline have an RPAP that prevents transmission through the pipeline of any material whose radioactivity exceeds standard, and the same should apply to all substances listed in WMGR123 Appendix A. Certainly these issues have not been addressed for WMGR123SW025, and until they are, its renewal must be denied. (20)

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Response: The Department believes that the commenter is mistaken regarding the assertion that the operator of the facility changed. The corporate entity, which is also the permittee of the Dogbone Facility, has not changed, though its name has changed from Chevron Appalachia, LLC., to EQT Chap, LLC. A name change would not affect the operational practices of a facility. In addition, please see the Department's response to Comment 8, above regarding the facility's Radiation Action Plan.

WMGR123SW026

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

3. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW027

1. **Comment:** Range's WMGR123SW027 application includes a March 30, 2020 public notice to the Washington County Commissioners. This Act 14 notice for Range's Hopewell 18 Tank Pad contained incorrect information of Range's intent for waste activity in Hopewell Township near the county park which includes Cross Creek Lake. The notice identified the location of waste activity outside of Hopewell Township at a site 13.5 miles away in Smith Township. Residents of Hopewell Township and anyone that enjoys both the Cross Creek county park and Cross Creek Lake should be given correct information and the opportunity to comment on a proposal that may negatively impact them. (21)

Response: The March 30, 2020, notice to Washington County Commissioners contained an error by not using the correct name of the facility in the letter. The letter named the Bare Tank Pad rather than the Hopewell 18 Tank Pad; however, the correct address of the Hopewell 18 Tank Pad was used in the letter making it clear the location of the facility was not in Smith Township. Furthermore, the application package sent with the notice included the location maps clearly showing the location of the Hopewell 18 Tank Pad in Hopewell Township rather than Smith Township.

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- Comment:** DEP Efacts show that on May 6, 2021 the Department received a request from Range to already modify their 4-month-old residual waste permit. We saw a similar pattern when Range received their first residual waste permit in 2018. Fourteen days after receiving the approval, Range requested and received from DEP 3 months later a minor modification.

Residents of rural Washington County have witnessed Range's well pads go from simply drilling and extracting gas to processing and compressing, pigging, gathering or transmitting gas, transferring and now storing liquid waste. This waste stream may also include radioactive material that otherwise would never be in our neighborhoods or in our lives if left underground. Designating the reuse of oil and gas liquid waste as "beneficial" does not give DEP a pass at requiring companies to supply full and complete applications in order to receive a WMGR123 permit, especially since it has a life of 10 years. (21)

Response: After a WMGR123 permit is issued, a company may decide it needs more storage capacity. Public notice to the township and county is required when an application for a permit modification is submitted, and the Department requires submission of a complete application to include the following forms and documents: Form GIF (General Information Form), Form B (Professional Engineer's Certification), Form MRW-C (Compliance History); Form 20, including a site location map, revised design engineer's report (with revised operational narrative), revised layout drawing showing the proposed modification, specifications for any proposed tanks or other new equipment, revised bonding worksheets, if necessary, and a \$300 application fee. The Department reviews all submissions prior to acting on an application.

- Comment:** A long list of Range's violations is noted in both Hopewell 20 Tank Pad and Hopewell 18 Tank Pad WMGR123 permit applications. Of these violations, many include spills, mismanagement of waste as well as improperly following the state's regulations. Why would the Department overlook this serious and dangerous pattern of violations by Range which many feel indicate the potential to harm the health, safety and welfare of humans and the environment? (21)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

There were no open violations of the waste regulations for the applicant at the time of permit issuance, which would be deemed the most serious compliance issues in the application review. Previous violations were reviewed, but the violations did not indicate a lack of intention or inability to comply with the applicable statutes or regulations. Accordingly, the compliance

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history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

Further, as part of the compliance evaluation, other DEP program areas were consulted as to whether the issuance of renewed coverage under WMGR123 should be held because of open violations, and no such requests were made to hold this permit renewal due to non-compliance.

4. **Comment:** Range should not be allowed to self-monitor nor self-report their activity. The Department should not rely upon Range to tell on themselves. (21)

Response: All permittees under any general permit issued by the Waste Management Program must operate in accordance with the terms and conditions of the applicable general permit and in compliance with the SWMA. These terms and conditions, and regulatory requirements include requirements for reporting information to the Department on a regular basis, and taking appropriate action when a spill or release occurs. Please see the Department's response to General Comment #70.

5. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

6. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

7. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW029

1. **Comment:** Chevron is applying for a WMGR123 permit renewal when it may be required that it obtain a new WMGR123 permit. It appears that Chevron is attempting to renew a permit that was originally obtained for a facility, located on the same property, that is different from the one they now plan to construct. Public health and the environment may not be adequately protected if this new construction does not have its own specific permit and appropriate level of review. (176, 177)

Response: The Department's review of the permit application for renewal confirmed that a new WMGR123 permit was not needed but a renewal of the facility that was permitted on

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November 16, 2018, was the appropriate permit request for the Herminie South Centralized Water Facility. The application and site plans for the renewal permit are the same as those submitted for the permit which was issued on November 16, 2018.

2. **Comment:** In Chevron's Wetland and Stream Delineation Report, Attachment 20-10 of Chevron's Application Narrative, 4 streams and 1 wetland are identified on the permitted land. On page 7, the report states that, "impacts to wetlands will be avoided but construction will likely require impacts to at least one (1) stream with a drainage area less than 100 acres. The proposed impact is not significant. Therefore, CEC assumes the requirement for a permit is waived." However, the delineation report and permitting narrative provide no additional information justifying the claim that the wetland will not be impacted. Additional information and preventative measures are needed to verify this claim on account of the following factors which call into question the validity of the statement:
 1. The Wetland and Stream Delineation Report shows that a wetland is located directly downhill from the proposed construction area. Therefore, any runoff, sediment, spills or loose debris will flow into the wetland system.
 2. While not directly within the Limit of Disturbance, the wetland is located no more than 20 feet at the nearest point. Notably, the wetland is also less than 30 feet away from the proposed 'debris stockpile area.' This area, as previously mentioned, is directly uphill from the wetland, ensuring that any fugitive debris, and the contaminants and impairing substances that may be found within it, will travel the relatively small distance of 30 feet and into the wetland system.
 3. The Wetland and Stream Delineation Report also states that at least one stream on the property will be impacted by construction. It does not make clear which of the stream or streams are included in this assessment. It then states that the wetland will not be subject to the same impact. It does not clarify this distinction. This must be addressed, because the wetland is also downhill from the construction and logically would be subject to any impact that the streams are subject to.

The omission of any impact on wetlands is relevant to this permit because of the waivers required pursuant to 25 Pa. Code § 105.12(a)(2). Under the Dam Safety and Encroachments Act, construction permits cannot be granted if they result in impairment of waters of the commonwealth (which include both streams and wetlands.) The available waivers for this prohibition include the exception referenced by Chevron's permit, which allows "water obstruction in a stream or floodway with a drainage area of 100 acres or less." All 4 streams onsite are less than 100 acres, so the exception is valid. However, the waiver "does not apply to wetlands located in the floodway." Thus, if the wetland identified by Chevron, which is located just 20 feet downhill from the proposed construction and is in the same area as the impacted streams, is impaired by construction, the waiver does not apply. Chevron would then be required to apply for additional permitting required under 25 Pa. Code § 105.12(a)(5) before this permit can be granted. (176, 177)

Response: WMGR123 Condition C.5.b states that the facility shall not be located in or within 300 feet of an exceptional value wetland. The applicant has demonstrated that it met this condition with the Wetland and Stream Delineation Report prepared on February 27, 2018, which concluded there are no exceptional value wetlands located in or within 300 feet of the facility.

The Herminie South Centralized Water Facility has not been constructed yet. In order for site construction to begin, EQT will need to obtain a Chapter 102 permit for discharges of stormwater associated with construction activities which would include an Erosion and Sedimentation Control Plan (E&S Plan) to be implemented during construction. As part of the review of the Chapter 102 permit and E&S Plan, an evaluation of whether the wetlands will be impacted will occur. If the wetlands are going to be impacted, then a Chapter 105 Water Obstruction and Encroachment permit would be required. The fact that none of these permit applications have been submitted yet does not impact the issuance of the Waste Management general permit authorization.

3. **Comment:** The PA Game Commission found that the construction of the water facility posed potential impacts to the Indiana Bat (*Myotis sodalists*), a federally listed endangered species. The US Fish and Wildlife Service (FWS) found that the construction site is in close proximity to an Indiana bat hibernaculum, and therefore clearing trees with a trunk diameter greater than 5 inches could kill or injure roosting Indiana bats. The FWS recommended that tree clearing occur between November 15 and March 31, when Indiana bat hibernation season is not occurring. However, trees have been cleared from the construction site and there was absolutely no enforcement or independent verification that Chevron acted in compliance with the FWS recommendation. Further, Chevron's permit application provides no evidence that tree clearing occurred or will occur during the FWS recommended time frame. If tree clearing occurred outside of the FWS recommended time frame, it is also the case that no incidental take permit was obtained for the project. Additionally, no mitigation strategies such as replanting on nearby land or construction of artificial nesting habitats is discussed or proposed. The loss of trees which are vital for the Indiana bat's hibernation may constitute a disturbance to the species, which could result in taking of individuals in the species. In other words, there is nothing to ensure that an illegal taking of the Indiana bat has not already occurred, nor will be prevented, during the clearing of trees for the project. As such, DEP may recommend that Chevron apply for an incidental take permit and submit a subsequent conservation plan to the EPA, pursuant to the Endangered Species Act [16 U.S. Code § 1539(a)] in order to mitigate and oversee these risks to the Indiana bat population. (176, 177)

Response: The Department appreciates the commentators' raising this issue and agrees that the clearing of trees associated with constructing this facility requires further evaluation. An investigation to determine whether the trees cleared from the construction site followed the FWS recommendation will require the combined efforts of the Department and the FWS. Appropriate follow-up will occur once the investigation is completed.

4. **Comment:** The only information on wastewater chemical constituent concentrations in the renewal application comes from laboratory results from Geochemical Testing. Geochemical Testing notes that the wastewater samples they received were diluted, and that therefore the results of testing may have been biased low. Regardless, several constituent concentrations are

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listed as significantly higher than the maximum concentration limits for treated wastewater listed in Appendix A of Permit WMGR123.

Additionally, some constituent concentrations are listed as being less than a given value, but that value is greater than the limit set in Appendix A – in other words neither confirming or disaffirming compliance. It is unclear whether the chemical concentrations in the tested water is in attainment of Appendix A limits. There is the additional problem that it is unclear where the tested wastewater came from, or what level of treatment that tested water had received. It could not have come from the proposed water treatment facility, as that has not been constructed. Overall, Chevron has failed in their duty to demonstrate that wastewater treated at their proposed facility will be in attainment of Appendix A limits. (176, 177)

Response: Please see the Department's response to General Comment #74. Because the Appendix A sampling is not required, the location from which the sample originated is not relevant to the application review.

- Comment:** In addition to the chemicals listed in Appendix A of Permit WMGR123, several of which this permit application surpasses the maximum concentration limits, the application also proposes the use of multiple chemicals that are dangerous to environmental and human health. The water treatment plan proposes the use of hydrochloric acid, sodium hydroxide, polyaluminum hydroxychloride, and hydrogen peroxide during the treatment process. These compounds are highly corrosive and reactive, presenting dangers to human health and risks to ecosystems in the event of spills or releases into air or water. These chemicals will require storage onsite, transportation to the proposed facility, and inspection throughout their use to mitigate the risk of spills, none of which are detailed in this application. Given Chevron's history of violations, as discussed in the next section, detailed explanations and procedures for ensuring the safe handling of these toxic materials are needed to ensure they are never released into the environment under this permit. (176, 177)

Response: As explained in other responses, the limitations set forth in Appendix A of Permit WMGR123 are not required to be met for this facility in light of the operations conducted. The Department has considered other issues raised by this comment and will be further evaluating the issues raised in the near future. While the Department may determine that revisions to the facility's Preparedness, Prevention and Contingency Plan are warranted depending upon the results of its further investigation, it does not believe that the public nor operations at the facility are currently endangered.

- Comment:** Attachment L-1, the Preparedness, Prevention, Contingency Plan, includes in Appendix C a Summary of NRC and NOV spills. This is a document of Chevron's recent spills in Pennsylvania as recorded by the National Response Center (NRC) and Notices of Violation (NOVs) by the Pennsylvania Department of Environmental Protection. Note that the document only includes notifications between February 2012 and November 2015. In that time, the NRC and DEP noted over 40,000 gallons of spills at Chevron facilities in Pennsylvania. Substances spilled include fuels, oils and other hydrocarbons; treated and untreated frac water, brine, and other wastewaters; fracking fluid and mud; hydrochloric acid and other treatment chemicals; and various additional liquids from the transportation, storage, processing, and disposal of petrochemical materials at the company's facilities. These spills have been the result of any

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number of operator errors, equipment failure and leaks, overflows, and failed oversight by Chevron. Additionally, form HW-C of the Application provides a Compliance History which discloses 900 different violations by Chevron in Pennsylvania between May 2011 and March 2020. This includes 2 Environmental Health & Safety violations at Herminie South in April and May 2019.

The repeated spills and violations at Chevron's facilities in Pennsylvania, in just the past decade, indicates that the PPC plan and containment methods followed have been inadequate for protecting the environment from damage by Chevron's operations. The Pennsylvania DEP has a responsibility to review permits from companies like Chevron with a history of noncompliance in the region with a high level of scrutiny to ensure that the needed improvements have been made to prevent future noncompliance. The fines Chevron has paid for these violations in the past have been inadequate in preventing spills, so it is in the best interests of the Commonwealth for the DEP to presume that improved mitigation strategies have not been adopted either. (176, 177)

Response: At the time of the Department's review of the application, the applicant's PPC plan was reviewed and deemed satisfactory for this facility.

Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected." (Emphasis added).

There were no open violations of the waste regulations for the applicant at the time of permit issuance, which would be deemed the most serious compliance issues in the application review. Previous violations were reviewed, but the violations did not indicate a lack of intention or inability to comply with the applicable statutes or regulations. Accordingly, the compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

Further, as part of the compliance evaluation, other DEP program areas were consulted as to whether the issuance of renewed coverage under WMGR123 should be held because of open violations, and no such requests were made to hold this permit renewal due to non-compliance.

8. **Comment:** Chevron is applying for a WMGR123 permit renewal when it may be required that they obtain a new WMGR123 permit. It appears that Chevron is attempting to renew a permit that was originally obtained for a facility, located on the same property, that is different from the one they now plan to construct. Public health and the environment may not be adequately protected if this new construction does not have its own specific permit. A map that is a part of

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Attachment 20-2 on the permit lists that a residence is a 300 foot distance from the facility construction site. This may be an issue because WMGR123 permit requires that a relevant facility not be located within 300 feet of an occupied residence. Below is the referenced map from Attachment 20-2, with the 300 foot distance comment circled in red. (176, 177)

Response: The map submitted as Attachment 20-2 was part of the Pennsylvania Natural Diversity Inventory review and was not of the appropriate scale to show whether the facility meets the setback criteria. The setback criteria map, drawing No. 2 of the permit drawings submitted with the application, confirms that the facility is not located within any of the restricted areas of Permit Condition No. C.5, including the 300-foot distance from a residence.

9. **Comment:** It is the opinion of the undersigned commenters that additional review of the permit application must be completed that addresses the concerns listed above before renewal of the proposal may be granted. It is the duty of the DEP to investigate impacts to wetlands and endangered species; high concentrations of several chemicals, both listed and unlisted in the permit; Chevron's repeated violations and spills in the region; and the failure of the site's scope and location of construction to align with the purview of the permit before allowing this site to complete construction and begin treating millions of gallons of dangerous petrochemical wastewater. More information and assurances of compliance from Chevron will help alleviate these concerns as demonstrate that this permit is being granted in good faith and with the health and safety of the Commonwealth's residents and environment as a top priority. (176, 177)

Response: As explained in the Department's previous responses to comments for this authorization, the Department does not believe that a suspension or revocation of the facility's authorization is warranted or necessary at this time.

10. **Comment:** Chevron included concerning responses to questions in the General Information Form. On GIF page 3 of 7, it checked "no" to "1. Have you informed the surrounding community and addressed any concerns prior to submitting the application to the Department?" The Department should require Chevron to engage with the community, even at this late date. (178)

Response: Although the response to this question was checked "No," the Department has confirmed that, as required by 25 Pa. Code § 287.641(g), the applicant notified South Huntingdon Township and Westmoreland County of the submission of the application and provided the application to them for review. The Department will take your suggestion to engage with the community under advisement and may conduct an informal meeting with interested parties.

11. **Comment:** On GIF page 5 of 7, Chevron checked "no" to the following questions:

- 3.2: "Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?"

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- 6.0: “Will the project involve discharge of stormwater or wastewater from an industrial activity to a dry swale, surface water, ground water or an existing sanitary sewer system or separate stormwater system?”

This appears to be contradicted by outlet drains and a stormwater management area shown on the “Geotechnical Subsurface Summary” drawing in the “Figures/Drawings” section of the submission. (17, 178)

Response: The purpose of the General Information Form (GIF) is to assist the applicant in determining which environmental permits or approvals are needed for the project and to assist the Department with coordinating permits with other Department Programs. Incorrect responses to these questions do not make the application invalid. The Department may request that corrected responses from the applicant be submitted where necessary but has and will coordinate permitting with the appropriate bureaus even if the responses to the questions are incorrect. In this instance, “no” is the appropriate response to this question because the facility is not discharging industrial wastewater or stormwater.

12. **Comment:** Chevron fails to acknowledge that the project will involve the installation of large aboveground storage tanks (see GIF page 7 of 7). (17, 178)

Response: The purpose of the General Information Form (GIF) is to assist the applicant in determining which environmental permits or approvals are needed for the project and to assist the Department with coordinating permits with other Department Programs. Incorrect responses to these questions do not make the application invalid. The Department may request that corrected responses from the applicant be submitted where necessary but will coordinate permitting with the appropriate bureaus even if the responses to the questions were incorrect. The Department acknowledges that the answers to the question regarding aboveground storage tanks should have been “Yes,” and Department Waste Management has coordinated with the appropriate Department programs, as necessary.

13. **Comment:** Chevron failed to acknowledge that earth disturbance would be required and failed to list the amount of earth disturbance. (See GIF page 5 of 7) It failed to acknowledge that the project will “involve the construction and operation of industrial waste treatment facilities.” (17, 178)

Response: The purpose of the General Information Form (GIF) is to assist the applicant in determining which environmental permits or approvals are needed for the project and to assist the Department with coordinating permits with other Department Programs. Incorrect responses to these questions do not make the application invalid. The Department may request that corrected responses from the applicant be submitted where necessary but will coordinate permitting with the appropriate bureaus even if the responses to the questions were incorrect. The Department acknowledges that the answers to the question regarding earth disturbance should have been “Yes,” and Department Waste Management has coordinated with the appropriate Department programs, as necessary.

14. **Comment:** Chevron is proposing to put the tanks on a denuded slope surrounded by colluvium and other soils and rock that do not provide much geotechnical support. It has commissioned a

geotechnical analysis that conditions its approval of the plan on various facts which have not yet been shown to be true. For example, on page 22 of the 2018 geotechnical report, CEC writes that “it is essential additional laboratory strength testing is performed on excavated materials throughout the site to verify the materials meet the (minimum) estimated strength requirements indicated in Section 4.0. Construction of fill slopes and buttresses using soils with lesser strength parameters will likely result in marginally stable fill slopes and an increased likelihood of slope distress or movement.” There is no condition in the WMGR123 permit or any other permit showing that this condition will be met.

The Operating Condition #16 provides that “The activities authorized by this general permit shall not harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth.” Without any oversight as to whether the conditions are present for the slope to slide, Operating Condition #16 has not been met. (17, 178)

Response: WMGR123 Condition C.23 requires the oil and gas liquid waste, before and after processing, and all other wastes generated by the operation to be stored and transported in accordance with 25 Pa. Code, Chapter 299. 25 Pa. Code § 299.122(b) requires that tanks be designed and constructed in accordance with current code of practice developed by Nationally recognized associations such as UL, ACE, API, ASME, ASTM or NACE. These standards require tanks to have a stable foundation, be capable of supporting the total weight of the tank when full of waste without movement, rolling or unacceptable settling and the foundation design and construction shall be based on sound engineering practices. Requiring the applicant to follow the storage tank standards of 25 Pa. Code § 299.122, and requiring that applicant have a Professional Engineer certify that the tanks were properly installed according to the specifications will provide the oversight necessary to protect the health, safety and welfare of the people and the environment.

15. **Comment:** Chevron’s PNDI search dates to January 31, 2018. As the PNDI form itself says, “These agency determinations and responses are valid for two years (from the date of review),” so only valid until January 31, 2020, and this was sent in August 2020, so it was invalid already by the time the Department began to review the application. An updated PNDI search should be undertaken before any construction moves ahead at the site to ensure no threatened or endangered species impacts occur. (17, 178)

Response: The Department appreciates the commentators’ raising this issue and agrees that potential impacts to endangered species from construction or operation of the facility requires further evaluation. The Department is actively evaluating these impacts to ensure that a valid PNDI search is associated with the facility.

16. **Comment:** The highway occupancy permit had already expired when Chevron submitted it to the Department, and no new permit has been provided. This is another instance of Incompleteness. The PPC plan was last revised in March 2017 and should have been updated at the very least for the renewal permit. Its Appendix C “SUMMARY OF NRC AND NOV SPILLS” ends in September 2015, which was out-of-date even as of the March 2017 revision and is now woefully out of date. (17, 178)

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Response: The Department appreciates the commentators' raising this issue and agrees that the validity of the highway occupancy permit requires further evaluation. The Department is actively evaluating this issue to ensure that a valid highway occupancy permit is associated with the facility.

In regard to the PPC Plan, the information in Section 1.4 and Appendix C, was provided to show the types of incidents that have occurred as a result of the applicant's overall operation in the oil and gas drilling industry and is not a list of previous pollution incidents at this specific facility. Because this facility is not constructed and operating, there is no Pollution Incident History to report in Section 1.4 of the PPC Plan.

17. **Comment:** The radiation protection plan is also out-of-date. While the cover page claims it is from July 2020, every other page is dated to December 2017. Some of the information in it is not applicable such as some of the contact information in Appendix A. For example, why is the Fayette County Emergency Management Agency listed, but nothing for Westmoreland County? Why is the Uniontown Hospital contact info listed, but nothing close to this site? It appears copied-and-pasted from another facility. It is vital that in an emergency situation, the closest a healthcare facility is listed, but that is not the case here. The document itself states: "The RMAP will be reviewed every two years and revised to reflect procedural, operational, and regulatory changes put in place since the previous review. Any proposed revisions to the most recently approved Chevron RMAP shall be reviewed with the DEP prior to implementation." If it has been reviewed since, that information did not make its way into the application materials. The whole document needs to be redone this year, for this facility. (17, 178)

Response: The Department appreciates the commentator's raising this comment and agrees that the permittee's Radiation Protection Action Plan requires further evaluation. While the Department may determine that an updated Radiation Protection Plan is needed, it does not believe that the public is endangered since the facility is not constructed or currently operating.

18. **Comment:** Chevron did not include with its application materials any information establishing that the facility would qualify for coverage under Section C.1.a of the General Permit. However, it also cannot qualify under Section C.1.b, as the chemical analyses, Chevron included with its application show many exceedances of the concentration limits in Appendix A. Therefore, Chevron has not established that it qualifies for coverage under the General Permit at all. In particular, the application materials lack analytical data including a minimum of 14-day consecutive daily flow for strontium, barium, and total dissolved solids. (17, 178)

Response: Please see the Department's response to General Comment #74.

19. **Comment:** Taken together, it is clear that Chevron has not met its requirements to be given a permit to operate this facility in the state of Pennsylvania. The Department must require this application to be redone in compliance with the requirements set out by law. Allowing such a project to continue operating while all these problems persist is neither safe nor reasonable. (17, 178)

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Response: As explained in the Department's previous responses to comments, the Department does not believe that a suspension or revocation of the facility's authorization is warranted or necessary at this time.

WMGR123SW033

1. **Comment:** Upon review of the permit request for construction and maintenance of a frack wastewater storage facility on Herminie West Newton Road, serious public and environmental concerns are raised that the permit was not thoroughly vetted. It is concerning that the permit was requested without the appropriate public comment period which violates due permitting process. The site sits within an established municipal conservation district to protect the area's watershed. The project has strong opposition from multiple organizations and the citizens of Sewickley Township. The outside engineering consultation included in the application points to concerns of the physical integrity of the current structure which is compounded by the proposed construction in regard to the use of substrate materials supporting the tanks. The proposed site will have the capacity to store 3 million gallons of contaminated frack wastewater. A storage facility of this size with a questionable structural integrity would be disastrous to the Big and Little Sewickley Creek Land Conservation Area, undoing decades of conservation work by local citizens. Further, commenters suspect that due diligence will not be done by Chevron Appalachia LLC to prevent such a disaster, as is exemplified by a history of health and environmental safety standards. (176, 177)

Response: Please see the Department's response to General Comment #2. The Department believes that the appropriate public comment period was provided regarding this permit. The Department has considered your comment, however, and will consider holding additional public outreach with interested parties to discuss the Herminie North Centralized Water Facility. Please see the Department's response to WMGR123SW033 Comment #2, below, regarding structural integrity of the tank substrate.

2. **Comment:** Soil Composition and Landslides: The soil examination of the current site shows that there is a large amount of fill in the northeast corner of the site. Three tanks will rest on the east edge of the site. Although the report states that present materials are not known to cause landslides, nor is there evidence of current landslides, the area documented one historical landslide that was caused by hillocks. The area, however, is to be excavated. The concern is that the materials below the surface may be subject to the same geological forces that caused the old landslide. Rock samples indicate solid bedrock will be encountered and will likely need to be excavated. Will removing bedrock further weaken the structure? (176, 177)

Response: The Geotechnical Report was prepared to determine if the area would provide a stable foundation for the tank facility. The report concluded that the pad and tank foundation, if built in accordance with the requirements of the Construction Quality Assurance/Quality Control Plan, will have the bearing capacity and slope stability to support the weight of the tanks when full. Permit condition C.23 requires the oil and gas liquid waste, before and after processing, and all other wastes generated by the operation to be stored and transported in accordance with 25 Pa. Code, Chapter 299. 25 PA Code Section 299.122(b) requires tanks be designed and constructed in accordance with current code of practice developed by Nationally recognized associations such as UL, ACI, API, ASME, ASTM or NACE. These standards require

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tanks to have a stable foundation, be capable of supporting the total weight of the tank when full of waste without movement, rolling or unacceptable settling and the foundation design and construction must be based on sound engineering practices. Furthermore, permit condition No. C.24 and C.25 requires a registered Pennsylvania Professional Engineer to certify in writing that each phase of the construction was conducted in accordance with the documents, statements, design, and plans submitted as part of the application as approved by DEP. This requirement will provide the oversight necessary to protect the health, safety and welfare of the people and the environment.

- Comment:** Slope Degree: The maximum recommended slope gradient is H3:V1, or 33%. Sewickley Township defines a steep slope as >25%. With regard to the questions about the structure of the site, the township should be informed and consulted if not already. (176, 177)

Response: Please see the Department's response to WMGR123SW033 Comment #2. Sewickley Township will be consulted, if warranted.

- Comment:** The Use of Fill Post-Construction: The site is reported to have fill with "deleterious" materials such as ceramics, glass, and plastics. These materials can fragment causes shifts and settling. Guidelines are that no more than 5% of fill may contain deleterious or organic material. The site is covered to some extent in wooded debris which is assumed to be razed during construction. How much will this contribute to fill material? Further, the tanks may rest on fill which may cause a deviance greater than the recommend 0.5"-1" threshold. (176, 177)

Response: Please see the Department's response to WMGR123SW033 Comment #2,

- Comment:** Wetted Earth and Slope Maintenance: Should the slope be built; the recommendation is for continuous maintenance of the slope to dry the land to prevent landslide conditions. The public will need reassurance that proper maintenance will be conducted, particularly in the months that the facility is not operating and will have an assumed limited staff at the site. (176, 177)

Response: Condition C.22 of WMGR123 requires at a minimum, that weekly or monthly inspections (depending upon the specific scope of operations) of all processing and storage areas be conducted to determine compliance with the terms and conditions of this general permit, and for evidence of failure.

- Comment:** Emergency Containment: Although the site meets the required 110% capacity of the largest tank size criteria, is this enough given the former questions of structural integrity? "Construction of fill slopes and buttresses using soils with lesser strength parameters will likely result in marginally stable fill slopes and an increased likelihood of slope distress or movement." -Geotechnical Report August 10, 2018. (176, 177)

Response: In regard to the questions of structural integrity, please see the Department's response to WMGR123SW033 Comment #2. Furthermore, the quotation from the Geotechnical Report needs to be put into context. The report was explaining how important it is to perform laboratory strength testing on excavated soils before they are used in construction of the facility. The statement that construction of fill slopes and buttresses using soils with lesser

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strength would increase the likelihood of slope distress was made to justify why the strength testing on the excavated soils is so important.

7. **Comment:** Safe Drinking Water: The construction assessment confirms that springs and other sources of ground water will be encountered during construction. The Sewickley Water Authority has a comprehensive water conservation plan which includes the preservation of ground water. It is warranted that they be consulted. (176, 177)

Response: Sewickley Township will be consulted, if warranted.

8. **Comment:** Environmental Conservation: Sewickley Township in partnership with its citizens and several prominent environmental organizations has spent decades to restore the once impaired waterways of Little and Big Sewickley Creeks. The creeks were contaminated with acid mine drainage and particulate matter from years of overdevelopment which prohibited life in the creek and on the land. These creeks also serve as a watershed for downstream drinking sources. Three million gallons of frack waste resting in the middle of the watershed is a significant environmental and public health concern to local communities who have spent a great deal of time and money to create neighbors rich in greenspace, wildlife, and clean water. Chevron Appalachia, LLC should make a rigorous effort to engage the citizens on the issue, especially in light of the fact that they were denied the initial opportunity. (176, 177)

Response: Please see the Department's response to General Comment #2. The Department believes that the appropriate public comment period was provided regarding this permit. The Department has considered your comment, however, and will consider holding additional public outreach with interested parties to discuss this facility.

9. **Comment:** Chemical Composition: There are 18 chemicals which tested at the maximum threshold of concentration. Although the chemicals do not cause the regulated group of these chemicals to exceed the group threshold, many of these chemicals are known toxins, carcinogens, mutagens, and teratogens in small amounts. These chemicals are sulfate, uranium, mercury, thorium, aluminum, arsenic, beryllium, cadmium, cobalt, copper, lead, nickel, selenium, silver, molybdenum, benzene, toluene, and ethylene glycol. The chemical analysis should be repeated. (176, 177)

Response: Please see the Department's response to General Comment #2.

10. **Comment:** Third Party Waste Delivery: The facility plans to accept third party waste material. The plan outlines an onsite inspection of delivery trucks, however, does not mention pre-inspection agreements with third party transporters. (176, 177)

Response: The focus of this comment is unclear; however, if the concern is that third-party transporters must contractually agree to allow onsite inspection of delivery trucks, the operator of the permitted facility will have the authority to require such inspections as a condition of the transporter's use of the facility. The operator of the facility is obligated to ensure this occurs.

11. **Comment:** History of Multiple Violations: The company lists 154 Environmental and Health Safety violations and 57 Administrative violations. These violations further call into question the

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safety of the site and the due permitting process, again, especially since public comment was denied. Time should be allotted to review each violation. (176, 177)

Response: Please see the Department's response to General Comment #2. The Department believes that the appropriate public comment period was provided regarding this permit.

Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

There were no open violations of the waste regulations for the applicant at the time of permit issuance, which would be deemed the most serious compliance issues in the application review. Previous violations were reviewed, but the violations did not indicate a lack of intention or inability to comply with the applicable statutes and regulations. Accordingly, the compliance history does not support the denial, suspension or revocation of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

Further, as part of the compliance evaluation, other DEP program areas were consulted as to whether the issuance of renewed coverage under WMGR123 should be held because of open violations, and no such requests were made to hold this permit renewal due to non-compliance.

- 12. Comment:** In compensation to the citizens of the township and surrounding areas being denied the opportunity for public comment, and the significant concerns in the construction and maintenance of the facility, additional time beyond the regular comment period should be allowed. Chevron Appalachia LLC should initiate an effective outreach plan to engage citizens. Further, public entities including Sewickley Township and its respective boroughs, and all organizations involved in watershed conservation of Little and Big Sewickley Creek should be included in the permitting process as stakeholders. Further, additional time should be granted for any organization that wishes to conduct a second assessment of the property. (176, 177)

Response: Please see the Department's response to General Comment #2. The Department believes that the appropriate public comment period was provided regarding this permit. The Department has considered this comment, however, and will consider holding additional public outreach with interested parties to discuss this facility.

- 13. Comment:** Chevron did not include with its application materials any information establishing that the facility would qualify for coverage under Section C.1.a of the General Permit. However, it also cannot qualify under Section C.1.b because although Chevron did provide a chemical analysis of the facility's water, the analyses show many exceedances of the concentration limits

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in Appendix A. Therefore, Chevron has not established that it qualifies for coverage under the General Permit at all. In addition, the application materials lack required analytical data, particularly a minimum of 14-day consecutive daily flow for strontium, barium, and total dissolved solids. (17, 178)

Response: Please see the Department's response to General Comment #74.

14. **Comment:** Besides the concentration limits, in describing earlier spills at the facility on page three of the Preparedness, Prevention & Contingency (PPC) plan, Chevron claims that spills were small and mostly under five gallons. However, Chevron included a Summary of National Response Center (NRC) and Notice of Violation (NOV) Spills as Appendix C of the revised permit renewal application. This list actually shows many spills over five gallons, including many in the hundreds of gallons and even several in the thousands of gallons are included—making the earlier claim demonstrably false. DEP should take this into account when evaluating the safety of the facility and the likelihood of a severe spill. (17, 178)

Response: The Department acknowledges this comment and will consider this during reviews of future PPC Plan submissions. It should be noted that this facility has not yet been constructed, and therefore no spills at this facility have occurred.

15. **Comment:** The bonding worksheets for waste processing facilities published by DEP and completed by Chevron ask the permittee to “select a likely ‘worst-case’ scenario where you would have a maximum amount of the facility open and in need of closure” in order to ensure that the bond is sufficient to cover the costs from a worst-case scenario occurring. However, Chevron chose a supposed “worst-case scenario” that involves the facility shutting down early, while the tanks are still at capacity. Chevron only calculated the cost of emptying its storage tanks and transferring the contents to another facility; it did not calculate any possible spills or damage to the surrounding land making their business loss a priority over the environmental cost of mistakes.

Chevron also marked both surface water and groundwater monitoring as “N/A” to the situation, despite the fact that both could plausibly be required if a serious leak or spill occurred. The reason to include both surface water and groundwater monitoring for a facility like this is to protect the land and water from contamination resulting from a spill. It is clearly applicable to this wastewater facility. DEP must require Chevron to redo its bond calculations and acquire a higher bond to accommodate an actual worst-case scenario. (17, 178)

Response: The bonding worksheets were reviewed and approved of by the Department for the anticipated costs to the Commonwealth to complete final closure of the facility and implement measures to prevent adverse effects upon public health and safety, public welfare and the environment. Included in these costs are: facility decontamination, disposal costs for wastes and contaminated materials, disposal of the facility equipment, costs for disposal of washwater and contaminated liquids from the decontamination process, and regrading and revegetating the site. The costs for surface water and groundwater monitoring are not necessary since there is no surface or groundwater monitoring required for this type of facility during its operation. The Department does not intend by language in its bonding worksheets to include surface or groundwater monitoring in the absence of a current indication of contamination. Closure bonds

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do not include costs for accidental spill cleanups, which must be addressed immediately and not await facility closure. The bond as approved is adequate to complete closure of the likely worst-case scenario at this facility.

If a serious spill or leak occurred, the company would be required to clean up the spill under the clean-up regulations, not as part of their closure costs. If the company failed to comply, enforcement actions would be taken requiring compliance. Please see the Department's response to General Comment #70.

16. **Comment:** Chevron's highway occupancy permit expired on January 8, 2020, months before the initial permit renewal application was submitted on May 6, 2020. An expired permit fails to demonstrate that Chevron would be allowed to use the highway in question, and so this application is incomplete and Chevron must be required to submit a complete application with a current permit. The same is true of Chevron's PNDI search receipt, which expired December 13, 2020. Since the permit in question was not renewed until December 30, 2020, a new inventory search must be done and submitted. Until these expired documents are replaced with up-to-date documentation, the application will remain incomplete. (17, 178)

Response: The Department appreciates the commentators' raising this issue and agrees that the highway occupancy permit and PNDI search require further evaluation. While the Department may determine that another highway occupancy permit is needed, or that an updated PNDI search should be undertaken prior to construction, it does not believe that the public or environment is currently endangered since the facility is not constructed or currently operating.

17. **Comment:** Under the required radiation action plan, Chevron is required to provide the information of local healthcare facilities as well as emergency and county officials. The action level notification list in Appendix A of the revised permit renewal application that Chevron submitted was actually prepared for a different location than the permit being renewed here. This is demonstrated by the fact that Chevron included contact information from the wrong county, Fayette, as opposed to Westmoreland. The fact that Chevron attempted to submit a document clearly not prepared for the facility being permitted is unacceptable. The information for a separate facility does not serve the intended purpose of this requirement. DEP must require Chevron to submit accurate information for the specific site in question or else the application will continue to be incomplete.

Additionally, the radiation action plan also purports to be from July 2020 as it states on the cover page, but the actual body of the text is dated December 2017. The plan itself states that "The RMAP will be reviewed every two years and revised to reflect procedural, operational, and regulatory changes put in place since the previous review. Any proposed revisions to the most recently approved Chevron RMAP shall be reviewed with the DEP prior implementation." By its own terms, this form is out of date and must be redone for this specific facility. (17, 178)

Response: The Department appreciates the comment and agrees that the permittee's Radiation Protection Action Plan (RPAP) requires further evaluation. While the Department may determine that an updated RPAP is needed, it does not believe that the public is currently endangered since the facility is not constructed or currently operating.

18. **Comment:** Beginning on page one of the project narrative, which is included as attachment 20-1 to the revised permit renewal application, it is clear the information has not been updated since the initial permit application. The narrative consistently refers to the project in the future tense and describes future construction, despite supposedly referencing sites and equipment that have already been set up. This is in direct contradiction to other paperwork that Chevron submitted, claiming for example that no aboveground storage tanks will be constructed. The same is true for the included geochemical report.

Additionally, the application included a transportation impact study that clearly predates the project because it lists the land in question as an unused open field. The mix of outdated and current information in Chevron's permit application makes it hard to know whether the application material is accurate. DEP should require a resubmission with all current application materials, to ensure that it correctly understands what is being proposed (and what already is) at the facility. (17, 178)

Response: The Herminie North Centralized Water Facility has not been constructed as of January 2021. The application is almost exactly that which was submitted in January 2019 because the facility is not an operating storage tank facility. As stated in response to other comments, the Department intends to review the application to determine whether it needs to be updated or corrected.

19. **Comment:** Taken together, it is clear that Chevron has not met its requirements to be given a permit to operate this facility in the state of Pennsylvania. DEP must require this application to be redone in compliance with the requirements set out by law. This should include requiring that Chevron obtain a new highway occupancy permit and PNDI search, redo its radiation action plan for this specific site, and completely redo its bonding worksheets, taking an actual worst-case scenario in account. If the new bonding worksheets demonstrate a need, DEP must also acquire a larger bond. Allowing such a project to continue operating while all these problems persist is neither safe nor reasonable. (17, 178)

Response: As explained in the Department's previous responses to comments for this authorization, the Department does not believe that a suspension or revocation of the facility's authorization is warranted or necessary at this time; however, evaluation of the items brought to our attention will be undertaken promptly.

WMGR123SW036

Response to All Comments: General Permit No. WMGR123SW036 was issued to Range Resources-Appalachia, LLC on October 3, 2019, and renewed on December 30, 2020, for the processing, transfer and beneficial use of oil and gas liquid waste at the Imperial Land North Tank Pad Facility located at Quicksilver Road, McDonald, PA 15057, Robinson Township, Washington County. On April 1, 2021, the permittee notified the DEP of closure of the facility and requested that its bond be released. The Southwest Regional Office conducted a final inspection of the site on April 21, 2021 confirming closure of the site and terminated general permit WMGR123SW036 on May 18, 2021.

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1. **Comment:** The application materials submitted for WMGR123SW036 appear to be limited to Test America results from 2013 as well as a report entitled "Sampling and Analysis of Water Streams Associated with the Development of Marcellus Shale Gas" that was prepared on December 31, 2009 for the Marcellus Shale Coalition

The 2009 data do not appear to reflect an analysis by Range Resources Appalachia, LLC or their agents of the waste they will be managing with this permit, but general industry samples.

Moreover, the 2013 results only reflect a few pollutants on Appendix A, and they do not appear to have been updated to reflect more recent testing of the fluid in the intervening more than 6 years.

In addition, only three pages, 28, 29, and 36, of what appears to be a larger document, are included in the Marcellus Shale Coalition report results, and only pages 8 through 11 are included of the TestAmerica results even though the bottom of each page says "of 48" pages. This sampling data therefore appears to be missing a significant number of pages of monitoring data.

In addition, the sampling data did not include any values at all for several critical constituents of concern, including benzene and toluene. (4, 5)

2. **Comment:** Range's list of many violations indicates a potential to harm the health, safety, or welfare of people or the environment. The Department issued this permit without an adequate investigation of the facility's compliance with the applicable statutes and regulations. For example, the permit application's section regarding the relevant compliance history includes a list of 469 violations spanning 18 pages of documentation. These violations include many incidences of spills and permit requirement violations. These violations individually, and in the context of the large cumulative number of violations, indicate the potential to harm or present a threat of harm to the health, safety, or welfare of the people or environment of this Commonwealth.

Commenters request that the Department justify granting authorization despite this compliance history replete with hundreds of examples of Range's failure to comply with legal requirements, or to amend, suspend, or revoke this permit in order to ensure there is not ongoing threat of harm to the people or environment of the Commonwealth. (4, 5)

3. **Comment:** The application also includes several omissions that DEP failed to explain and for which Commenters request clarification of whether a requirement was met or not and request that DEP require Range to provide missing data or correct inaccuracies. Specifically, the application's Form B, the professional certification, was missing signatures from a soil scientist and a geologist. (4, 5)
4. **Comment:** Commenters understand Range has requested relinquishment of WMGR123SW036 and that it claims its facilities have been decommissioned. Commenters request a response from DEP regarding whether DEP has: 1) received documentation from Range confirming that there are no remaining risks from this facility's operations or activities; and 2) reviewed these documents to confirm whether ongoing obligations remain to ensure the safety of this site for

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health and the environment prior to approving the relinquishment of the permit and release of the bond. (4, 5)

5. **Comment:** Commenters appreciate the DEP's review and consideration of these comments. Commenters request that the Department provide the requested information and clarifications, and amend, suspend, or revoke this permit as required to ensure compliance with Pennsylvania law and regulatory requirements. (4, 5)
6. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)
7. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)
8. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

WMGR123SW037

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

3. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW041

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

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2. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

3. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW042

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

3. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW045

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

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Response: The Department acknowledges the comment.

3. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW049

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

3. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW050

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

3. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

WMGR123SW051

WMGR123SW051, Range Resources - Appalachia, LLC, which was proposed to be located at 106 Clinton Frankfurt Road, Clinton, PA 15026, Hanover Township, Beaver County, was rescinded on November 29, 2021. When this application was submitted in November 2020, Range Resources sent the application package and a notification of the application submittal to Hanover Township, Beaver County but did not send the application package and notification to Hanover Township, Washington County. When it was discovered that the package and notification should have also been sent to Hanover Township, Washington County, Range Resources requested that the permit be rescinded. Any comments for this authorization will be addressed as part of the subsequent comment period for WMGR123SW058.

1. **Comment:** [The commentator references Range Resources' (Range) February 9, 2021, letter responding to the Department's Technical Deficiency Letter received by Range on February 2, 2021. The specific responses the commentator highlights are in regard to operational details for loading and unloading waste, secondary containment related to a manifolded tank system, and the procedures for utilizing pipeline transference of fluids.]

The concern with the language, referring to the level of detail and designs as having been previously approved without providing direct answers to the issues raised by the Department in the Technical Deficiency Letter, is of transparency with the DEP and the public. (179)

2. **Comment:** In the 2540-PM-BWM0397 Checklist - MUNICIPAL OR RESIDUAL WASTE GENERAL PERMIT (New Permit, Registration, or Determination of Applicability), Range Resources did not check Public Notification Types: Publication in the Pennsylvania Bulletin, 60-Day Public Comment Period, or Public Hearing(s) may be required. Regardless of whether there has been a publication in the Public Herald, this appears incomplete. (179)
3. **Comment:** DEP did not require any additional testing for pollutants beyond the WMGR123 Appendix A list despite the fact that other pollutants that could pose threats of harm to the health, safety, or welfare of humans or the environment are present in oil and gas liquid waste, and testing for them should have been required. Range Resources states in the Acceptance Plan that "No sampling will be conducted."

Section F of the 2540-PM-BWM0397 Checklist requires Chemical Analysis to be conducted by an accredited environmental laboratory. (179)

4. **Comment:** Range Resources' Permit Application uses 'Residual Waste'. Residual waste is defined by the PA Department of Environmental protection as nonhazardous industrial waste.

Oil and gas liquid waste, defined in WMGR123 as "liquid wastes from the drilling, development and operation of oil and gas wells and pipeline facilities . . .," contains a variety of toxic chemicals. "Oil and gas exploration and production use a wide range of chemicals to drill and

frack wells, mobilize additional chemicals within the oil and gas formations, and release these chemicals across nearly all environmental media.” The chemicals used by the oil and gas industry include a variety of those chemicals used to drill and frack wells, including methanol, 2-butoxyethanol, and ethylene glycol, the three most commonly used chemicals as reported by a 2011 report by the Minority Staff of the U.S. House of Representatives Committee on Energy and Commerce. That report also specifically identified 29 chemicals used by companies that are known or possible human carcinogens, regulated under SDWA for risks to human health, and/or listed as hazardous air pollutants (“HAPs”) under the Clean Air Act, including naphthalene, xylene, hydrochloric acid, and formaldehyde. “When used as fracking fluids, these products and chemicals are mixed with a base fluid, typically water or reused wastewater, and anywhere between two to five million gallons of this mixture is injected to frack a single well.” (179)

5. **Comment:** Initial drilling of the wells also uses a variety of muds and fluids that contain toxic chemicals. Drilling muds can include barite, which contains primarily barium sulfate but also a host of toxic metals, such as mercury, cadmium, and chromium. Other chemicals used in drilling and well development practices that can contaminate liquid waste from these processes include additional toxic constituents such as propargyl alcohol, a common corrosion inhibitor; heavy naphtha, a lubricant that contains the toxic BTEX compounds; and Duratone HT, a filtration control agent for drilling that contains nonylphenol.

Furthermore, there are toxic chemicals already present in the gas formation that get mobilized as drill cuttings and flowback water, which, in the Marcellus shale formation, can include lead, arsenic, barium, chromium, uranium, radium, radon, and benzene. “Drill cuttings can also contain naturally occurring radioactive materials (“NORMs”), which have proven to be a problem for the disposal of these wastes in landfills not capable of handling them.” Many of these pollutants that are used or produced during fracking and can be present in oil and gas liquid waste are toxic or otherwise dangerous. According to Earthworks’ “Hydraulic Fracturing 101” page and sources cited therein:

- “Many fracturing fluid chemicals are known to be toxic to humans and wildlife, and several are known to cause cancer. Potentially toxic substances include petroleum distillates such as kerosene and diesel fuel (which contain benzene, ethylbenzene, toluene, xylene, naphthalene, and other chemicals); polycyclic aromatic hydrocarbons; methanol; formaldehyde; ethylene glycol; glycol ethers; hydrochloric acid; and sodium hydroxide.
- “Very small quantities of some fracking chemicals are capable of contaminating millions of gallons of water. According to the Environmental Working Group, petroleum-based products known as petroleum distillates such as kerosene (also known as hydrotreated light distillates, mineral spirits, and a petroleum distillate blends) are likely to contain benzene, a known human carcinogen that is toxic in water at levels greater than five parts per billion (or 0.005 parts per million).
- “Other chemicals, such as 1,2-Dichloroethane are volatile organic compounds (VOCs). Volatile organic constituents have been shown to be present in fracturing fluid flowback wastes at levels that exceed drinking water standards. For example, testing of flowback samples from Texas have revealed concentrations of 1,2-Dichloroethane at 1,580

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ppb, which is more than 316 times EPA's Maximum Contaminant Level for 1,2-Dichloroethane in drinking water.

- "VOCs not only pose a health concern while in the water, the volatile nature of the constituents means that they can also easily enter the air. According to researchers at the University of Pittsburgh's Center for Healthy Environments and Communities, organic compounds brought to the surface in the fracturing flowback or produced water often go into open impoundments (frac ponds), where the volatile organic chemicals can off-gas into the air."

In fact, pollution caused by mismanagement of oil and gas liquid (and solid) waste was recently even the subject of criminal charges in Pennsylvania. (179)

6. **Comment:** Given these failures of Range Resources' application materials to comply with the technical and application requirements of WMGR123's Appendix A or test for dangerous pollutants not on Appendix A, it appears that the requirements of Condition C.1 of WMGR123 have not been satisfied.

Unless DEP can establish that Range Resources' application materials and operations meet the requirements of the health and safety conditions of the permit, the activities are not consistent with the requirement of WMGR123 and further may have the potential to harm the health, safety, or welfare, of the people or environment of the Commonwealth, in violation of 25 Pa. Code § 287.642(e).

DEP must suspend or revoke WMGR123SW051 until such time as the permit requirements can be met and health and safety ensured. (179)

7. **Comment:** Please reject Range Resource's current application to construct and operate a natural gas drilling wastewater tank farm in Hanover Township. Range Resources ignore that Beaver County has a local planning commission, a comprehensive plan and an Act 167 stormwater management plan. When asked about the existence of these commissions and plans in the permit application, Range Resources left all answers blank. The Beaver County Comprehensive Plan lists "abundant farmland, unspoiled natural places, and recreational land" as among the region's "significant strengths." This application would reduce all of those strengths. (180-207)
8. **Comment:** Range Resources presented outdated wastewater testing data in its application to DEP. This application claims that because it will only be receiving waste from other Range Resources drilling operations it will not be testing wastewater entering the facility. This is alarming because, in its application, Range Resources has presented two outdated wastewater testing reports from 2009 and 2013. In order to store a maximum of 220,550 gallons of fracking wastewater, Range Resources should be required to conduct more recent testing of its generated wastewater in the region. Naturally occurring and "technically enhanced naturally occurring" radiation deep beneath the earth's surface is highly irregular and can contaminate drilling liquid. (180-207)

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9. **Comment:** Range Resources claims that the additional 552 truck trips per day at the proposed Hanover Tank Pad will reduce truck traffic in the region because the proposed tank farm will allow nearby gas well sites to reduce truck traffic associated with the movement of fracking wastewater. Range Resources has not identified the nearby facilities it is referencing. To assume that this facility will reduce truck traffic at other facilities is counterintuitive speculation and should not be taken into consideration by DEP. (180-207)
10. **Comment:** The application also does not explain how storing collected stormwater at the site will impact planned operations, specifically how storing collected stormwater will impact the drilling fluid storage capacity. Range Resources should be required to explain what the procedure will be if storage capacity is reached because of a precipitation event and where incoming drilling fluid will be stored in that event. (180-207)
11. **Comment:** On February 20, 2021, DEP sent Range Resources a deficiency letter outlining several significant shortcomings in this application, specifically about the design of various equipment. In its response, Range Resources claimed in four instances that either a “design” or “level of detail” was “previously approved” without mentioning the context of that approval or evidence that any approval actually took place. If Range Resources is referring to designs and detail at other previously approved facilities, it should be required to specify those sites. Thank you for your attention to this application and please reject it in its current form.” (180-207)

WMGR123SW052

1. **Comment:** Keystone Clearwater Solutions respectfully requests that you consider its support of this Range Resources permit. (8)

Response: The Department acknowledges the commenter’s support of the referenced WMGR123 authorization.

2. **Comment:** This permit is for a temporary facility. These temporary facilities are sited and built to the same rigorous standards and requirements as permanent facilities. Further, the sites must be sited and built in accordance with all applicable ordinances from and notifications to local municipalities. (2, 11, 13, 15)

Response: The Department acknowledges the comment.

3. **Comment:** Nottingham Township is in full support of approval of the above identified permit. (15)

Response: The Department acknowledges the commenter’s support of the referenced WMGR123 authorization.

WMGR123NW001

- 1. Comment:** Covanta included several concerning responses to questions in the General Information Form. On GIF page 3 of 7, it checked “no” to “1. Have you informed the surrounding community and addressed any concerns prior to submitting the application to the Department?” The Department should require Covanta to engage with the community, even at this late date. Covanta also failed to acknowledge in Section 3 of the GIF that the project has to do with waste, and in fact involves processing of waste, from gas wells. (17)

Response: Community input is being provided through the public notice requirements as of 25 Pa. Code §§ 287.623 and 287.641. Public notice of the permit renewal application was posted in the *Pennsylvania Bulletin*. Covanta also submitted two additional copies of the application which were forwarded to the host county and township for comment in accordance with 25 Pa. Code § 287.152(d).

Although the response to Question 3.0 on the GIF may have been improperly checked as “No,” Covanta’s application properly indicates the project involves waste (See Question 18). The narrative contained in the application details how oil and gas liquid waste will be processed. In addition, Covanta was applying for the renewal of a permit that authorizes the processing and beneficial use of oil and gas liquid waste.

- 2. Comment:** The failure to note that the facility would emit air pollution is particularly concerning, as the Bureau of Air Quality should be looking at the facility to determine whether any air quality permitting is needed, or what practices need to be in place to qualify for an exemption from permitting requirements. As noted in the project description, “[a]n evaporation unit would be installed to process gas field produced waters and that processed water returned to the ‘producer’ for Beneficial Reuse.” It is not entirely clear from the description what this would entail. However, it is possible that evaporating the produced waters will generate volatile organic compounds that volatilize and drift offsite. Furthermore, there is a long history of odor complaints at the site, which necessarily means that emissions are leaving the facility. Yet the facility has no air pollution permit. See https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleSite.aspx?SiteID=659383. The Council requests that the Bureau of Air Quality examine this facility to determine what permitting is or is not needed. (17)

Response: Condition C.11 of WMGR123 requires Covanta to comply with the Air Quality regulations governing fugitive emissions under 25 Pa. Code, Chapter 123. The Department previously determined that this facility does not require an Air Quality plan approval or permitting, as it is a source of minor significance under 25 Pa. Code § 123.1(a)(9). Because this application was for renewal of an existing permit and did not propose changes to the operation of the facility that would alter existing emissions, the Department’s previous air quality permitting determination remains valid. Covanta also has an odor control plan to help mitigate any odors generated at the facility.

- 3. Comment:** As noted by the Lawrence County Department of Planning and Community Development, the facility is in a Designated Floodplain Area. Under condition 5.a of the

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WMGR123, DEP must have approved “in the permit a method for protecting the facility from a 100-year flood consistent with the Flood Plain Management Act ... and Dam Safety and Encroachment Act...” This did not occur. DEP must revise the permit to include such additional protections. This is especially concerning because of the history of leaks and spills at the facility. Leaks and spills were documented in at least 1997, 2000, 2003 (which had not been reported by the company), and 2014. Numerous other violations were documented. (17)

Response: None of the waste processing, storage areas, buildings, or roadways are within the 100-year flood plain, as documented in the PPC Plan, Attachment 1, Site Map.

4. **Comment:** The General Permit states “The renewal applications shall be submitted to the appropriate DEP Regional Office (see attached list) and include, at a minimum, the following: ... Form X (Radiation Protection Plan).” However, the application did not contain any Form X Radiation Protection Plan. (17)

Response: Covanta has a Radiation Protection Plan for this existing facility. Covanta did not submit the Form X with the renewal application because it was not required to be in the application at the time Covanta submitted for renewal. Based on this comment, the Department has requested to review Covanta’s existing Radiation Protection Plan and will consider appropriate next steps if the Plan is found to have deficiencies.

5. **Comment:** Covanta did not include with its application materials any information establishing that the facility would qualify for coverage under Section C.1.a of the General Permit. However, it also cannot qualify under Section C.1.b, as it did not provide any liquid waste chemical analysis whatsoever. Therefore, Covanta has not established that it qualifies for coverage under the General Permit at all.

Response: Please see the Department’s response to General Comment #74.

6. **Comment:** Taken together, it is clear that Covanta has not met its requirements to be given a permit to operate this facility in the state of Pennsylvania. DEP must require this application to be redone in compliance with the requirements set out by law. Allowing such a project to continue operating while all these problems persist is neither safe nor reasonable. (17)

Response: The Department has determined that the renewal application met the required regulations and permit conditions for coverage under General Permit WMGR123.

7. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Covanta Environmental Solutions, LLC under consideration by the Department of Environmental Protection (DEP) Northwest Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter’s opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate

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under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

- 8. Comment:** It is my understanding that this facility has a long list of violations, up to and including a consent agreement for civil penalty. In short, this permit should not be renewed.

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

Covanta has corrected all violations noted by the Department and resolved civil penalty liability for the same. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

WMGR123NW005

- 1. Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permit. (14)

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Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

- 2. Comment:** As the Department's own permit name implies, the WMGR123 general permit facilitates the beneficial use of wastewater. These permits are beneficial for the operator, for the environment, and for the local community. For these reasons, I am pleased to express my support for this above-referenced permit. (18)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization and the WMGR123 general permit.

- 3. Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Highland Services, LLC under consideration by the Department of Environmental Protection (DEP) Northwest Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

WMGR123NW006

- 1. Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Clarion Altela Environmental Services, LLC under

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consideration by the Department of Environmental Protection (DEP) Northwest Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

WMGR123NW009

- 1. Comment:** The General Permit states "The renewal applications shall be submitted to the appropriate DEP Regional Office (see attached list) and include, at a minimum, the following: ... Form X (Radiation Protection Plan)." However, the application did not contain any Form X Radiation Protection Plan. (17)

Response: RES Water has a Radiation Protection Plan for this existing facility. RES Water did not submit a Form X with the renewal application because it was not required to be in the application at the time RES Water submitted for renewal. The Department appreciates the commentator raising this issue and agrees that the permittee's Radiation Action Plan requires further evaluation. Based on this comment, the Department has requested to review RES Water's existing Radiation Protection Plan and will consider appropriate next steps if the Plan is found to have deficiencies.

- 2. Comment:** On page 5 of 7 of the General Information Form, RES checked "yes" to "3.2 Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry

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swale, surface water, ground water or an existing sanitary sewer system or storm water system? If "Yes," discuss in Project Description." But RES failed to discuss that anywhere in the Project Description. (17)

Response: RES Water applied for and received a NDPEs Permit to discharge stormwater to Connoquenessing Creek (PAG02001013011 (1)). RES Water correctly stated "yes" in response to this question.

3. **Comment:** On page 6 of 7 of the General Information Form, RES checked both "yes" and "no" to the question of whether the project would involve air emissions, and noted "RFD attached," suggesting that RES meant "yes." However, no RFD was included with the application materials, and a review of the eFACTS page for the site does not indicate the issuance of an RFD anywhere. See https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleSite.aspx?SiteID=771163 ("eFACTS page"). From a satellite view of the site, the existing tank appears to be open-topped, meaning there would be emissions from the VOCs in it. The plan for the new tank appears to be identical, suggesting an increase in emissions from the site. It is problematic that this is nowhere dealt with, discussed, or, as far as we can tell, approved by the Department. (17)

Response: Condition C.11 of WMGR123 requires RES Water to comply with the Air Quality regulations governing fugitive emissions under 25 Pa. Code, Chapter 123. The Department previously determined that this facility does not require an Air Quality plan approval or permitting as it is a source of minor significance under 25 Pa. Code § 123.1(a)(9).

This portion of the application narrative that was submitted is from a permit modification requested in 2015 when the additional tank was added. It was mistakenly left in the application. Because this application for renewal of an existing permit did not propose changes to the operation of the facility that would alter existing emissions, the Department's previous air quality permitting determination remains valid.

4. **Comment:** In Form HW-C, RES should have noted its company-wide violations. Instead, it included no information whatsoever on violations. This is particularly egregious because this very facility was cited for the following violations in just the last permitting period:

- "Unlawful transportation of solid waste to an unpermitted facility"
- "Handles solid waste contrary to rules and regulations, or orders of the Department, or any permit condition, or in any manner as to create a public nuisance."
- "Operation is not in accordance with approved plans and permit."
- "Residual Waste is mismanaged."
- "Handles solid waste contrary to rules and regulations, or orders of the Department, or any permit condition, or in any manner as to create a public nuisance."
- "Person or municipality operates a facility without a permit."
- "Unlawful Management of RSW"
- "No hazardous waste determination"

With such a compliance history, it is hard to believe that the omission of the compliance history in its application is not deliberate. Regardless, a company like that does not deserve a renewal of its permit, let alone a renewal with an expansion of its facility. (17)

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Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

RES Water has corrected all violations noted by the Department and resolved civil penalty liability for the same. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

- 5. Comment:** RES did not include with its application materials any information establishing that the facility would qualify for coverage under Section C.1.a of the General Permit. However, it also cannot qualify under Section C.1.b, as the chemical analyses RES included with its application show many exceedances of the concentration limits in Appendix A. Therefore, RES has not established that it qualifies for coverage under the General Permit at all.

Furthermore, the analysis that RES had done of the waste did not include any analysis of radioisotopes, as is required to demonstrate compliance with the limits in Appendix A. (17)

Response: Please see the Department's response to General Comment #74.

- 6. Comment:** In the included 2020 Form 26R, RES did not include a hazardous waste determination. This is something that the Department had previously cited RES for. These repeated compliance issues should have disqualified RES for a renewal permit. (17)

Response: While completion of a 26R is a requirement under 25 Pa. Code §§ 287.51(b) and 287.54(a)(1), and applies to a person or municipality that generates more than 2,200 pounds of residual waste per generating location in any single month in the previous year, completion of or failure to complete a Form 26R is outside the scope of the requirements under WMGR123. Failure to provide a hazardous waste determination with a Form 26R would not preclude permit issuance or renewal under WMGR123. RES is prohibited from accepting hazardous waste under the terms and condition of WMGR123.

- 7. Comment:** Taken together, it is clear that RES has not met its requirements to be given a permit to operate this facility in the state of Pennsylvania. DEP must require this application to be redone in compliance with the requirements set out by law. Allowing such a project to continue operating while all these problems persist is neither safe nor reasonable. (17)

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Response: The Department has determined that the renewal application met the required regulations and permit conditions for coverage under General Permit WMGR123.

8. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for RES Water - Butler, LLC under consideration by the Department of Environmental Protection (DEP) Northwest Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

9. **Comments:** While numerous violations can be identified for this facility through the Efacts system, the permit application indicates that no violations have been received. I find this concerning and would expect the department to correct this issue prior to any consideration for approval. (16)

Response: Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent

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corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***” (Emphasis added).

RES Water has corrected all violations noted by the Department and resolved civil penalty liability for the same. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

WMGR123NW010

1. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permits. (14)

Response: The Department acknowledges the commenter’s support of the referenced WMGR123 authorization.

2. **Comment:** The General Permit states “The renewal applications shall be submitted to the appropriate DEP Regional Office (see attached list) and include, at a minimum, the following: ... Form X (Radiation Protection Plan).” However, the application did not contain any Form X Radiation Protection Plan. (17)

Response: The Department appreciates the commentator raising this issue and agrees that the permittee’s Radiation Action Plan (RPAP) requires further evaluation. PER has a RPAP for this existing facility. PER did not submit a Form X with the renewal application because it was not required to be in the application at the time PER submitted for renewal. Based on this comment, the Department has requested to review PER’s existing Radiation Protection Plan and will consider appropriate next steps if the Plan is found to have deficiencies.

3. **Comment:** PER fails to include several of the needed forms with its application, including the project description, facility map, and PNDI papers, asking the Department instead to refer to its previous application. That material is not available to commenters. Moreover, while PER did not ask for a change in the permit, it implied that it might expand the facility with an additional 300-barrel tank. That might further impact the site, and all of those just-mentioned materials should have been included to allow the Department to determine the impacts. Lacking from this set of materials is anything that shows how the facility is laid out and operates. (17)

Response: The submitted application was for a renewal of an existing facility permitted under WMGR123. There is no intent to expand the facility beyond what is already permitted. The application did indicate they are permitted to construct additional storage capacity but haven’t done so yet. This additional storage capacity was included as part of the Department’s review.

4. **Comment:** PER included several concerning responses to questions in the General Information Form. On GIF page 3 of 7, it checked “no” to “1. Have you informed the surrounding community and addressed any concerns prior to submitting the application to the Department?” The Department should require PER to engage with the community, even at this late date. On GIF

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page 5 of 7, it checked “no” to “7.0 Will the project involve the construction and operation of industrial waste treatment facilities?” While the Department understands what this site is, it is still concerning that PER incorrectly answered this basic question. (17)

Response: Community input is being provided through the public notice requirements in 25 Pa. Code §§ 287.623 and 287. 641. Public notice of the permit renewal application was posted in the *Pennsylvania Bulletin*. PER also submitted two additional copies of the application which were forwarded to the host county and township for comment in accordance with 25 Pa. Code § 287.152(d) In response to the part of this comment concerning question 7, PER did not request to process or treat the wastewater at this facility. The facility simply was intended store the wastewater before beneficially reusing it at other oil & gas well sites.

5. **Comment:** On GIF page 7 of 7, PER checked “no” to “24.0 Will the intended activity involve the use of a radiation source.” The chemical analysis PER included in its application materials showed Radium 226 measured at 14,199 pCi/l. This is about 3,000 times the standard for drinking water, and certainly qualifies as a radiation source. (17)

Response: Question 24 on page 7 of the GIF Form falls under the Coordination Information section. These questions and the information provided are intended for the Department’s use to identify other potential permits that may be required for the project. The Department is aware that oil & gas wastewater typically contains Radium 226 and is considered to contain TENORM (technologically enhanced natural occurring radioactive material). This is the reason condition C.9. of WMGR123 requires a RPAP. No separate permit from the Bureau of Radiation Protection is required for this waste as a radiation source.

6. **Comment:** PER did not include with its application materials any information establishing that the facility would qualify for coverage under Section C.1.a of the General Permit. However, it also cannot qualify under Section C.1.b, as the chemical analyses PER included with its application show many exceedances of the concentration limits in Appendix A. Therefore, PER has not established that it qualifies for coverage under the General Permit at all. (17)

Response: Please see the Department’s response to General Comment #74.

7. **Comment:** As of the date of the application, there were several open compliance matters with PER that should have been resolved. (17)

Response: Although there were a few compliance matters open at the time of this application, these issues were not associated with this specific facility or location. Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department’s satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: “Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application***”

demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.” (Emphasis added).

PER has corrected all violations noted by the Department and resolved civil penalty liability for the same. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

8. **Comment:** Taken together, it is clear that PER has not met its requirements to be given a permit to operate this facility in the state of Pennsylvania. DEP must require this application to be redone in compliance with the requirements set out by law. Allowing such a project to continue operating while all these problems persist is neither safe nor reasonable. (17)

Response: The Department has determined that the renewal application met the required regulations and permit conditions for coverage under General Permit WMGR123.

9. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for PennEnergy Resources, LLC under consideration by the Department of Environmental Protection (DEP) Northwest Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter’s opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department’s responses to General Comments #33 and 70.

WMGR123NW011

1. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permits. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Highland Services, LLC under consideration by the Department of Environmental Protection (DEP) Northwest Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

WMGR123NW014

1. **Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permits. (14)

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Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

2. **Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for PennEnergy Resources, LLC under consideration by the Department of Environmental Protection (DEP) Northwest Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

3. **Comment:** The General Permit states "The renewal applications shall be submitted to the appropriate DEP Regional Office (see attached list) and include, at a minimum, the following: ... Form X (Radiation Protection Plan)." However, the application did not contain any Form X Radiation Protection Plan. (17)

Response: The Department appreciates the commentator raising this issue and agrees that the permittee's Radiation Action Plan requires further evaluation. PER has a Radiation Protection Plan for this existing facility. PER did not submit Form X with the renewal application because it was not required to be in the application at the time PER submitted for renewal. Based on this comment, the Department has requested to review PER's existing Radiation Protection Plan and will consider appropriate next steps if the Plan is found to have deficiencies.

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4. **Comment:** PennEnergy Resources (PER) fails to include several of the needed forms with its application, including the project description, facility map, and PNDI papers, asking the Department instead to refer to its previous application. That material is not available to commenters. Lacking from this set of materials is anything that shows how the facility is laid out and operates. (17)

Response: The application was for a renewal of an existing facility that did not propose any changes to the operation. A facility map is included with the application under the Form E-GP and both the letters to the host municipalities and the application narrative include a project description.

5. **Comment:** PER also included several concerning responses to questions in the General Information Form. On GIF page 3 of 7, it checked “no” to “1. Have you informed the surrounding community and addressed any concerns prior to submitting the application to the Department?” The Department should require PER to engage with the community, even at this late date. (17)

Response: Community input is being provided through the public notice requirements as of 25 Pa. Code §§ 287.623 and 287.641. Public notice of the permit renewal application was posted in the *Pennsylvania Bulletin*. PER also submitted two additional copies of the application which were forwarded to the host county and township for comment in accordance with 25 Pa. Code §287.152(d)

6. **Comment:** On GIF page 5 of 7, it checked “no” to “7.0 Will the project involve the construction and operation of industrial waste treatment facilities?” While the Department understands what this site is, it is still concerning that PER incorrectly answered this basic question. (17)

Response: The company did not request to process or treat the wastewater at this facility. The facility simply was intended store the wastewater before beneficially reusing it at other oil & gas well sites. No industrial waste treatment occurs at the site. They place the wastewater into tanks and later remove it for beneficial reuse.

7. **Comment:** On GIF page 7 of 7, PER checked “no” to “24.0 Will the intended activity involve the use of a radiation source.” The chemical analysis PER included in its application materials showed Radium 226 measured at 7127.400 pCi/l. Based on volume, this comes within a factor of three of needing to be classified as hazardous waste due to its radioactivity (see <http://www.depgreenport.state.pa.us/elibrary/GetDocument?docId=4984&DocName=REGULATED%20SUBSTANCES%20LIST.PDF%20>) and certainly qualifies as a radiation source. (17)

Response: Question 24 on page 7 of the GIF Form falls under the Coordination Information section. These questions and the information provided are intended for the Department’s use to identify other potential permits that may be required for the project. The Department is aware that oil & gas wastewater typically contains Radium 226 and is considered to contain TENORM (technologically enhanced natural occurring radioactive material). This is the reason condition C.9. of WMGR123 requires a RPAP. No separate permit from the Bureau of Radiation Protection is required for this waste as a radiation source.

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- 8. Comment:** PER did not include with its application materials any information establishing that the facility would qualify for coverage under Section C.1.a of the General Permit. However, it also cannot qualify under Section C.1.b, as the chemical analyses PER included with its application show many exceedances of the concentration limits in Appendix A. Therefore, PER has not established that it qualifies for coverage under the General Permit at all. (17)

Response: Please see the Department's response to General Comment #74.

- 9. Comment:** The included compliance history is nearly illegible. Several violations concern failure to properly store residual waste and spilling residual waste onto the ground. Several open compliance matters exist as well. (17)

Response: The compliance history was included with the application in an electronic format which contained a pdf file listing past violations. This page of the file was easily enlarged to make the information legible.

Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

PER has corrected all violations noted by the Department and resolved civil penalty liability for the same. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.

- 10. Comment:** Taken together, it is clear that PER has not met its requirements to be given a permit to operate this facility in the state of Pennsylvania. DEP must require this application to be redone in compliance with the requirements set out by law. Allowing such a project to continue operating while all these problems persist is neither safe nor reasonable. (17)

Response: The Department has determined that the renewal application met the required regulations and permit conditions for coverage under General Permit WMGR123.

WMGR123NW015

- 1. Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permits. (14)

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Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

- 2. Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for Highland Services, LLC under consideration by the Department of Environmental Protection (DEP) Northwest Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

WMGR123NW017

- 1. Comment:** On behalf of the members of the Marcellus Shale Coalition (MSC), I write to express my support for the above-referenced WMGR123 Residual Waste General Permits. (14)

Response: The Department acknowledges the commenter's support of the referenced WMGR123 authorization.

- 2. Comment:** I am writing in strong opposition to the Processing and Beneficial Use of Oil and Gas Waste General Permit WMGR123 for PennEnergy Resources, LLC under consideration by the Department of Environmental Protection (DEP) Northwest Regional Office. It is my firm opinion that the approval of this permit will further denigrate the environmental quality of our

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Commonwealth and create undue and unnecessary harm to clean drinking water for millions of Pennsylvanians. (16)

Response: The Department acknowledges the commenter's opposition to the referenced authorization but disagrees that approval of this permit will further denigrate the environment and create harm to clean drinking water for millions of Pennsylvanians. In order to operate under WMGR123, applicants must demonstrate that they can operate in accordance with the terms and conditions of the general permit and the Solid Waste Management Act (SWMA) and must continue to demonstrate that throughout the life of the operation.

The terms and conditions of WMGR123 and the applicable provisions of the SWMA aim to ensure facilities operate in a manner that is protective of human health, safety and the environment. This includes a permit review process that now requires a public comment period and evaluates all aspects of a proposed project, such as a compliance history review of the applicant and any contractors or agents that exercise control over any aspect of the operation; appropriate setback requirements that mirror those in the residual waste regulations for individually permitted residual waste processing facilities; requiring an adequate PPC plan and RPAP; appropriate management of stormwater run-on and run-off; execution of an adequate bond for a facility; requiring regular inspections of any waste processing and storage areas; incorporation of a more robust construction certification requirement to ensure a registered professional engineer in the state of Pennsylvania has certified that each phase of construction of the facility, including any storage tanks, has been done in accordance with a permit application, maintaining appropriate documentation and reporting pertinent information to the Department on an annual basis for review. In regard to any concerns over the proper storage of oil and gas liquid waste at a permitted WMGR123 facility, or the requirements for addressing a spill, should one occur, please see the Department's responses to General Comments #33 and 70.

3. **Comment:** The fact that there remains two open violations for this facility citing 'failure to follow permit conditions' and 'PCSM plan does not reflect site conditions,' are especially troubling and should disqualify approval of the permit. (16)

Response: Although two violations were issued for this facility in 2019, the facility worked to correct all violations that were cited in the past.

Under 25 Pa. Code § 287.201, the Department will not approve a permit application unless the applicant affirmatively demonstrates to the Department's satisfaction that certain conditions are met, including but not limited to, the compliance status of the applicant or a related party under section 503(c) and (d) of the act (35 P. S. § 6018.503(c) and (d)) does not require or allow permit denial. 25 Pa. Code § 281.201(a)(7). Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503(d), provides: "Any person or municipality which has engaged in unlawful conduct as defined in this act, or whose partner, associate, officer, parent corporation, subsidiary corporation, contractor, subcontractor or agent has engaged in such unlawful conduct, shall be denied any permit or license required by this act ***unless the permit or license application demonstrates to the satisfaction of the department that the unlawful conduct has been corrected.***" (Emphasis added).

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PER has corrected all violations noted by the Department and resolved civil penalty liability for the same. Accordingly, the compliance history does not support the denial of coverage under Section 503(d) of the Solid Waste Management Act, 35 P.S. § 6018.503 or 25 Pa. Code § 287.201.