

January 15, 2026

COMMENTS TO THE OEPA ON THE DRAFT GENERAL NPDES PERMIT FOR DATA CENTERS

A 90-day extension for review is necessary. We would like another two months to comment on the draft permit to seek additional experts for review and comments. Nobody anticipated that a general NPDES permit would be considered by the OEPA, so we need more time to comment. Many people are just now learning of the draft general permit and its possible ramifications. Notifications through newspapers are an ineffective way to notify concerned citizens and organizations about proposed regulations. Most Ohioans are just now learning of the planned massive buildout of data centers. Townships and municipalities that are targeted for data center development should be notified about permit applications that will affect them and have a chance to comment and advocate for necessary protections for their water. In today's digital age (without the use of AI Large Language Models), electronic notifications of far-reaching and impactful proposed rules require a more robust way to notify the public of commenting opportunities as well as a longer time period to review and comment.

Key questions remain about the reasons and need for a general NPDES permit. For example, how were, "social and economic" justifications made that determined it is necessary to degrade water quality? Would a general NPDES allow data centers to discharge without monitoring, perhaps through a storm sewer? How are antidegradation rules applied for a single water source that will be impacted through withdrawals and discharges by one or more data centers? For instance, the Maumee River, which is my drinking water source, is already impaired and in need of greater protection. This is the same water body targeted for LLM data centers. This demonstrates that a general permit should not be allowed when a single, large and very important drinking water source, already at risk, is targeted for massive data center buildouts. The Maumee River needs a separate, individual discharge permit for all polluters. This needs to be examined, and if done, it is likely that it would be much more protective of water sources to require continuous monitoring for large data center discharges, requiring pre-treatment before discharge when there are hazardous exceedances. This draft general permit does not appear to take into serious consideration that data center discharges will be allowed into important sources for drinking water like the Maumee River and Great Lakes, potentially causing cumulative hazardous impacts to drinking water and public health.

Are there studies that resulted in the antidegradation approval process for this general permit, and if so, can we please request all the correspondence through a public records request, or will the companies declare that information as proprietary? We would like to examine the process that simply allows degradation without providing that it would not impact the current classification of the receiving water body.

Also, has the OEPA erroneously interpreted "low volume," to justify the general permit without considering the tremendous concentration of pollutants that could be present in "low volume"



effluent from data centers because of the concentration of toxins through evaporation for cooling?

Continuous sampling of data center water discharges is necessary to know what is being discharged to ensure public safety, especially when discharges are made into public water sources. Grab samples can miss the worst exceedances. Continuous testing is possible and should be implemented to accurately characterize the toxicity of data center discharges to ensure adequate oversight and protective permit requirements.

PFAS chemicals and precursors

An essential requirement for any NPDES for any data center is that PFAS/PFOA/"Forever Chemicals" not be permitted for use for cooling or any other application in a data center. If they are, the discharged water must be continuously monitored for those chemicals with filtering to ensure their removal before discharge. Forever chemical precursors [like TFA](#) must also be regulated if used: ["At data centers, the AI that drafts emails, mines cryptocurrency and analyzes medical scans requires enormous computing power. To prevent the computers from overheating, data centers use cooling fluids, some of which emit chemicals that become TFA."](#)

If not banned in entirety, all PFAS chemical use and PFAS precursor chemicals that are created must be measured and reported to identify the responsible party should the receiving water be found to have increasing levels of the chemical over time. Any permitting must ensure that any [users of forever chemicals](#) that could be released into the environment are held accountable for the harms they cause. The General Accountability Office (GAS) has stated: [PFAS—"Forever Chemicals"—May Be the Biggest Water Problem Since Lead](#). These serious warnings must be heeded by our regulators to ensure that the massive data center buildout combined water impacts do not introduce and concentrate even higher levels of forever chemicals in our water supplies. The incoming water for data centers must be monitored and reported for not only quantity used, but for the toxic chemicals that are present that will be concentrated by the evaporation of cooling water for data center use. [Nitrate concentration](#) is already a problem, especially in agricultural areas. PFAS and PFAS precursor chemicals that may be present in source water must be identified to test for presence and concentration levels for appropriate filtering before discharge. Without stringent reporting requirements of additives and testing to know the level of concentration of harmful chemicals in the data center waste, there will be inadequate protections. As quoted in the Guardian article (<https://www.theguardian.com/environment/2025/oct/04/pfas-pollution-data-centers-ai>), "There's so much you just don't know and we're at the whim of these big corporations and what they're willing to tell us," Starck said. "We think the community has a right to know these things."

Cumulative impacts

It is not well known how many data centers are planned and being built regionally, but this needs to be assessed for water impacts from withdrawals to feed data centers and discharges by them. Each watershed must be examined individually to estimate the potential concentration of existing pollutants like nitrates and PFAS chemicals, as well as what the discharge from data centers would add to the total. These studies have not been done, and without a water balance study and a water quality analysis, the long term cumulative impacts would not be known and addressed



before it is too late. Has anyone done the necessary studies to assess the ability of a water body to safely take in concentrated data center waste over time? Has anyone looked at whether phosphorous, already a problem in the Maumee River and Lake Erie, could be concentrated by data centers so that the discharge, that along with continuing [droughts](#), might contribute to the production of even more toxic algae?

There is huge variation among data centers in size and operation, which is a big reason why a general NPDES permit is not applicable to this industry. All data center permitting for air and water pollution should be done on an individual basis and combined for a cumulative analysis of impacts to a watershed or airshed.

The operation of each data center must be evaluated to determine adequate regulations. For instance, as quoted in an [EESI report](#): “Cooling data centers is a complex operation. At the server level, water chillers cool IT rooms to maintain optimal temperatures and prevent damage to chips. This can be achieved through air cooling using water evaporation, which is an open-loop and more water-intensive method, or through server liquid cooling. Server cooling is a more expensive approach that delivers the liquid coolant directly to the graphics processing units (GPUs) and central processing units (CPUs). Direct-to-chip liquid cooling and immersive liquid cooling are two standard server liquid cooling technologies that dissipate heat while significantly reducing water consumption. During immersive cooling, water or specialized synthetic liquids flood the chips, absorbing the heat. The difference between direct server liquid cooling and air cooling through evaporation can be compared to the difference between drip irrigation and flooding in agriculture.”

Competitive Advantages

A general NPDES permit is not appropriate for all data centers which have a wide range of operating parameters. NPDES permits must address important differences in data center operations to ensure each data center is regulated according to its specific processes. Otherwise, lax regulations for a major data center could give the company an advantage over another data center operator that wants to provide better protections but cannot competitively do so. Government regulations are necessary to ensure polluters are responsible for protecting the environment and public health equally, so that those who want to cut corners for greater profitability are not allowed to uneven the playing field for more responsible companies to compete.

Variability in Watersheds and Data Center Operations

The EESI report also states, “Approximately 80% of the water (typically freshwater) withdrawn by data centers evaporates, with the remaining water discharged to municipal wastewater facilities. The large volume of wastewater from data centers may overwhelm existing local facilities, which were not designed to handle such a high volume.” This reiterates the fact that the receiving watershed must be studied, as well as the ability of wastewater treatment plants to adequately remove contaminants from large volume users before discharging. Are such studies being done?



Without strict NPDES permits customized to address the varying operations and sizes of data centers, cumulative pollutants could be [concentrated into even less water](#). Dilution is not the solution for pollution, but a perfect storm could be visited upon a major water source like the Maumee River which is already targeted as a water source for multiple large data centers. The Maumee River is already impaired and could lose significant environmental flow if droughts continue, threatening drinking water quality without strict oversight of what is discharged. Stormwater discharges from large data centers should also be permitted separately. Data center discharges with data center pollutants should not be allowed to be diluted by stormwater, which can mask the extremely hazardous chemicals that can be used by data centers.

Warm Water Impacts

The impact of heated discharge can be extremely detrimental to aquatic life. Ohio must ensure that the heated data center discharge meets all of the water quality standards for all designated uses to protect aquatic life.

There are numerous requirements in the Ohio Water Quality Standards for temperature to protect aquatic life, including cold water fauna. How are temperature WQ criteria, including criteria that prohibits a change in temperature above certain values, to be monitored and regulated? Those criteria must be included in any data center discharge permits.

In the WQS, there is also information on the designated use for each waterbody. Any discharge permit must protect the highest possible designation. Any permit is clear on how the monitoring will be done for both daily average and daily max to meet the WQS. If the average is good but you get extreme highs, it can be fatal to species.

Climate change and waters already warming in Ohio will exacerbate this issue. Where waters are already impaired for temperature, heated discharges should not be allowed.

Under Section 316 (a) of NPDES is a provision for thermal variances that's been around for a long time. The General permit SHOULD ensure that ALL criteria are met for all designated uses. Due to permitting variances, the IG report that reviewed how EPA did variances had recommendations on how to do them better which should be incorporated:

<https://www.epa.gov/sites/default/files/2015-09/documents/20130523-13-p-0264.pdf>

Great Lakes Compact

Please reference the Great Lakes Compact and the implications for the massive data center buildout in Ohio. What are the cumulative impacts to the Great Lakes due to data center demands and discharges? Referring [to this report](#), the State of Ohio is responsible..."to develop and maintain a conservation and efficiency program to:

- Ensure improvement of Great Lakes water resources.
- Protect and restore the hydrologic **and** ecosystem integrity of the Basin.
- Retain the quantity of surface water and groundwater in the Basin.
- Ensure the sustainable use of waters of the Basin.
- Promote the efficiency of use and reduce losses and wasted water.





Per the Compact, programs “need to adjust to new demands and the potential impacts of cumulative effects and climate.” The report goes on to examine data center impacts and states, “The corresponding increase in the cumulative use of water by data centers, both in their indirect energy needs and direct cooling needs, must be better quantified and understood.” Without such an understanding, the loss of water quantity from data center usage combined with the concentration of pollutants through data center evaporative cooling needs to be assessed to issue adequate permits for necessary regulatory protections for discharges.

We are concerned that a general NPDES for effluent discharges would potentially violate the intent of the Great Lakes Compact through inadequate regulation and oversight of the data center water quality impacts.

Clean Water Act

Please review and incorporate information from the report linked here for comments regarding the Clean Water Act:

<https://www.sourcewatercollaborative.org/highlights/new-guide-for-using-clean-water-act-discharge-permits-to-protect-drinking-water-sources/>

Also, please consider this report as excerpted here:

[A July 2025 report by the University of Michigan](#) outlined the potential harms of data centers if appropriate policies and regulations are not implemented. “A thorough review of potential cumulative impacts would lead to much better regulations, and may likely demonstrate the need for all data center discharges to be pretreated and sent to wastewater treatment plants rather than be released with stormwater into our drinking water resources.

An NPDES general permit without these basic requirements would threaten the environment and public health, especially considering the cumulative effect of many data centers in a single watershed. Every water source used by data centers must be closely monitored to detect the concentration of pollutants caused by individual and multiple data centers in a watershed.

We assert that without the requirement for individual NPDES permits based on a thorough review of the data center operation and water requirements/discharge pollutant loads, the OEPA risk violations of the Clean Water Act by not establishing effluent limits of harmful chemicals. Per the report attached, “NPDES permits contain several components that can be used to help protect public water supplies:

1. Technology-based effluent limits are based on national minimum performance standards for publicly owned treatment works (POTWs) and many categories of industrial dischargers.
2. Water quality-based effluent limits (WQBELs) are based on applicable WQS of the receiving water and reflect a positive determination that, without such limit, the discharge will exceed or has the reasonable potential to exceed those standards.
3. Monitoring and reporting requirements can be used to identify pollutants of concern in the discharge and alert permitting authorities when permit violations occur.
4. Standard conditions are uniform in all permits, but several can be relevant to protecting drinking water, such as a 24-hour reporting requirement of events that result in the discharge in excess of certain permit effluent limits, rules for any anticipated noncompliance, and, for POTWs, notification of new pollutants or change in pollutant volume or character.
5. Special conditions may include best management practices, special studies, and pretreatment requirements. For more information on NPDES technology-based and water quality-based limits,



monitoring and reporting requirements, standard conditions, and special conditions, please see the NPDES Permit Writers Manual [http:// cfpub.epa.gov/npdes/writermanual.cfm](http://cfpub.epa.gov/npdes/writermanual.cfm).”

Please enter the attached report, “[Using Clean Water Act Discharge Permits to Protect Drinking Water Sources,](#)” to these comments for a thorough review, analysis and consideration to justify that a general NPDES permit is inappropriate for the robust regulatory policies that are required for data centers.

Like with fracking, data centers are exploding onto our landscape in Ohio with inadequate oversight and regulations, basically claiming our water as their own. We have one opportunity to get this right before the long-term cumulative impacts of lax regulations become apparent, as it is now because of fracking. The stricter the initial regulations for new industries that would have a huge impact on the environment, the better. If, over time, continuous monitoring shows that there is nothing to be worried about from data center discharges, great! But we have seen too often that companies take advantage of fast-tracking, the lack of political will for environmental protections, and lax regulations to enhance their profits at our expense. We know from experience that once the regulations are in place, it is very difficult if not impossible to tighten them up. Even when there are exceedances and violations of permits, it often seems that very little is done even after serious damage is realized. Better permitting will help avoid costly remediation, which those costs are often externalized upon the public.

Exemptions:

The permit lists 15 examples of specific discharges that are not authorized by the permit, which include discharges that exhibit the reasonable potential to exceed a Water Quality Standard; discharges located within 500 yards upstream of a public water supply surface water intake that cannot meet Ohio’s public water supply standards; discharges to a lake other than Lake Erie; discharges from co-located activities such as steam electric power generation facilities; discharges to combined or sanitary sewer systems or ground water; and discharges that include certain concentrations of volatile organic compounds.

<https://www.brickerggraydon.com/insights/publications/ohio-epa-issues-draft-general-npdes-permit-for-data-centers>

Dilution is not the solution:

Ohio is already suffering from droughts and climate change impacts, including evapotranspiration due to warming weather that reduces the amount of water available for dilution of contaminants. Although dilution is not the solution to pollution, it is a major factor in water quality that must be assessed before allowing additional contaminant discharges, especially to an already impaired water body like the Maumee River.

Additional Info

Please review these additional informative articles about data center water impacts before allowing a general permit. These articles also highlight why a general permit for wastewater discharges is not appropriate for data centers and would be negligent if allowed:



<https://signalohio.org/dramatic-surge-in-water-demand-predicted-by-2040-puts-farmers-and-industry-on-collision-course-and-the-supply-for-all-in-question/>
<https://www.techpolicy.press/data-center-boom-risks-health-of-already-vulnerable-communities/>
https://greatlakes.org/wp-content/uploads/2025/08/AGL_WaterUse_Report_Aug2025_Final.pdf
<https://www.forbes.com/sites/kensilverstein/2026/01/11/americas-ai-boom-is-running-into-an-unplanned-water-problem/>

In your review of these comments, please keep in mind this is just a lay person's review of a draft permit with very little time and little educational background to do the necessary research. My educational background is on systemic function/dysfunction, which is becoming obvious in Ohio with inadequate legislative and regulatory will to provide better protections for Ohio's long term environmental and economic health. Ohio must not recklessly allow the proliferation of harmful polluters and water users without adequate regulation as it has with the fracking industry just to fast-track industry and political wishes for revenue without necessary protections. That will never end well, and the Ohio taxpayer will be on the hook for externalized costs, perhaps even for their cancer treatments, which is even more reprehensible even without considering the huge tax breaks being given to data centers at our expense. I hope these comments are helpful and will lead to a decision to only grant individual permits for data center water discharges to guarantee needed protections and avoid water degradation, especially in those watersheds that are already at risk from loss of water quantity and quality.

Thank you

Lea Harper
Managing Director