



State Fiscal Year 2018

July 1, 2017 — June 30, 2018

Annual Report



July 2018

Message from the Director

Since 2011, under the leadership of Governor John R. Kasich, the State of Ohio has invested more than \$6 billion to improve water quality throughout the state by addressing nutrient runoff. These funds have been directed toward improving drinking water and wastewater facilities, monitoring water quality, planting cover crops, recycling dredge material, installing controlled drainage systems on fields and fixing faulty septic systems.

This year, Ohio created the Ohio Domestic Action Plan 1.0, which will advance efforts toward the 40 percent nutrient reduction target identified in the binational Great Lakes Water Quality Agreement. Working together with our state partners at the Ohio Department of Agriculture, Ohio Department of Health and Ohio Department of Natural Resources, we are using the Domestic Action Plan's adaptive management process to address nutrients in the western basin of Lake Erie. This means that water quality monitoring, sampling and nutrient management practices are developed, evaluated and adjusted as circumstances change in order to meet the state's goals.

At Ohio EPA, we focus on protecting public health and the environment. We spend a great deal of time monitoring our air, land and water to ensure environmental standards are met. In addition, we process high-priority, complex permits for new facilities or major expansions to retain and support Ohio businesses.

Ohio EPA continues to provide our customers with access to technical and financial resources that will help them achieve and maintain compliance and create new jobs and economic growth opportunities for Ohioans. We are always looking for ways to improve internally, work more efficiently and effectively. Building on the achievements described in this annual report, we will continue to look for creative solutions to the challenges on the horizon.



A handwritten signature in black ink that reads "Craig W. Butler". The signature is written in a cursive, flowing style.

Craig W. Butler
Director

Legislation and Policy Initiatives

Asset Management

Given the unpredictable nature of power failures, it is critical that water systems acquire onsite alternative power sources as part of their contingency planning. In SFY'18, to help community water systems increase their technical capacity to provide a continuous source of safe drinking water, Ohio EPA began offering interest-free loans and grants to develop asset management plans and reimburse the initial cost of emergency generators and the necessary accessories.

The five-year, interest-free asset management planning loans include up to \$10,000 in principal forgiveness for development and implementation of the requirements to create and implement an asset management plan outlined in Senate Bill 2 (SB 2), which was passed by the General Assembly in June 2017, and associated rules. In combination with these planning loans, the Agency is also offering emergency generator grants of up to \$10,000. To date, Ohio EPA has allocated \$290,000 for generator grants and will continue to offer grants up to another \$210,000.

In addition to providing financial assistance, the Agency is focusing review and technical assistance on water systems with the highest risk of failure. The Division of Drinking and Ground Waters has revised its contingency plan rules and is emphasizing the importance of a robust, adequate plan to prevent and respond to emergencies. Over the next year, the division also will highlight the need to maintain and exercise maintenance programs.

Nutrient Mass Balance Study for Ohio's Major Rivers

In SFY'18, Ohio EPA completed the second edition of the Nutrient Mass Balance Study for Ohio's Major Rivers. The report, released in April 2018, included nine watersheds in Ohio, covering 66 percent of the state's land area. The watersheds studied were in both the Lake Erie and Ohio River drainages and included data for water years 2013-2017. The objective of the study is to determine nutrient (phosphorus and nitrogen) loads and relative proportions of point and nonpoint sources. The study highlights differences between the watersheds both as total loads and relative contributions from different sources in the watersheds. The Agency held webinars and gave several presentations to share study results.

Addressing Nutrients in Ohio's Lakes and Rivers

In February 2018, Ohio EPA technical staff published a paper on Eutrophication Endpoints for Ohio's Large Rivers in *Environmental Monitoring Assessment (2018) 190:55* (link.springer.com/article/10.1007%2Fs10661-017-6422-4). The paper examined relationships between biological and enrichment indicators to establish hallmarks of enrichment that can be used in managing eutrophication in large rivers. This study will serve as the baseline for establishing nutrient water quality standards for the large river assessment units in Ohio.

Lake Erie Water Quality

To develop a method to assess the open waters of the western Lake Erie basin for algae impacts on recreation for Clean Water Act Section 303(d) listing purposes, the Division of Surface Water obtained input from several Lake Erie researchers including OSU/Sea Grant, University of Toledo, BGSU and NOAA. The workgroup presented recommendations to the Agency in early 2018. In turn, the division used the recommendations to assess water quality in the western basin for 2012-2017. The 2018 Integrated Report included the assessment method, revised assessment units and resulting listings of recreation and drinking water impairments based on harmful algae. Ohio EPA also revised the 2016 Integrated Report to update the list of recreation and drinking water algae impairments in Lake Erie.

Reducing Diesel Emissions

To further improve Ohio's air quality and reduce diesel emissions, Ohio EPA launched two new grant programs in 2018 to help owners of aging diesel vehicles transition to newer, cleaner fuels. Alternative Fuel Vehicle (AFV) grants provided \$5 million in grants up to \$25,000 per vehicle to help replace heavy-duty trucks and buses with those that run on compressed or liquid natural gas or propane. Funds supported 43 new school buses and 114 new trucks used for freight handling, recycling, refuse collection, snow removal and road maintenance.

In January 2016, the U.S. and California sued Volkswagen and its affiliated companies over the sale of diesel vehicles equipped with “defeat devices” that allowed them to emit between nine and 40 times more nitrogen oxide, a harmful pollutant, than allowed under the Clean Air Act. The final settlement created a mitigation trust which was divided primarily among participating states. In Ohio, the resulting Diesel Mitigation Trust Fund (DMTF) will provide \$75 million over the next decade. Funds will be used to replace or repower medium- and heavy-duty vehicles and off-road equipment in 26 priority counties. Eligible fleets include school, transit and shuttle buses, trucks, locomotives, tugboats and ferries, and cargo handling equipment in ports and airports. The Fund also will provide \$11 million to install charging stations for cars and other light duty electric vehicles, primarily along Ohio’s designated alternative fuel interstate corridors.

The first grant awarded under the program during SFY’18 is for engine components to replace eight diesel tug boats built as far back as 1897, with engines that were last rebuilt in the 1950s. These will be replaced with four new diesel-electric tugs with current emission controls that will operate on batteries when not providing a ship assist. The project is supported with a combination of DMTF funds and a grant from U.S. EPA. Ohio EPA estimates that the project will reduce more than 40 tons of emissions annually from vessels operating in ports in the heart of Toledo, Cleveland, Ashtabula and Conneaut. The new tugs are being built in a Cleveland shipyard, adding to Ohio’s economy through job creation and retention.



Diesel tug boats are being retired and replaced with new diesel-electric tugs with emission controls.



Investigation and Evaluation of Human Health Risks Due to Perfluorinated Chemicals

During SFY’17, in coordination with the Ohio Air National Guard (OANG), the U.S. Air Force, the Ohio Department of Health and local health departments, Ohio EPA sampled ground water at or near five air bases for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). The sampling identified one sector of concern at Wright-Patterson Air Force Base (WPAFB).

In Feb. 2018, the City of Dayton informed Ohio EPA and WPAFB that fire-fighting foam was used at the city’s Fire Training Center located on the eastern edge of the Mad River wellfield. Sampling confirmed the presence of PFAS compounds in both the raw and finished water from Dayton’s Ottawa Treatment Plant, which receives water from various production wells in the Mad River wellfield. Dayton also provided ground water sampling results which confirmed the presence of PFAS in ground water wells near the city’s Tait’s Hill Wellfield, which is adjacent to the Fire Training Center. Due to the contamination found near the Tait’s Hill Wellfield, Ohio EPA has required Dayton to conduct investigations to determine the source of the PFAS detected in the raw water at the Ottawa Plant. Dayton also is conducting a feasibility study to determine the best method of treating PFAS contamination to remove these chemicals from the potable water supply. Dayton plans to complete the feasibility study and its investigation of the Fire Training Center by the end of 2018.

During SFY'18 Ohio EPA increased efforts to identify potential human health drinking water risks due to PFOA and PFOS. The Division of Drinking and Ground Waters (DDAGW) continues to work with WPAFB and the City of Dayton to investigate and mitigate the impacts of perfluoroalkyl and polyfluoroalkyl substances. Coordination with U.S. EPA Region 5 and 3 and the state of West Virginia will further address the contamination associated with the use of fire-fighting foam.

Both Dayton and WPAFB conduct quarterly sampling of a sentinel well network designed to detect contamination migrating toward their production wells. WPAFB regularly collects water samples from all production wells and treats two production wells impacted by PFAS in its Area A drinking water system. In summer 2018, WPAFB plans to install additional monitoring wells in Areas A and B to identify potential sources of PFAS near Huffman Dam and the Area B production wells.

Identifying and Addressing Potential Vapor Intrusion

Recognizing that previously closed facilities may still pose some threat to nearby residents and businesses, in SFY'17, Ohio EPA initiated a new process to identify and address areas that may be subject to vapor intrusion of trichloroethylene (TCE).

As part of this initiative, Ohio EPA developed new guidance outlining response action levels and timeframes for common contaminants of concern at vapor intrusion sites across the state. This guidance is used at residential and commercial sites that have the potential for vapor intrusion from contaminated soil and ground water.

Since the guidance was adopted, the Agency has evaluated a large number of current remedial sites and historically remedied sites to ensure ongoing protectiveness. In SFY'18, Ohio EPA focused a large amount of resources to investigate and remediate impacts to homes from vapor intrusion of certain chemical solvents such as TCE and continues to ensure that any potential imminent human health risks are addressed quickly.

Innovation, Development, Training, Safety and Assistance

Ground Water Program Reorganization

Historically, Ohio EPA's ground water program staff have served as consultants to other Agency divisions for all matters relating to ground water. This work was carried out under memorandums of understanding (MOU) and funding was transferred from the contracting division to DDAGW. Geologists also provided technical assistance to other Agency and state programs as needed.

In May 2018, Ohio EPA reorganized the existing ground water program and transferred 29 geologist positions to the divisions formerly served through the MOU – the Division of Environmental Response and Revitalization (DERR) and the Division of Materials and Waste Management (DMWM). DDAGW retained 23 positions to support the Source Water Assessment and Protection and Underground Injection Control programs, Clean Water Act Section 106 activities and technical ground water support to the Division of Surface Water. This reorganization was designed to improve decision making, reduce management structure for DDAGW, allow DERR and DMWM more control over priorities and to integrate ground water reviews and expertise within their programs. A Ground Water Coordinating Committee is being formed to ensure statewide consistency within and across programs.

Response to Harmful Algal Blooms (HAB) at Public Water Systems

Ohio EPA manages and coordinates response to algal bloom reports, maintains the ohioalgaefinfo.com website and cyanotoxin database, and provides technical assistance and training related to HAB sampling procedures, treatment optimization, reservoir management and other related topics. Thanks to these efforts, and steps taken by proactive public water systems including source water monitoring, rapid treatment optimization and prevention at the source, Ohio has not had any HAB-related drinking water advisories since 2014.

Under Ohio's HAB rules, more than 60 public water systems have triggered development of Treatment Optimization Plans and nearly 20 are now working on Cyanotoxin General Plans. These requirements and routine monitoring at the water system have led to earlier identification of toxin-producing blooms and rapid response. Ohio EPA continues to coordinate with U.S. EPA, USGS, NOAA and others to address science gaps, readily share knowledge with state and local partners and connect Ohio public water systems with the tools they need to ensure safe drinking water. To assist

communities in detecting and treating HABs, Ohio EPA provided monitoring equipment grants and allocated \$150 million for no-interest loans.

The HAB program also plays a leadership role by developing guidance and coordinating state response with the Ohio Department of Health and Ohio Department of Natural Resources. It also provides training, outreach events and technical assistance across the state to local health districts and other local agencies.

In an ongoing effort to provide safe finished drinking water free of HAB toxins, Ohio EPA's lab analyzed nearly 3,500 cyanobacteria samples from susceptible water systems around Ohio. Many of these were emergency samples analyzed outside of normal business hours in response to suspected toxin presence in finished drinking water and source water. Division of Environmental Services staff also have trained and certified approximately 40 public water system and commercial labs to analyze for HABs using analytical methods developed by the Agency.

Building Ohio's Economy

Cleveland-Cliffs Inc.

Ohio EPA's technical specialists continue to process complex permits for new and expanding facilities that retain and support Ohio businesses while including conditions that are protective of human health. Cleveland-Cliffs applied to build a new hot briquette iron manufacturing facility in Toledo. To make the project a reality, the company had to navigate at least 12 environmental permits, certifications and consultation/approvals required by local, state and federal laws and regulations. Ohio EPA was directly involved in eight of those permits/certifications, ensuring protections for air, surface water, wetlands and brownfield redevelopment.

"The air permitting team from Ohio EPA and the City of Toledo Environmental Services were highly professional and knowledgeable. Their focused, coordinated efforts along with regular communications to our team resulted in an efficient and thorough permitting process."

*Jason Aagenes, Cleveland-Cliffs
Director, Air Regulatory Strategy and Programs*

Building Businesses and Communities

The Division of Environmental and Financial Assistance (DEFA) provides both technical and financial assistance to help businesses and communities maintain compliance, improve infrastructure and save money through innovative and common-sense pollution prevention and sustainability efforts.

DEFA's Office of Compliance Assistance and Pollution Prevention (OCAPP) provides free and confidential assistance to help businesses comply with environmental requirements. During SFY'18, OCAPP provided environmental assistance to more than 5,000 businesses and other organizations. This includes 177 site visits and assistance in completing 843 forms – including permit applications and other Ohio EPA paperwork. OCAPP staff participated in 43 presentations and training events, reaching more than 1,677 people with information about pollution prevention and environmental compliance.

DEFA's Compliance Assistance Unit (CAU) conducts on-site technical assistance visits and works directly with operators to address compliance at small wastewater treatment plants. Thanks to this assistance, many communities have resolved treatment problems and identified ways to save money through energy efficiency and other best management practices. During SFY'18, CAU staff conducted 227 wastewater treatment plant visits and provided training to more than 1,300 individuals through 27 training events and workshops.

Funding to Help Communities Address Wastewater and Drinking Water Needs

In SFY'18, Ohio EPA's state revolving fund loan programs provided millions of dollars to help Ohio communities improve drinking and wastewater infrastructure.

Through the Water Pollution Control Loan Fund (WPCLF), Ohio EPA offers financial and technical assistance to public entities (villages, cities, counties and sewer districts) for wastewater-related projects, including improving wastewater plants, replacing sewers, elimination of sewer infiltration/inflow, and infrastructure development or improvement to address combined sewer overflows and unsewered areas. During SFY'18, Ohio EPA awarded more than \$845 million in WPCLF loans to Ohio communities.

Since 2016, Ohio EPA has offered the Home Sewage Treatment System (HSTS) program, which provides funding to communities to help low- to moderate-income home owners repair and replace failing systems. In 2018, 70 counties and two cities applied for up to a maximum of \$200,000 each to distribute funds under the program. In total, approximately \$13.2 million in principal forgiveness funding will help communities address failing home sewage treatment systems. To date, 975 soil evaluations and design projects have been completed and 1,200 systems have been repaired or replaced. The Agency also is providing nearly \$16.7 million in additional principal forgiveness to provide collection capacity in unsewered areas and address other infrastructure priorities, particularly in economically disadvantaged and small communities.

Ohio EPA's Water Supply Revolving Loan Account (WSRLA) provides financial assistance to communities for planning, design, construction and improvements to public water systems. Ohio EPA awarded WSRLA loans totaling close to \$106 million to help communities address drinking water infrastructure needs. Small, disadvantaged communities received about \$26.3 million in principal forgiveness funding.

Ohio EPA leverages financial resources through our SRF programs to address some of the state's most significant water quality challenges, including harmful algal blooms and combined sewer overflows. Loans totaling just over \$72 million were awarded during SFY'18 through the WPCLF program for infrastructure improvements and equipment to reduce phosphorus and other nutrients. In addition, close to \$109,000 was made available through the WSRLA program for water systems to purchase cyanotoxin testing equipment. Ohio EPA committed WPCLF funding at no interest to help communities address aging and failing storm water and sewer infrastructure. During SFY'18, more than \$400 million in loans, of which \$75 million were no interest, were awarded for 18 combined sewer overflow projects.

Promoting Recycling and Environmentally Sustainable Practices

[Ohio's Materials Marketplace](#)

In April 2017, Ohio EPA launched the Ohio Materials Marketplace (OMM) — a free, online platform for Ohio businesses, nonprofits and government organizations to facilitate the reuse of materials that would otherwise be destined for disposal in landfills. To date, more than 700 members have joined OMM and 3.3 million pounds of materials have been exchanged for reuse and diverted from landfills, saving members more than \$152,000.

[Recycling and Litter Prevention Grants](#)

DEFA's Recycling and Litter Prevention (R&LP) grant program awards competitive grant funding each year to support recycling community development, market development, litter management and scrap tire management. In 2018, the program awarded grants totaling more than \$3.9 million to support 60 projects impacting communities throughout the state.

[Encouraging Environmental Excellence \(E3\) Program](#)

Ohio EPA's E3 Program recognizes businesses, organizations and government entities for achievements in environmental stewardship. During SFY'18, Ohio EPA acknowledged 11 Gold Level, seven Silver Level and eight Achievement Level E3 recipients. This was the first year Ohio EPA recognized three organizations with a new Platinum Level award for their efforts to expand their environmental sustainability programs beyond their own facilities to make a positive impact on their surrounding community.

Air

Ohio EPA regulates more than 16,000 facilities and 76,000 air pollution sources. During SFY'18 the Division of Air Pollution Control (DAPC) issued more than 2,000 permitting actions and 530 permit-by-rule authorizations.

Attaining the 2008 Lead Air Quality Standard

On Oct. 15, 2008, U.S. EPA substantially strengthened the national air quality standards for lead, revising the standard from 1.5 µg/m³ to 0.15 µg/m³. Portions of three Ohio counties — Fulton, Cuyahoga and Logan — did not meet the standard and were designated nonattainment by U.S. EPA. The partial nonattainment area in Logan County was redesignated on Sept. 26, 2014. After nearly 10 years, U.S. EPA's recognition of Cuyahoga County's attainment was

effective on July 31, 2017, and Fulton County's attainment of the standard was effective on March 13, 2018. Based on air quality data, the state now meets the 2008 lead standard.

Asbestos Program Merger

To eliminate duplication of efforts and confusion that occurred when asbestos was regulated by two different Ohio agencies, House Bill 49 (HB 49) called for a single asbestos program. Beginning Jan. 1, 2018, all Ohio Department of Health (ODH) asbestos program regulations and responsibilities related to asbestos licensing, training and prior notification were transferred to Ohio EPA. As part of this process, the Agency revised and adopted ODH's asbestos licensing rules and merged existing notification forms. Applicants are now able to submit forms online thanks to the creation of a new notification database. The Agency also is developing a new asbestos licensing system which will allow customers to submit applications and pay fees online. All state of Ohio and local air agency asbestos inspectors have been trained as abatement supervisors and are now performing both asbestos licensing and renovation/demolition inspections during the same project inspection.

Land

Creative Use of Former Landfill Space

Brooklyn Landfill Solar Project

The City of Brooklyn, Cuyahoga County, partnered with various firms to install a 4-megawatt solar array at its closed 38-acre landfill. DMWM authorized the city to repurpose the landfill for productive use. The supporting structure of the solar panels sits on top of the landfill cap, with no penetrations, and ensures the continued integrity of the cap. Cooperative power agreements allow the city to supply power to its adjacent municipal garage and county buildings. All design plans, solar panels, support structures and installation were supplied by Ohio-based businesses. The solar array can be enlarged in the future to supply additional power.

Cleaning up Illegal Dumping

ARCO Site

In partnership with the Cuyahoga County Board of Health, Ohio EPA removed more than 300,000 cubic yards of illegally disposed demolition debris from the ARCO site in East Cleveland, Cuyahoga County. The two-phase cleanup took approximately nine months to complete. During Phase 1, clean hard fill was removed for recycling use. During the second phase, demolition debris was taken to a licensed disposal facility.

During the cleanup, a large fire broke out in the debris pile, causing the cost and complexity of debris removal to increase significantly. Cleveland Division of Air Quality, with assistance from DAPC, conducted extensive air monitoring during the whole removal process to ensure nearby residents were not being exposed to air contaminants. Ohio EPA and the Attorney General Office are working to recover the cleanup costs from the responsible parties. The Agency is now working with local community officials to promote a more responsible use of the property.

Ensuring Adequate Waste Disposal Options

During calendar year 2017, Ohio EPA issued final permits-to-install for the following municipal and residual solid waste landfills, providing approximately 88 million cubic yards of additional capacity for the environmentally secure disposal of solid wastes in Ohio.

- Apex Sanitary Landfill — Jefferson County, 61 million cubic yards, 16 years of remaining capacity
- Crawford County Landfill — Crawford County, 6.9 million cubic yards, 39 years of remaining capacity
- Suburban Landfill — Perry County, 18.7 million cubic yards, 18 years of remaining capacity
- Lafarge North America — Paulding County, 1.8 million cubic yards, 202 years of remaining capacity

Ohio EPA also approved five final permits-to-install to date in calendar year 2018, for three municipal solid waste landfills and two solid waste transfer facilities. These permits authorize approximately 45 million cubic yards of new disposal capacity.

- Girard Transfer Station — Trumbull County, establishment of new solid waste transfer facility

- Preble County Sanitary Landfill — Preble County, 0.26 million cubic yards, 18 years of remaining capacity
- Franklin County Sanitary Landfill — Franklin County, 45 million cubic yards, 24 years of remaining capacity
- Maharg Transfer Facility — Mercer County, expansion of solid waste transfer facility
- Rumpke Sanitary landfill — Hamilton County, increase in authorized daily waste receipt limit.

Emergency Response

Ohio EPA's Office of Emergency Response (OER) responds to environmental emergencies 24-hours-a-day, 7-days-a-week via Ohio EPA's spill hotline. Often these emergencies are the result of an accidental release of chemicals or other materials that present an imminent threat to human health, safety and the environment. OER's 11 on-scene coordinators are specially trained and equipped to deploy to emergency incidents to assist local emergency response personnel in mitigating the release of chemicals and other materials.

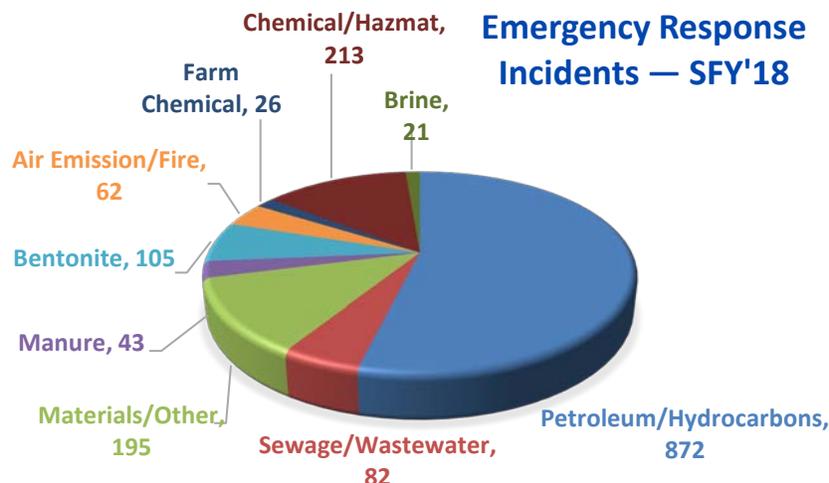
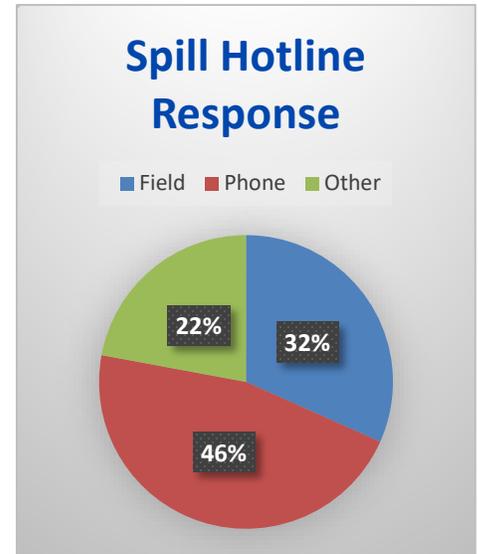
As shown in the chart to the right, OER received 2,333 incident release reports to the Ohio EPA Spill Hotline.

Throughout Ohio, local response partners are well experienced and fully capable in managing incidents without needing OER staff on scene. This allows OER to focus on incidents that present challenges to our response partners and require OER on-scene assistance. In nearly half of the incidents (1,079), on-scene coordinators provided technical assistance and coordination services to local response partners via telephone. Managing an incident by phone provides cost savings to both Ohio EPA and the responsible party.

On-scene coordinators conducted field responses to directly assist, coordinate and mitigate 739 incidents in conjunction with local response partners (fire, police, local EMA, other state agencies).

After initial assessment, 515 reports to the spill hotline were determined to be non-emergency incidents that needed further investigation by individual Ohio EPA programs. These types of complaints are forwarded directly to the affected Ohio EPA program through a formal referral process.

The chart below shows the number of incidents based on the predominant chemical or material that was released. Petroleum/hydrocarbons make up most of released material, due in large part to the number of transportation accidents that involve the release of fuels and oils. Other chemicals and hazardous materials, which also has a high correlation to transportation-related incidents, make up the next most common released material. Manure releases totaled 43 which is down from previous years. However, bentonite releases from drilling operations are higher, likely due to the increase in pipeline infrastructure work. The 26 farm chemical releases represent herbicides or pesticides as well as ammonia, urea or other fertilizer releases.



Building a Future

Evaluating and Addressing Brownfields, Abandoned Gas Stations and Environmental Contamination

The Site Assessment and Brownfield Revitalization program provides free assistance to communities and their partners with brownfield revitalization projects. This assistance includes: conducting environmental site assessments; technical assistance; project guidance; and brownfield training. Funding is from U.S. EPA grants and state resources. During SFY'18, the program assisted 24 communities with site-specific assessments totaling more than 77 acres of brownfield property across 21 counties. The program also worked to match sites with other funding options by working cooperatively with the Ohio Development Services Agency and the Ohio Department of Commerce/State Fire Marshal's Bureau of Underground Storage Tank Removal. Through this partnership, 11 communities received the prerequisite assessments to apply for the Abandoned Gas Station cleanup program, leveraging \$400,000 in cleanup funding. Project successes include business expansion, a new community school, commercial development assistance partnering with the Small Business Association and planning for redevelopment of a former landfill site.

The Voluntary Action Program (VAP) allows companies to voluntarily investigate environmental contamination and, if needed, clean up a site. During SFY'18, the program granted 24 Covenants Not to Sue to volunteers. More than 600 acres were cleaned up across 18 counties, with an additional 17 projects currently under review. VAP staff have also provided thousands of hours of requested technical assistance on ongoing cleanup projects.

Safe Storage and Disposal of Hazardous Waste

Ohio EPA's hazardous waste program conducts inspections at operating facilities that generate hazardous waste and oversees treatment, storage and disposal of hazardous waste in Ohio. During SFY'18, hazardous waste program staff conducted approximately 500 generator inspections, permitted facility inspections and complaint inspections. Ohio's compliance rate with hazardous waste laws is high, less than two percent of our hazardous waste inspections result in escalated enforcement. We also ensure that companies provide adequate financial assurance to perform cleanup at approximately 100 sites. Ohio EPA continues to oversee more than 80 permitted treatment storage or disposal facilities, processing permit applications/renewals and various modifications to existing permits.

To document progress at remediation sites, U.S. EPA's Government Performance Results Act 2020 goals include various environmental indicators, including: human exposure under control; ground water migration under control; remedy construction complete; and performance standards attained. In SFY'18, Ohio EPA met our program goals, achieving a total of 42 environmental indicators at various sites, including multiple indicators at individual sites. Although the complexity of the remaining sites poses a challenge, the Agency is working to ensure that sites in the hazardous waste program's sitewide remediation process meet these goals as well.

Ensuring Proper Cleanup and Remediation

Ohio EPA's remedial program oversees state-led remediation projects that are not in the VAP or hazardous waste program. These projects are mostly nonoperating facilities. In SFY'18, Ohio initiated a review of all of the sites undergoing remediation within the program to determine if sites are currently meeting U.S. EPA's human exposure environmental indicator criteria. These criteria are designed to document that human health exposures are under control and demonstrate clean up progress. Evaluation of the more than 90 sites in the remedial program is underway and, to date, has affirmatively documented progress.

In addition to these state-led remediation projects, Ohio EPA assists and oversees cleanup at various federal sites operated by the Department of Defense and Department of Energy. Three of the largest sites, Camp Ravenna Joint Military Training Center, Wright-Patterson Air Force Base and the Portsmouth Gaseous Diffusion Plant, require considerable oversight resources.

American Ditch Clean-Up

The American Smelting and Refining Company (ASARCO) facility at 1363 Windsor Ave. in Columbus operated as a zinc smelter from 1920 until 1986. By-products of the operation included clinker — a waste product from the smelting furnaces which contained cadmium and zinc. The clinker was spread across the 47-acre site and, as a result, water draining from the site contained varying amounts of zinc and cadmium. Some of this water drained into what is known as American Ditch, contaminating soil in the ditch. In addition to the soil contamination, debris and other waste material accumulated in American Ditch and on adjacent property over the years, creating an unsightly view for nearby residents.



American Ditch before and after cleanup.

Approximately 20 years after closing the facility, ASARCO declared bankruptcy. As part of the bankruptcy settlement, Ohio EPA received funding to clean up the contaminated soil in American Ditch. Ohio EPA hired a contractor to remove the contaminated soil and some of the waste that had collected in and around American Ditch. During 2016 and 2017, the contractor removed approximately 245 tons of contaminated soil along a 500-foot section of American Ditch. As part of this clean-up project, the contractor also removed approximately 15 tons of waste debris. As a result, the contaminated soil has been removed and American Ditch is now much more scenic for area residents.



Water

Implementation of New Lead and Copper Rules to Protect Drinking Water

With the passage of House Bill 512 (HB 512) during SFY'17, Ohio EPA adopted new lead requirements. More than 1,000 public water systems must now perform annual monitoring for lead and copper and meet two-day public and consumer notice requirements. If public water systems fail to meet the deadlines for reporting lead results and lead action level exceedances to consumers set in HB 512, Ohio EPA will perform those public and/or consumer notices. This ensures that consumers in Ohio are provided with information about lead concentrations in drinking water much faster than the current Federal reporting requirements for the lead and copper drinking water program. Beginning Oct. 1, 2018, public water systems must provide filters when completing line replacements in areas known or suspected to have lead service lines. DDAGW is developing implementation guidance for public water systems to meet this requirement.

Total Maximum Daily Load Program

New requirements included HB 49 for Ohio EPA's Total Maximum Daily Load (TMDL) program are now being integrated into practice. The Big Darby Creek Biological and Water Quality Study was the first report sent out for stakeholder review and input following the new outreach requirements. Changes made to the program include:

- formalized stakeholder involvement throughout TMDL development;
- additional items of consideration in implementation and wasteload/load allocation; and
- a requirement to undertake rulemaking for stakeholder notification and determining significant public interest.

Lisbon Dam Removal

The Lisbon Dam on the Middle Fork Little Beaver Creek, Columbiana County, has been removed as part of the Natural Resource Damage Assessment restoration project for Nease Chemical. The dam removal also was an implementation goal of the federally approved TMDL pollution reduction target for Little Beaver Creek. In Nov. 2017, Ohio EPA sampled at the former dam pool and collected fish species including variegate darters, rosyface shiners and northern hog suckers, all indicators of good water quality.



Variegate darters were one of the species collected from the former Lisbon Dam pool in November 2017.

Biological Monitoring Confirms Improvement and Identifies Issues of Concern

Cuyahoga River Watershed

During the summer of 2017, the Division of Surface Water performed an intensive stream survey on the mainstem of the Cuyahoga River. Ohio EPA will sample the tributaries to the Cuyahoga in summer 2018, including a special study of the ship channel. The survey has been timed to release the report in 2019 on the 50th anniversary of the river catching fire. In addition, the data will be used to determine if any of the Beneficial Use Impairments for the Cuyahoga Areas of Concern can be delisted.

Do Not Eat Fish Advisory Lifted for Portage Canal and Summit Lake, Reduced for Others

Fish can be part of a healthy diet and evaluations of fish tissue are showing some places where anglers can eat all of certain varieties of fish that they can legally catch. Each year, Ohio EPA partners with Ohio Department of Health and Ohio Department of Natural Resources to develop the Sport Fish Consumption Advisory. Unless otherwise noted, a general advisory is in place that recommends limiting one meal each week of Ohio-caught fish. Some areas in this year's Ohio fish study were evaluated for the first time, and the general advisory was applied as a baseline, unless the data show a less restrictive advisory. There are notable improvements (along with new recommendations) which lift previous restrictions and/or now exceed the state's one fish meal per week baseline advisory. Among the noticeable improvements from fish data collected last summer: do not eat advisories were removed for channel catfish in Portage Canal and Summit Lake and replaced with less strict recommendations. In addition, many fish species in Indian Lake now have no restriction. Other waterbodies recognized as improved or less restrictive than the one fish per week recommendation for certain species include: Guilford Lake, Lake Nesmith, Maumee River, Rocky Fork Lake, Sugar Creek and Summit Lake.

Advisory Added for Tuscarawas River near Massillon

A new Do Not Eat Advisory added to this year's Ohio fish consumption recommendations is for common carp in the Tuscarawas River between Massillon and New Philadelphia. This designation is based on polychlorinated biphenyls (PCBs) found in the tissue of common carp in this river section.

Construction Storm Water General Permit Renewal

Annually, DSW issues general permit coverage to an average of 2,150 construction projects. Previously, DSW had three construction storm water general permits:

- Statewide;
- Big Darby Creek watershed; and
- Portions of Olentangy River watershed.

On April 23, 2018, DSW issued a new generation of the construction storm water general permit, combining all three individual general permits into one. The new general permit authorizes storm water discharges from construction activity disturbing one or more acres and is applicable statewide.

In addition to combining the three general permits, the new permit also maintains special conditions that apply to the Big Darby Creek watershed and portions of the Olentangy River watershed.



Rules – Summary (from 07/01/17 – 06/18/18)

The attached table contains those rules which were filed with the Joint Committee on Agency Rule Review. This includes all rules adopted, amended, rescinded, and filed as no change within the summary timeframe, the number of rules in the rule package, a brief description of the rule package, and an indication of whether or not the rules were reviewed under the five-year rule review provision, and whether or not the rules went through the Common Sense Initiative Office.

Division	Rule Package	Rule Package Description	# of Rules	5YRR	CSIO Review	Effective Date
DAPC	Particulate Matter Standards	Contains requirements for emissions of particulate matter from stationary sources such as fuel burning equipment, storage piles, roadways and industrial processes.	11	Y	Y	1/20/2018
DAPC	Acid Rain	Contains the requirements pertaining to the Acid Rain program for limitation of emissions of sulfur dioxide and nitrogen oxides from fossil-fuel fired electrical generating units.	52	Y	Y	10/20/2017
DSW	Water Quality Standards	Contains the purpose and applicability of the water quality standards chapter and the criteria applicable to all waters.	2	Y	Y	1/2/2018
DAPC	SERC	Contains the purpose of the chapter and the special emergency planning fund.	2	Y	Y	No-change - Not applicable
DAPC	SERC	Contains the hazardous chemicals and emergency planning.	11	Y	Y	11/18/2017
DEFA	Water Pollution Control Loans	Contains the provisions for the implementation of the Ohio Water Pollution Control Loan Fund, authorized by Ohio Revised Code (ORC) Section 6111.036.	15	Y	Y	No-change - Not applicable
DERR	Universal Waste	Updated to designate hazardous non-empty aerosol containers, hazardous antifreeze and hazardous paint and paint-related wastes as universal wastes to promote the proper handling, recycling, or disposal.	18	Y	Y	12/21/2017
OEEF	Alternative Fuel Vehicles	Creates a new grant program, with funds to be awarded on a first-come, first-served basis to eligible applications, for alternative fuel vehicles.	3	N	Y	12/31/2017
DAPC	SERC	Contains the requirements for the identification of hazardous chemicals.	1	Y	Y	1/15/2018
DSW	Permit-to-Install (PTI)	Contains the applicability, exemptions, procedures, general permit requirements, isolation distances, and hold tank requirements.	4	Y	Y	2/23/2018
DMWM	Construction and Demolition Debris (C&DD)	Contains the requirements for financial assurance, leachate sampling, closure, and post-closure care.	7	Y	Y	2/10/2018
DAPC	Asbestos	Contains the transfer Asbestos Hazard Abatement Contractors, Specialists & Other Professionals program from ODH to Ohio EPA.	11	N	Y	1/1/2018
DMWM	Construction and Demolition Debris (C&DD) Operator Certification	Contains the definitions, operational requirements, and the new certification program for operators.	3	Y	Y	7/1/2018
DERR	Hazardous Waste Set O	Contains the hazardous waste management rules regarding permitting; identification and listing of hazardous waste; generator standards; treatment,	69	Y	Y	2/12/2018

Division	Rule Package	Rule Package Description	# of Rules	5YRR	CSIO Review	Effective Date
		storage, and disposal standards; land disposal restrictions; universal waste management; and used oil management.				
DAPC	Low RVP Fuels	Rescission of entire chapter of Low Reid Vapor Pressure fuel requirements.	8	Y	Y	1/20/2018
DSW	Credible Data Program	Contains the requirements for the credible data program for water data collection.	6	Y	Y	2/8/2018
DSW	Water Quality Standards	Contains the standards for the Wabash River drainage basin.	1	Y	Y	5/9/2018
DAPC	NOx Budget Trading Program	Contains the requirements for the NOx Budget Trading Program: definitions, general provisions, permits, compliance, allocations, tracking, transfer, monitoring, reporting, opt-in units, and compliance plans.	10	Y	Y	1/29/2018
DAPC	Clean Air Interstate Rule	Rescission of the entire chapter for Clean Air Interstate requirements.	21	Y	Y	1/29/2018
DMWM	Composting and Multi-Program (amend)	Contains the requirements for the composting program along with the multi-program definitions, applicability, and general administration.	49	Y	Y	In to be refiled status
DMWM	Composting and Multi-Program (no-change)	Contains the requirements for the composting program along with the multi-program licensing and financial assurance.	20	Y	Y	No-change - Not applicable
DAPC	Title V Permitting (amend)	Contains the requirements for the permitting of major sources of air pollution under Title V of the Clean Air Act.	9	Y	Y	JCARR jurisdiction ends 6/20/18
DAPC	Title V Permitting (no-change)	Contains the requirements for the permitting of major sources of air pollution under Title V of the Clean Air Act.	1	Y	Y	No-change - Not applicable
DSW	Water Quality Standards	Contains the technical process for converting Ohio water quality standards (WQS) to wasteload allocations that can be used as limits in National Pollutant Discharge Elimination System (NPDES) permits.	6	Y	Y	3/1/2018
DAPC	Asbestos	Contains standards for notification of demolition and renovation activities, standards for asbestos waste handling, standards for both active and inactive waste disposal sites, and other standards for asbestos manufacturing and asbestos containing materials	15	Y	Y	4/8/2018
DAPC	Open burning (amend)	These rules regulate the type of fire, size of fire, and materials that may be burned as well as establishing the requirements for obtaining a permission to open burn and penalties for violations of the open burning regulations.	4	Y	Y	4/30/2018
DAPC	Open burning (no-change)	These rules regulate the type of fire, size of fire, and materials that may be burned as well as establishing the requirements for obtaining a permission to open burn and penalties for violations of the open burning regulations.	2	Y	Y	No-change - Not applicable
DDAGW	Lead and Copper	Revisions to rules incorporate provisions from Ohio Revised Code (ORC) Section 6109.121, addressing lead notification and monitoring for community water systems and nontransient noncommunity water systems.	12	Y	Y	5/1/2018

Division	Rule Package	Rule Package Description	# of Rules	5YRR	CSIO Review	Effective Date
DSW	National Pollutant Discharge Elimination System (NPDES)	Contains the administrative and technical requirements for writing and obtaining individual wastewater discharge permits.	9	Y	Y	6/1/2018
DSW	Water Quality Trading	Contains the requirements for the development and implementation of water quality trading program in Ohio, which is voluntary program that allows a NPDES permit holder (point source) to meet its regulatory obligations by using pollutant reductions generated by another wastewater point source or non-point source.	14	Y	Y	5/11/2018
DSW	Wetland Water Quality Standards (amend)	Contains the wetland definitions, narrative criteria, and antidegradation requirements.	3	Y	Y	7/30/2018
DSW	Wetland Water Quality Standards (no-change)	Contains the wetland numeric chemical criteria for waste water discharges and use designations.	2	Y	Y	No-change - Not applicable
DAPC	Consumer Products (no-change)	Contain Ohio regulations on the content of volatile compounds in consumer products sold, supplied, offered for sale, or manufactured for use in Ohio.	8	Y	Y	No-change - Not applicable
DAPC	Consumer Products (amend)	Contain Ohio regulations on the content of volatile compounds in consumer products sold, supplied, offered for sale, or manufactured for use in Ohio.	2	Y	Y	6/14/18
DDAGW	Operator Certification	Contains the certification requirements for water and wastewater system operators to ensure public water and wastewater systems are operated by properly trained and qualified individuals	18	Y	Y	In to be refiled status
DERR	Voluntary Action Program – Remediation	Contains the requirements for remediation in the Voluntary Action Program (VAP).	1	N	Y	JCARR jurisdiction ends 7/5/18
DSW	Permit-to-Install Design Flow	Amending to account for water efficiency or water saving devices. An up to thirty percent reduction in the design flows for a wastewater treatment works may be considered by Ohio EPA, based upon the installation of low flow fixtures of water saving devices installed at the source of wastewater generation.	1	Y	Y	JCARR jurisdiction ends 7/4/18
DDAGW	Backflow Prevention and Underground Injection Control	Proposed revisions include: clarification that the Director must prepare a fact sheet when reducing requirements to make the rule consistent with its federal counterpart; changing the phrase "backflow prevention device" to "backflow preventer"; clarification that booster pumps installed before August 8, 2008 are required to have one of the three acceptable minimum pressure sustaining methods in place; clarification that a public water system (PWS) can deny or discontinue water service where any minimum pressure sustaining method, not just low pressure cut-off devices, are not installed or maintained properly.	4	Y	Y	JCARR jurisdiction ends 7/20/18
DSW	Biosolids	Contains the requirements for the disposal, use, storage, transfer and treatment of sewage sludge and biosolids, and the beneficial use of biosolids.	12	Y	Y	JCARR jurisdiction ends 8/18/18



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