Water Quality Concerns

Comment 1: The Ohio River is a source of drinking water for roughly 5 million people and must be protected. It has been designated as the most polluted body of water in the United States. In addition, multiple people are concerned about the types of chemicals that may be discharged and how it will affect the recreational use, fish tissue, and drinking water in the Ohio River.

Response 1: The proposed permit is protective of all applicable water quality standards. Ohio EPA develops and announces water quality standards to protect human health, drinking water, recreation, aquatic life, agricultural water use, and industrial water use.

In addition, the Ohio River Valley Water Sanitation Commission (ORSANCO) has an organics detection system program on the Ohio River. The program is designed to detect low-level concentrations of volatile organic compounds in the river at water intakes. More information is
Anti-backsliding and Antidegradation

**Comment 2:** The draft permit is less stringent than past permits issued for the facility, in violation of anti-backsliding provisions of the Clean Water Act and Ohio law.

**Response 2:** Ohio EPA understands the anti-backsliding comment to be in reference to the 2018 modification because this proposed permit has the same effluent limitations as the existing permit. This comment was answered during the public comment period for that modification but is answered again below.

Ohio Administrative Code (OAC) paragraph 3745-33-05 (F)(1)(a) and the CWA section 402 (o)(2)(A) allow less stringent effluent limits when there have been material or substantial additions or alterations that occur after permit issuance that justify the application of a less stringent effluent limitation.

OAC paragraph 3745-33-05 (F)(1)(b) and the CWA section 402 (o)(2)(B) allow less stringent effluent limits when there is information available that was not available at the time of permit issuance that would have justified the application of a less stringent effluent limitation at the time of permit issuance.

PTTGCA presented new information to Ohio EPA for the 2018 permit modification showing it had altered its proposed processes and decreased its process wastewater flow rates. When technology-based effluent limits were recalculated using the updated information, the concentration limits were higher due to the decreased flow.

Loadings are dependent on flow and concentration. It is possible to discharge at higher concentrations and lower flow rates and meet mass effluent limitations. When the limits are calculated, Ohio EPA assigns an allocation of zero to the dilution, so as there is less dilution proposed, the concentration limits increase.
Comment 3: The permit did not include a full antidegradation review, meaning the State did not look at how the Ohio River water quality would become degraded. As the 2018 modification to the permit led to a net increase of regulated pollutants, that modification required an antidegradation review. This process, including full public input, should have been completed before approving the current modified permit and, since it was not, the permit should not be renewed until this full review is done.

Response 3: An antidegradation analysis is required when an effluent loading limitation is proposed to increase. In both the 2018 permit modification and this proposed permit, the loading limits in the permit either stayed the same or decreased, therefore no antidegradation analysis is, or was, required. In other words, the total mass-per-day of pollutants allowed stayed the same or decreased in the aforementioned permits. Concentration limits increased in some cases because there was a lower flow, but increased concentration limits do not require an antidegradation analysis.

While the concentration limits at outfall 601 increased in the 2018 modification, the loading limits at outfall 601 did not change, which prevents PTTGCA from being authorized to discharge an increased amount of mass of these pollutants to the Ohio River. Therefore, there was no net increase discharge of regulated pollutants in the modification or this permit.

Ohio EPA conducted a reasonable potential analysis with this permit renewal to ensure the proposed permit is protective of all water quality standards in Ohio EPA’s rules.

Comment 4: To avoid doing an antidegradation review, Ohio EPA has kept the loading limits at outfall 601 the same while increasing concentration limits. This does not comply with federal effluent limitations, which require that sources achieve a mass limit determined by multiplying process wastewater flow by the given concentration limits. U.S. EPA guidance states that NPDES permit writers must use a reasonable estimate of process wastewater discharge and the concentration limitations to develop mass limitations for the NPDES permit.
Response 4: Ohio EPA recalculated the federal effluent guideline limitations using updated production and flow information provided by PTTGCA. The calculations can be found in the factsheet. The loading limits calculated were higher than the loading limits in the existing permit. Ohio EPA is permitted to include limits that are more stringent than those calculated using the federal effluent guidelines. In addition, the federal effluent guidelines do not require concentration limits at all.

Ohio EPA has not prohibited the practice of including loading limits that are more stringent than concentration limits multiplied by design flow or a reasonable measure of average flow.

Comment 5: The proposed permit does not require the best available demonstrated control technology for the regulated pollutants.

Response 5: Best available demonstrated control technology is defined in OAC 3745-1-05 as “For industrial direct discharges subject to federal effluent guidelines, the facility shall be designed to meet the most stringent of the new source performance standards, best conventional pollutant control technology, best available technology economically achievable and best practicable control technology currently available for the appropriate categorical guidelines of 40 CFR 400 to 40 CFR 471”.

The proposed limits are compliant with federal regulations. They are more stringent than those required in the New Source Performance Standards, which are the most stringent of the effluent guidelines.

Comment 6: The LLDPE/HDPE unit was not considered during the prior antidegradation review

Response 6: The proposed addition of a LLDPE/HDPE unit does not change the list of pollutants expected in the discharge, nor in the quantities they are discharged. No antidegradation review was required for this unit in the 2018 modification.

Comment 7: If there is still no background water data on these pollutants Ohio EPA cannot know if the Ohio River has any remaining assimilative capacity for the pollutants listed above and if these pollutants would violate water quality standards. Rather than renew this permit, Ohio
EPA must collect this background water data and do a full antidegradation review. Allowing these chemicals into the drinking water of 5 million people increases the cost of filtering that water and will lead to future losses of human life and productivity through these slow poisons.

Response 7: Ohio EPA is not required to conduct additional sampling to determine background concentration of pollutants if there is no data available, and an antidegradation review is not required. In addition, as stated previously, the Ohio River Valley Water Sanitation Commission (ORSANCO) has an organics detection system program on the Ohio River. The program is designed to detect low-level concentrations of volatile organic compounds in the river at water intakes to ensure these are not present in drinking water. More information is available at: http://www.orsanco.org/programs/organics-detection-system-ods/.

Monitoring

Comment 8: The proposed permit does not include monitoring sufficient to ensure compliance with permit terms and conditions. Sampling must be performed more frequently than only once per year to reflect seasonal variation and to assure compliance with permit limitations and standards, and this sampling should be required while all industrial and treatment processes are in operation at the plant.

At a minimum, according to Ohio EPA permit guidance on “Determination of Sampling Frequency Formula for Industrial Waste Discharges,” monitoring must be done on a quarterly basis. And even then, quarterly reports are only permissible “if the pollutant is not of great interest”. Here, the pollutants to be monitored on an annual basis include pollutants with known carcinogenic and mutagenic effects.

Response 8: Ohio EPA does not expect the pollutants at outfall 601 that are to be monitored once per year to be present in PTTGCA's discharge. Federal regulations found at 40 CFR 414.91 require monitoring for these parameters for all organic chemicals, plastics, and synthetic fibers manufacturing facilities. Because the list of parameters was
designed to encompass different pollutants that could be discharged from a broad variety of facilities, they won’t all be present in the discharge of every facility subject to these regulations. For parameters that have the potential to be present in PTTGCA’s discharge, the monitoring frequency is, at a minimum, quarterly.

The NPDES permit requires sampling to be done at times, locations, and in such a fashion as to be representative of the facility’s overall performance in Part II, Items E. and F.

In addition, seasonal variation is not anticipated.

Comment 9: The “grab samples” that the draft permit allows in the monitoring of toxic chemicals may not provide representative conditions over a daily, weekly, or monthly time frame. Ohio EPA must require composite samples and continuous monitoring to ensure that all pollutants are effectively monitored.

Response 9: It is standard procedure to sample organic chemicals via grab sample. This is because they are volatile and degrade quickly so the sample must be preserved and analyzed quickly.

Environmental Justice

Comment 10: Commenters are concerned about Environmental Justice in the Ohio River Valley, who believe there to be a “petrochemical buildout” in this area, and that the health of the citizens and the environment in the area will suffer as a result.

Response 10: Ohio EPA is dedicated to issuing permits that are based on standards that are equally protective of all Ohioans no matter where they live.

This permit is in compliance with all applicable water quality standards.

Comment 11: Citizens are concerned about Environmental Justice and state that “The levels of water pollution the facility is likely to produce constitute a form of slow violence that undermines future generations and disproportionately affects low-income and rural communities and communities of color.”
Response 11: See Response 10.

Comment 12: Our area is poor and not a dumping ground to harm our health and environment. Already there are a loss of crayfish and such. This is an indication of the pending impact on humans. It needs stopped. Our cancer rates are high. Please keep us healthy.

Response 12: Studies are performed and reviewed to develop water quality standards and then NPDES permits are written to ensure water quality standards are not exceeded. The proposed permit is protective of all water quality standards in Ohio EPA's rules.

Other

Comment 13: Multiple commenters expressed that they want this permit denied for various reasons, including:

- Multi-national companies extract more money and resources from communities than what they provide to those communities.
- The approval of this permit will lead to environmental contamination caused by a private entity that will need to be remediated and paid for by the government and citizen’s tax dollars.
- They do not want petrochemical companies to operate near where they live or to discharge to the Ohio River.
- Markets are shrinking for plastics.
- PTTGCA’s product is not safe for all locations where it is shipped, and degradation of plastic is an unsolved issue.
- The financial cost for job creation is very large.
- Destruction of terrain in the project area to accommodate the facility.
- Examples of cancer caused by manufacturing facilities, such as Cancer Alley in Louisiana, which citizens are worried will happen in Belmont County.
- Allowing a polluting endeavor will discourage “clean” industries from investing in this community.
- There is already too much plastic that has produced in this world—much of which has led to pollution.
• The facility will not provide long term economic benefit to the area.

Additionally, multiple people commented that “despite proposing this project in 2015, PTTGCA has still not made a Final Investment Decision (FID). Over the past seven years, the project has lost a major partner, and the FID has been delayed indefinitely. There is no urgency to renew the permit for a project that has shown no progress.

Response 13: OAC chapter 3745-33-04 details the criteria the director shall consider when determining if an NPDES permit should be issued or denied. The renewal permit meets all state and federal laws and regulations. Because the renewal application was submitted on time, the facility would continue to be authorized to discharge under the existing permit, even if the permit were not renewed, because the existing permit would be administratively continued.

Comment 14: The permit fails to include basic requirements to protect the Ohio River from plastic pollution from the facility.

Response 14: PTTGCA has taken steps and has implemented best management practices to prevent pellets from entering the Ohio River. For stormwater in the area where the pellets will be produced, there will be secondary containment and catch basins with screens to catch pellets before the catch basins discharge to a stormwater pond that will then discharge to the Ohio River. In the rail loading area, there will be a dedicated sump for stormwater and wash water that will have a system that will remove pellets.

Comment 15: The public notice of this renewal was published on December 20, at a time when many residents are out of town or busy preparing for the holidays. Given this timing and the ongoing stressor of the worsening COVID-19 pandemic, many commenters request the comment deadline be extended to ensure full public participation. Many also request a public hearing so that the public has an opportunity to have its questions answered and to provide information on existing uses of the Ohio River near the proposed location.

Response 15: The public notice date of this proposed permit occurred because of the expiration date of the existing permit.
Because the existing permit expired on Jan. 31, 2022, the public notice was published a little over a month prior to that date. This proposed permit is largely unchanged from the existing permit. Ohio EPA previously held a public hearing for the 2018 modification to answer questions regarding this facility. Because most comments received during the public notice for this renewal are the same as those received during the comment period for the 2018 permit modification, and because there are no significant changes to this permit from the existing permit, Ohio EPA will move forward without a public hearing.

Comment 16: Several commenters expressed support for the permit renewal, citing financial benefits to local government, economic vitality in the Ohio River Valley region, and jobs that will be created.

Response 16: OAC chapter 3745-33-04 details the criteria the director shall consider when determining if an NPDES permit should be issued or denied.

Comment 17: Commenters request a revised public notice that states Ohio EPA will accept written comments electronically, as well as via mail and in person. The revised public notice must also provide an email address for receipt of these comments. One commenter believes electronic comments were not considered valid and expresses disbelief that Ohio EPA only accepts written comment.

Response 17: The public notice was issued in accordance with all applicable rules and regulations. Comments submitted electronically are allowed and have been incorporated and considered in this Response to Comments. Ohio EPA will not issue a new public notice.

Comment 18: There should be a way to sign up to receive notifications of permits under consideration.

Response 18: Currently there is no feature on Ohio EPA’s website with this capability. However, if this feature is constructed, the public will be made aware. In the meantime, the public may choose to regularly check Ohio EPA’s Weekly Review which lists all agency actions: https://ebiz.epa.ohio.gov/Notices/jsp/notice_search.jsp.
Comment 19: A 30-day public notice period is not sufficiently long, notwithstanding that this public notice period happened during the holiday season, including MLK day.

Response 19: Ohio EPA believes a 30-day public notice period is sufficient to provide public comment. This public notice period complies with 40 CFR 124.10. See response 15.

Comment 20: Ohio EPA does not engage the public in a meaningful and genuine way and does not sufficiently consider comments in opposition to projects that arouse public concern. This is a pattern of behavior since fracking first came to Ohio.

Response 20: Ohio EPA held a public hearing for the 2018 modification where many questions were answered regarding the NPDES permit. A hearing has not been proposed for this proposed renewal because the permit is substantially unchanged from the existing permit.

Comment 21: Ohio EPA should consider the potential impact the construction and operation of this facility will have on climate change.

Response 21: Consideration of climate change is outside the purview of this NPDES permit.

Comment 22: Ohio EPA is providing special favors to this facility to “keep the project alive”.

Response 22: Ohio EPA is not providing any additional benefits. This permit is written in accordance with all applicable rules and regulations written by the Federal and Ohio Legislature.

End of Response to Comments