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Across multiple industries, we specialize in the areas of air, water, waste, ecological, cultural and wastewater. And as part of POWER Engineers, we can provide integrated engineering and environmental solutions. With 45 offices located across the country and internationally, we have local resources and expertise where you need it.

LEADERSHIP INSIGHTS



Sustainability: The Importance of Doing the Same or More with Less

Bret Moffett, President and CEO

Part of POWER's vision is to "design and integrate sustainability into our projects as well as into our internal business practices." Our vision reflects how important it is to use the natural resources of the world in a way that allows the generations of tomorrow to have the same, or even better, quality of life we have today.

As part of our vision, POWER understands the importance of internal sustainability practices. And that is why we have taken concrete steps to reduce our own carbon footprint in various ways across our 45 offices. Some examples include recycling, installation of LED lighting, and implementation of smart heating, cooling and lighting systems. Most recently, we purchased an all-electric vehicle, a Chevy Bolt, as part of our vehicle fleet.

But what I really want to discuss is the importance of designing and integrating sustainability into our projects. As engineers and scientists, we have the opportunity—and the obligation—to provide not only safe and effective solutions to our clients, but also solutions that meet sustainability criteria. We really can have a profound impact on the natural environment and the built world through the work we do every day.

But what do we mean by "sustainability criteria"?

Several attempts have been made by industry to define these criteria, beginning with the U.S. Green Building Council's (USGBC) LEED certification, and, most recently, by the Institute for Sustainable Infrastructure's (ISI) Envision rating system for infrastructure projects. Both are respected organizations with great systems and POWER has numerous employees that are accredited in both.

Certainly, the type of detailed criteria and guidelines set forth by the USGBC and ISI are necessary for the complex technical projects we execute. On the other hand, POWER's philosophy can be simply summed up as "do the same or more with less."

Doing the same or more with less is critical because no project solution, no matter how "green," is without a carbon footprint. Take, for example, a solar photovoltaic (PV) farm: while the electricity it produces from sunlight is virtually carbon free at the point of production, its total carbon footprint is far from zero when you consider the impact of mining, manufacturing, transportation and disposal associated with the whole lifecycle of the project from cradle to grave.

That's why, no matter what, it is important to use less of everything to accomplish the same project objective. In the case of the solar PV farm, for example, we can use less of everything by siting the farm near the

power grid (fewer poles and wires for the interconnection), using more efficient solar panels (fewer solar panels and collector system cables), and designing the arrays to simplify installation and maintenance (reduced transportation).

In addition to being more sustainable, one could argue this philosophy of doing more with less is also more cost effective than the alternatives. Obviously, fewer materials reduce the cost of equipment, both in terms of the initial purchase, but also in terms of spare parts and replacements. Installation and maintenance costs are likely reduced, too, with simplified designs.

This philosophy may also ultimately lead to more resilient designs, too. In so far as there are fewer places for things to go wrong, such designs are inherently less susceptible to problems such as natural disasters. And when problems do arise, it is easier and faster to remedy them and get operations back online.

Designing and integrating sustainability into our projects is a win-win situation. Not only is it good for the environment, but it is also good business that can lead to more cost-effective and resilient designs. As engineers and scientists, we have a key role to play in preserving the natural environment for future generations while building great infrastructure for today. 🌱



Industrial Wastewater Treatment Systems: Reduce Your Risk with Proactive Assessments

John Wentz, P.E.
Senior Project Engineer

At the end of a production process, hidden at the back of the lot where nobody likes to go, sits an industrial wastewater treatment plant (WWTP). The WWTP collects the facility's process wastewater—a by-product of the production process—and treats it to a quality suitable for discharge on a continuous and consistent basis.

Just like the production facility, the WWTP is designed with specific operating criteria and requires periodic assessment. A properly run and compliant WWTP may receive little, if any, attention until discharge compliance issues arise.

Failure to properly treat wastewater to the minimum requirements of the discharge

permit will cause a facility to be identified as non-compliant. This status can result in unnecessary expenses, unwanted public and regulatory scrutiny, and potentially a production shutdown leading to loss of revenue. Implementing a more proactive approach can be a smart move to reduce risk and control costs.

Periodic assessments can help identify and address conditions that could potentially lead to treatment failures and non-compliance. Beyond the necessary mechanical maintenance, there are two proactive timeframes where an assessment should be considered:

1. Production changes
2. Discharge permit renewals

We've demystified WWTPs with a handy flowchart and common definitions. Check it out at www.powereng.com/WWTP



A safe release. The proper treatment of wastewater from processing and manufacturing facilities, such as food and beverage and consumer products as well as heavy industry, plays a vital role in protecting our environment.

How stringent are your requirements?

Since one of the timeframes is linked to permit renewals, it is important to understand your requirements. WWTPs typically fall under two types of discharge classifications: indirect or direct.

The majority of processing and manufacturing facilities discharge into public sewers and are known as indirect dischargers. The process wastewater is often contaminated by a variety of organic and inorganic constituents that are harmful to the public sanitary sewer collection system, and therefore requires a WWTP (or pretreatment facility as commonly known for indirect dischargers).

The discharge from a pretreatment facility is required to meet wastewater treatment standards specified in the discharge permit, which is typically issued by the local publicly owned treatment works (POTW) facility. The POTW receives the wastewater from the pretreatment facility (along with all other industrial and domestic wastewaters from the sewer-shed), provides further treatment and then safely discharges the wastewater into the environment.

Processing and manufacturing facilities located in areas where public sewers are not available can be permitted to discharge directly into a receiving body of water such as a lake, stream or river and are known as direct dischargers. To do so, they need a direct discharge permit that is typically issued at the state level and is based on site-specific water quality objectives.

Since the discharge goes directly to the environment, the level of treatment for a direct discharger is typically more stringent than that of an indirect discharger, and the penalties for non-compliance are more severe.

How can you proactively prevent non-compliance issues from developing?

The scenario to avoid is waiting until the wastewater discharge is out of compliance and you are forced into a reactive mode of investigation and reporting. The subsequent fines and corrective action to resolve the issue, and prevent a reoccurrence, is a costly consequence.

As the old saying goes, an ounce of prevention is worth a pound of cure. Consider

these key timeframes as ideal checkpoints to evaluate your WWTP/pretreatment facility. These are proactive measures intended to prevent conditions that will lead to non-compliance.

Production changes

An industrial WWTP is designed within defined hydraulic loading and mass loading parameters for specific inorganic and organic constituents. Changes in production can lead to a difference in the influent wastewater volume and quality outside of the design basis, resulting in reduction of the WWTP treatment efficiency.

Such changes may include an increase or decrease in production quantity, items produced, processing equipment, raw materials, cleaning procedures and frequency, production and/or cleaning chemicals, facility expansion or reduction, personnel, procedures, and any other changes that may impact the volume and/or constituent loadings of wastewater from the production and manufacturing operations.

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Alligators, Gypsum Roses and Spare Tires—A Geologist's Day in the Field

Jacob Geesin | Staff Geologist

During my first few months of environmental consulting, I was fortunate to have many unique experiences. I began my career as the only field staffer in an office of four project managers. To say I was constantly involved in an administrative tug-of-war was an understatement, but it gave me an opportunity to work on a wide variety of projects all over Texas.

My favorite project involved remediation of injection wells and installation of depressurization wells in a lignite mine. I remember receiving a call from my friend and coworker, Chris, asking if I was available to join him for three to four weeks in a coal mine.

My first thought was, "There's a coal mine in Texas?" I thought Texas was the bountiful land of oil and gas and

that coal was reserved for exotic places like Wyoming. I then began to panic imagining that I would be spending the next month in some sort of dimly lit cave that would be prone to collapsing in or explosions (you know, like you see in the movies). Nevertheless, I accepted the job, met Chris in Christine, Texas, and began my health and safety training followed by a tour of the mine.

I find it ironic that one of my longest and toughest field days produced some of the fondest memories of my career.

My expectations of the mine were shattered when we arrived. I expected to see soot-covered workers with headlamps

walking in and out of tunnels. Instead I saw long dirt roads dominated by vehicles that stood 30 feet higher than my pickup truck. The most interesting parts were the reclamation sites: areas that had already been mined for coal then reclaimed with the overburden soil and vegetation to let nature take its course.

Speaking of nature, I am a city boy from Austin, so I had never seen wild hogs, coyotes, turkeys or roadrunners anywhere outside of a museum or zoo. I heard rumors of alligators living in the ponds on the site, but I didn't believe any of them until I came face-to-face with one.

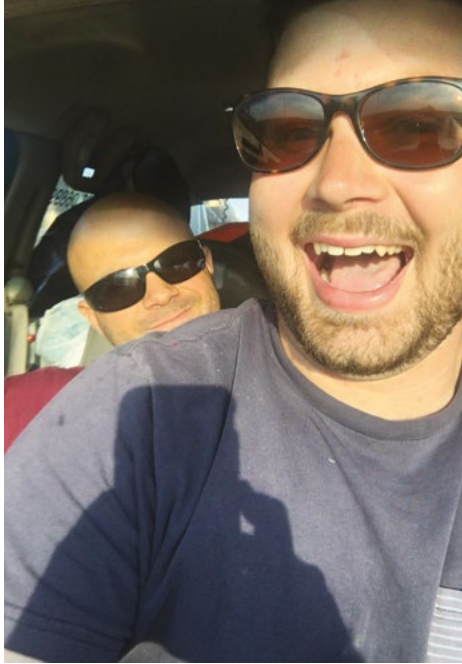
To reach the wells, we had to drive off-road through equipment and game trails. We arrived at Injection Well 6, ran over something sharp, and quickly lost one of our tires. Fortunately, our truck was equipped with a spare, so we changed the tire and pulled the truck off into the shade to check out the well.

Chris then took me up the hill behind the well, reached into the dirt, and pulled out an almost perfectly formed gypsum rose. The young geologist and rock hound in me was ecstatic. We spent the next half-hour collecting gypsum roses and large gypsum crystals in a 5-gallon bucket.

During our return to the truck, I heard a loud hiss that immediately made all my hair stand on end. I spent a year and a half as an intern (aka field grunt) in the oil fields and I learned that when you hear



Geologic wonder. A rose-like formation of crystal clusters formed by precipitation in sandy arid regions, the Desert Rose is typically made-up of gypsum, baryte, celestine, and other minerals.



Say cheese. Geologist Jacob Geesin snaps a picture to capture the humorous ride home with his colleague Chris.

a hiss, you book it in the other direction. As we approached the truck, the hiss was louder than anything I had heard in the oil fields. We backed up slowly and I bent over to see a 4-foot-long alligator staring back at me. Neither of us had been in a situation like this before, and we didn't have phone service to access the endless encyclopedia of the internet, so we let instinct take over and started yelling and throwing rocks at the gator to force it to leave. After about 20 minutes, the gator reluctantly, and with lots of hissing, crawled back into its nearby pond.

Unfortunately, our eventful day wasn't over. Exhausted from the drive down,

training and an adrenaline-filled screaming match with an angry alligator, we left the mine. On our way out, we drove over a large piece of chert and popped another tire. With our spare tire already on the truck, we were out of options.

The day shift workers for the mine had left about an hour earlier, and the lighter night crew was nowhere to be found. Chris's phone had died, and my phone had little to no service. We were stuck in the mine without a vehicle, phone service, or a way to get out. Chris remembered that he was Facebook friends with the geotechnical logger, Richard, so he took my phone and stood on top of the truck to get just enough service to access Facebook. Chris then logged into his account and called Richard repeatedly through the app until he answered and agreed to drive the 40 minutes to the mine to rescue us.

When Richard arrived, we realized space was limited in his equipment-laden truck. We came to the only sensible solution: that I would sit on Chris's lap for the duration of the ride home. I took a selfie in the car and have had that picture on my refrigerator ever since.

I find it ironic that one of my longest and toughest field days produced some of the fondest memories of my career. I now go into every field job—no matter how difficult it sounds on paper—with optimism and excitement because who knows what memories, experiences and friends I will make. 📸



The American Alligator

2

different types of alligators exist: the American alligator and the Chinese alligator

1000

pounds in weight at its heaviest

82.4°F

to 86 degrees Fahrenheit is the required temperature of the alligator's nest to produce a female. Males are produced at temperatures 90 to 93 degrees Fahrenheit, and intermediate temperature ranges will produce a mix of both.

1987

the year the U.S. Fish and Wildlife Service pronounced alligators as fully recovered and removed from the Endangered Species list after near extinction from market hunting and habitat loss

80

teeth (approx.) and a distinguishing factor from a crocodile. Unlike the alligator, the crocodile's lower jaw teeth are visible even when its mouth is closed.

NEWS BRIEFS

Stay informed on
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news and updates

NATIONAL NEWS

EPA Risk Management Plan Amendments Now in Effect

On December 3, the Risk Management Plan (RMP) amendments went into effect. The amendments include changes to the accident prevention program requirements (root cause analysis, independent third party audits after an RMP reportable accident, and changes to process hazard analysis); emergency response requirements (coordination with local agencies and notification exercises annually, full field exercises every 10 years, table-top exercises every three years); and public availability of chemical hazard information (through company website, social media, or other means, public meeting after an RMP reportable accident). Recent proposals to rescind some of the requirements have not been finalized so the January 13, 2017 amendments are in effect.

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NPDES General Permit Modifications Proposed for Stormwater Discharges from Construction Activities

On December 12, EPA proposed a permit modification for the 2017 National Pollutant Discharge Elimination System

(NPDES) Construction General Permit (CGP). The proposed modifications include: 1) removal of examples of the type of parties that could be considered operators; 2) clarification on the importance of dust control; 3) aligning the requirements of Part 2.2.11 with the construction and development rule regarding erosion of stormwater conveyance channels; 4) restoring the 2012 CGP provision excluding the need to prevent exposure for building materials that are not a source of stormwater contamination; and 5) clarification on shared permit responsibilities and Stormwater Pollution Prevention Plans for common-plan development operators. Modifications proposed will not affect the expiration date of this permit. Public comments will be accepted until January 28, 2019.

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EPA Revises Policy on Exclusions from Ambient Air

In November 2018, EPA issued a draft revised policy regarding exclusions from “ambient air,” which could have significant ramifications for future compliance assessments for National Ambient Air Quality Standard (NAAQS) compliance and Prevention of Significant Deterioration (PSD) increment consumption. In such assessments, air quality impacts must be assessed in all areas considered to be ambient air. Historically, EPA has required that for an area (e.g., property around a permittee’s emission source(s)) to be excluded from ambient air, public access to that area should be precluded by means of a fence or other physical barrier(s). EPA’s revised policy replaces the terminology of physical barrier with “measures, which may include physical barriers, that are effective in deterring or precluding access to the land by the general public.” These measures may include traditional fencing, but may also include video surveillance and monitoring, clear signage, routine security patrols, drones, and other potential technologies. EPA recommends

that regulatory agencies apply rules of reason in evaluating the effectiveness of measures in precluding public access.

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OSHA Proposes to Revise New Beryllium Standard for General Industry

On December 11, the Occupational Safety and Health Administration (OSHA) proposed modifications to the new beryllium standard, which went into effect in May 2017. In an effort to make the rule easier to understand, OSHA proposes to modify several of the definitions for general industry as well as adjust the methods of compliance, personal protective clothing and equipment, hygiene areas and practices, housekeeping, medical surveillance, communication of hazards, and recordkeeping. The proposed revisions would also remove Appendix A and replace it with Operations for Establishing Beryllium Work Areas. Comments must be submitted by February 9, 2019.

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EPA Signs MOU with the State Review of Oil and Natural Gas Environmental Regulations

On November 29, EPA signed a Memorandum of Understanding (MOU) with the State Review of Oil and Natural Gas Environmental Regulations (STRONGER), a non-profit organization with equal representation from the oil and gas industry, state oil and gas environmental regulatory agencies, and the environmental public advocacy community. Through the MOU, EPA and STRONGER will work together to identify specific areas for collaborating on such issues as providing opportunities for meaningful stakeholder engagement, identification of emerging issues impacting states and tribes, and the development of improved compliance assistance tools. Per EPA’s Acting Administrator, Andrew Wheeler, this MOU will provide more opportunities for EPA and STRONGER to work together

to enhance EPA's enforcement and compliance efforts and improve environmental protection and economic outcomes.

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EPA Finds States Meet "Good Neighbor" Obligations for 2008 Ozone Standard

On December 6, EPA updated the Cross-State Air Pollution Rule (CSAPR) to fully address certain states' obligations under the "good neighbor" provision for the Clean Air Act (CAA) regarding interstate pollution transport for the 2008 ozone NAAQS. This ruling is based on information that became available after the 2016 CSAPR update. In a related action, EPA is finalizing a determination that 2023 is an appropriate future analytic year to evaluate the remaining "good neighbor" obligations. The final rule takes effect February 19, 2019.

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PHMSA Amends Federal Pipeline Safety Regulations

On November 20, the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a final rule that amends portions of the Federal Pipeline Safety Regulations that govern the use of plastic piping systems for the transportation of natural gas and other gases. These revisions are required to ensure and enhance pipeline safety, allow for the expanded use of plastic pipe products in the transportation of natural or other gas, adopt innovative technologies and industry best practices, and respond to petitions from stakeholders. These amendments are effective January 22, 2019.

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EPA Proposes Revisions to Power Plant NSPS and GHGs

On December 6, EPA proposed revisions to the greenhouse gas (GHG) New Source

Performance Standards (NSPS) for new, modified and reconstructed electric generating units (EGUs). This revision proposes to modify the standards for coal-fired units and does not impact the combustion turbine section of the rule. The proposal removes from consideration partial carbon capture and storage as an option for CO2 control and as a result relaxes the CO2 emission limits for all coal-fired units. The proposed revisions also add additional emission limit size categories for new coal-fired units creating separate standard for units above and below 2,000 MMBtu/hr and combines the standards for new and reconstructed units. Comments are due February 19, 2019.

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EPA Confirms 2009 NSR Project Aggregation Actions and Establishes Effectiveness Date

On November 7, EPA affirmed the 2009 interpretation of when physical or operational changes should be combined into a single "modification" for analysis of major New Source Review (NSR) applicability. EPA's interpretation on when said activities should be combined for NSR purposes are when those changes are "substantially related." EPA would apply a policy of rebuttable presumption for projects undertaken three or more years apart and analyze them as separate projects unless the specifics of the activities refute this presumption.

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EPA Withdraws TSCA Significant New Use Rules for Over 50 Chemical Substances

On November 16 and December 4, EPA published notifications that it was withdrawing Significant New Use Rules (SNURs) under the Toxic Substances Control Act (TSCA) for over 50 chemical substances that were the subject of premanufacture notices (PMNs). These withdrawals are necessary to address

adverse public comments received by the EPA in response to the SNURs that were promulgated in September 2018 and October 2018. EPA will not consider petitions for significant new uses for these affected chemicals until adverse public comments are adequately addressed and final SNURs are published. The chemical substances that are the subject of these withdrawals are predominantly used in polymers, resins, surface coatings, lubricants/lubricant additives and semi-conductor binders. A complete list of chemicals is included in the November 16, 2018 and December 4, 2018 Federal Register notices.

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EPA Finalizes Amendments to the Petroleum Refinery NESHAP and NSPS Requirements

On November 8, EPA amended the petroleum refinery National Emission Standards for Hazardous Air Pollutants (NESHAP) rules (40 CFR 63 Subparts CC and UUU) and the New Source Performance Standards (NSPS) for petroleum refineries (NSPS J/Ja) in response to second and third petitions for rule reconsiderations filed in February 2016. The amendments relate to several corrections for work practice standards, recordkeeping and reporting provisions. The amendment also includes revised compliance dates for existing maintenance vent standards as well as delayed coking units using a water overflow alternative compliance option.

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USACE, EPA Propose Revising the Definition of "Waters of the United States"

On December 11, EPA and the U.S. Army Corps of Engineers (USACE) signed a proposed rule to revise the definition of "waters of the United States" regulated under the Clean Water Act (CWA). Consistent with the Executive Order 13778 signed on February 28, 2017,

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the agencies propose to clarify the scope of waters, including wetlands federally regulated under the CWA. The agencies propose to interpret several statutory definitions, most importantly the definition of jurisdictional waters. In drafting the proposed definitions, the agencies used as a basis the text and structure of the CWA, legislative history and Supreme Court precedent, while also considering agency policy choices and other relevant factors. The proposed definitions will clarify how the agencies will evaluate interrelated functions and hydrologic connections of navigable waters, tributaries with perennial, intermittent or ephemeral flows, adjacent wetlands, and so forth. The agencies will notify the public of a revised public hearing date, the start of the public comment period, and other outreach activities in the Federal Register after federal appropriations for the EPA have been passed by Congress.

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STATE NEWS

Significant Tier II Reporting Changes to Come for Texas Facilities

On March 1, 2019, Tier II reports are due for reporting year (RY) 2018. Tier II reports are required for all facilities

(manufacturing, non-manufacturing, retail, etc.) that store hazardous chemicals in quantities exceeding certain thresholds. In Texas, Tier II reporters will no longer be able to use Tier2Submit software to prepare and submit reports for RY2018. The Texas Commission on Environmental Quality (TCEQ) has launched a new online reporting system through STEERS (State of Texas Environmental Electronic Reporting System). With this new change, it is important to start the reporting process as soon as possible. Facilities must identify one person to register as the "Owner/Operator" for reporting purposes. Personnel who prepare the report must be "Authorized" by the Owner/Operator. Prior year reports should be migrated into STEERS, however, if you cannot locate your facility's RY2017 report in the system, contact the TCEQ Tier II Reporting Program.

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Pennsylvania EQB Approves Over \$20 Million in Proposed Permit Fee Increases

On December 18, Pennsylvania's Environmental Quality Board (EQB) approved over \$20 million in proposed increases to air and water quality and NPDES permit fees. The fee increases are necessary to pay for the administrative

costs of these programs resulting from the failure of Pennsylvania's General Assembly to provide adequate General Fund appropriations to the Pennsylvania Department of Environmental Protection (PADEP). There will be a 30-day comment period once the proposed increases are published.

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TCEQ to Require Electronic Submission of Stormwater MSGP Sampling Results

In accordance with the EPA's Final NPDES Electronic Reporting Rule, the TCEQ announced in November 2018 that it will begin requiring electronic submittal of annual discharge monitoring reports (DMRs) for facilities covered under the TXR050000 Multi-Sector General Permit (MSGP). Annual DMR submittals containing analytical results for determining compliance with the hazardous metals and sector-specific numeric effluent limitations outlined in the MSGP must now be reported in the NetDMR system through the EPA's Central Data Exchange (CDX). Annual DMR submittals for reporting year 2018 must be reported in the NetDMR system by March 31, 2019.

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Consider this: if the raw materials change in a production process, will the finished product remain unchanged? Of course not. So, thinking of your WWTP as a process system, with the desired output consisting of compliant wastewater discharge, makes it clear that any production change will result in a change to the final product.

An assessment prior to production changes can provide valuable insight about the potential impact these changes could have on the WWTP.

With advanced planning, these impacts can be mitigated or the design can be adjusted to ensure the WWTP remains in compliance.

Discharge permit renewals

Pretreatment Facility Discharge Permit Renewal. As an indirect discharger, the discharge permit for your pretreatment facility is typically valid for a period of three to five years and requires a renewal application be submitted typically six months in advance of the permit expiration date.

During the permit renewal process for your facility, it is advised to check in with appropriate POTW personnel. If the POTW has changes in its permit, the implementation of those changes could impact the discharge requirements of your pretreatment facility.

POTW Discharge Permit Renewal. Similar to an industrial facility, the POTW must re-apply for their National Pollutant Discharge Elimination System (NPDES) permit for direct discharge on a frequency regulated by the state. These

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Title V Petitions and NSR: Where Is the Line?

Whit Swift | Partner, Bracewell LLP

In 2018, the EPA Administrator issued several responses to petitions filed for Title V sources that are instructive in drawing a line with regard to whether and how the Title V process can be used to revisit past permitting decisions and possibly “re-open” pre-existing new source review (NSR) permit conditions.

The allure of prompting an EPA objection to a state Title V permit is the impact of that objection: unlike a comment received from EPA during the NSR permitting process, the permit (or permit record) must be changed to satisfy the EPA objection. If a permit has not yet been issued, the state permitting authority must address EPA's objection before permit issuance. If the permit has already been issued, the EPA objection does not affect the permit's validity, but the state permitting authority must reopen the permit to address EPA's objection or risk having EPA take over as permitting authority for that particular permit.

The EPA Administrator held, consistent with past orders responding to Title V petitions, that the Title V process is not an opportunity to revisit a state authority's past decisions regarding whether or not a project should have triggered federal NSR, or past best available control technology (BACT) determinations.

The Administrator did, however, grant a petition to object to a state Title V permit in an order that demonstrates how the

Title V process can impact underlying NSR requirements. Under Title V, the permitting authority must ensure that Title V permits contain monitoring requirements sufficient to yield data that is representative of the source's operation. In response to a petition that identified, with specificity, a scenario where EPA found no evidence in the permit record of the monitoring, recordkeeping, or reporting requirements that assure

...experience in 2018 demonstrates that, even under an administration committed to cooperative federalism, the Title V process can be used to impact NSR permit requirements.

compliance with an emission limit from an incorporated NSR permit, the EPA has granted a petitioner's request for an objection. The EPA Administrator's order directed the state permitting authority to specify the relevant monitoring, recordkeeping, or reporting, or alternatively to change the underlying permit to incorporate requirements adequate to assure compliance with emission limits.

At the same time, the EPA Administrator declined to object to a Title V permit based

on conclusory and unsupported statements about a particular permit condition not being sufficiently enforceable. While a vague challenge claiming unenforceable NSR permit requirements is unlikely to get any traction with EPA, experience in 2018 demonstrates that, even under an administration committed to cooperative federalism, the Title V process can be used to impact NSR permit requirements.

Given the potential for an objection from EPA in response to a successful petition or public comment—particularly one that could arise during a permit revision proceeding where the timing of permit issuance is important—it may be beneficial for permit holders to evaluate the monitoring, recordkeeping, and reporting requirements found in their underlying NSR permits to determine if the site is vulnerable to a similar objection. If that is the case, a proactive approach aimed at filling any such gaps before they become a target for public comments could benefit the permit holder and help ensure that such an objection does not arise at an inopportune time.

Copies of the EPA Administrator's orders referenced in this article, and other orders issued in response to Title V petitions, can be found on EPA's website at the following address:

<https://www.epa.gov/title-v-operating-permits/title-v-petition-database> 



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permit limits are based upon the residential and industrial customers discharging to the POTW, treatment capabilities of the POTW and the receiving body of water.

Changes, or lack thereof, to treatment operations at the POTW can have positive or negative repercussions on the requirements of industrial wastewater discharge from your pretreatment facility. For example, a POTW that is close to reaching its design capacity, and cannot implement needed upgrades, may reduce the allowable discharge limits of your pretreatment facility, as well as others that discharge to that POTW.

On the other hand, if the POTW facility expands or adds additional steps to the treatment process, their treatment capabilities are improved, which may allow more hydraulic volume and/or higher mass loadings from your pretreatment facility and others discharging to the POTW.

Advanced knowledge of this information allows for planning ahead of your facility's specific permit renewal. Evaluating your system against these changes in the discharge requirements will identify if changes to your pretreatment facility are needed.

Direct Discharge Permit Renewal Under State NPDES. If your facility is a direct discharger, contact with the state regulatory personnel would be appropriate to determine if there have been any changes to the designation of the water body, complaints from the public or modifications to other regulations.

Keeping back-end utilities top of mind

The utilities that serve the back-end of the facility operations can often be an afterthought. With a little planning and one or two proactive steps, WWTP owners can be better prepared for inevitable changes to their wastewater treatment system—and are more likely to avoid a scramble to stay in compliance when those changes come. 