![Ohio Environmental Protection Agency logo]

State Fiscal Year 2020

July 1, 2019 — June 30, 2020

Annual Report

July 2020

Message from the Director

This year's annual report highlights some of our many accomplishments as an Agency during State Fiscal Year 2020 (SFY20). A unique challenge for us during the past few months of this fiscal year has been maintaining our core functions and a high level of productivity during the COVID-19 pandemic.

I'm proud to report that we've accomplished much across all programs over the past fiscal year, including significant permit activity, processing rule packages, funding drinking water and wastewater infrastructure projects, and conducting several training and outreach events. Some of our programs have also taken this opportunity to tackle internal improvement projects, such as database clean-up projects. During these unprecedented times, our ability to continue so much of our core work and complete projects that will yield long-term benefits for our Agency and the state is due to the commitment and hard work of our team at Ohio EPA.

One key focus area for Ohio EPA during SFY20 has been supporting Governor DeWine's water quality priorities under H2Ohio and our statewide action plan for per- and polyfluoroalkyl (PFAS) substances.
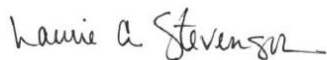
H2Ohio is a comprehensive, data-driven approach to long-term improvements in water quality in the Lake Erie basin and statewide. H2Ohio focuses on reducing phosphorus, creating wetlands, improving infrastructure, addressing failing septic systems, and preventing lead contamination. H2Ohio is a collaborative effort between the Ohio EPA, the Ohio Department of Agriculture, the Ohio Department of Natural Resources, the Lake Erie Commission, and many external experts and stakeholders invested in water quality improvements.

Ohio EPA is a proud partner in H2Ohio, and this annual report highlights projects that we are supporting to provide drinking water and wastewater infrastructure to smaller, economically disadvantaged communities. In addition, we are supporting the replacement of failing home septic systems in several Ohio counties and a pilot project to address lead in daycares and schools.

In September 2019 Governor DeWine asked Ohio EPA and the Ohio Department of Health (ODH) to analyze the prevalence of PFAS in Ohio's drinking water. This plan was announced in December 2019 and Ohio EPA secured the services of environmental contractors and testing labs to analyze samples from approximately 1,500 public water systems statewide. Our goal is to complete testing of these systems by the end of 2020. All testing information from Ohio EPA and other helpful information is being made available through a website jointly administered by Ohio EPA and ODH at *epa.ohio.gov/pfas*.

In addition to these major water quality initiatives, Ohio EPA saw significant accomplishments in other program areas, including continued improvements in air quality throughout the state. We continue to make progress on more effectively managing wastes, increasing recycling, cleaning up tires, and supporting the redevelopment of brownfield sites. Throughout the entire pandemic, we retained statewide emergency response capabilities with our team of highly-experienced professionals who assist communities every day in responding to environmental spills, releases, and other emergency incidents.

Finally, as we have become more adept in using virtual tools, we are excited about the possibility of exploring more opportunities to effectively use these tools in both inspection and assistance efforts, with a goal of reaching even more of our customers with important information and resources. We welcome your feedback, comments, and ideas as we head into the next fiscal year.

Laurie A. Stevenson

Laurie A. Stevenson, Director

H2Ohio – Protecting Ohio's Water

The H2Ohio Fund was proposed by Governor DeWine in March 2019 to invest in targeted solutions to help ensure safe and clean water for Ohioans across the state. Through the budget bill, the General Assembly invested $172 million in the plan. In November 2019, Governor DeWine announced the full details of the plan, which is being implemented by the Ohio Lake Erie Commission, Ohio EPA, Ohio Department of Agriculture, and Ohio Department of Natural Resources.

Governor DeWine announces the H2Ohio Plan.

H2Ohio focuses on:
- Reducing phosphorus in Lake Erie and elsewhere through farming best practices.
- Creating new wetlands to reduce excessive nutrients entering lakes and rivers.
- Addressing drinking water and wastewater infrastructure, including failing home sewage treatment systems in disadvantaged communities.
- Preventing lead contamination in water at daycares and schools.

Under H2Ohio, Ohio EPA will fund infrastructure projects in disadvantaged communities to help ensure they have safe drinking water and quality sewer infrastructure. H2Ohio will also help replace hundreds of failing home sewage treatment systems in low-income households to prevent the release of raw sewage onto property or into waterways. Additionally, through a combination of state and federal funds, H2Ohio will assess lead exposure in daycare centers and schools in high-risk areas of Ohio and will help replace lead pipes and fixtures. Ohio EPA entered into a total of 15 grant agreements for H2Ohio projects during SFY20.

Seven drinking water and wastewater infrastructure projects, listed and indicated on the map below, were partially funded through $4.21 million in H2Ohio grants. Ohio EPA was able to successfully leverage the H2Ohio grants with principal forgiveness and grant funding from other funding agencies.

- Pomeroy, $500,000; extend sewer lines to approximately 80 homes that currently have failing home sewage treatment systems.
- Williams County, $500,000; construct a new wastewater collection and treatment system that will serve approximately 90 homes in the unincorporated area of Kunkle.
- New Waterford, $500,000; extend drinking water line to provide water to Crestview Schools.
- Coshocton, $500,000; connect West Lafayette to Coshocton's drinking water system.
- Pike Water, Inc., $1 million; provide drinking water to 115 homes.
- West Milton, $500,000; provide sanitary sewers to the neighboring village of Ludlow Falls.
- Noble County Water Authority, $710,000; extend drinking water service to 91 residential customers.

Seven grants totaling $1.75 million were awarded to local health districts in the western basin of Lake Erie (Erie, Ottawa, Paulding, Putnam, Williams, Wood, and Sandusky). These grant awards will supplement principal forgiveness and allow the health districts to assist even more low-income homeowners in repairing and replacing failing HSTS. These replacements will have a direct impact on water quality in Lake Erie. Including these H2Ohio grants, to date, $10.8 million in principal forgiveness has been awarded for these projects to 73 counties through the Water Pollution Control Loan Fund (WPCLF), Ohio's state revolving loan program. Lastly, Ohio EPA entered into a $725,000 grant agreement with Greater Cincinnati Water Works to replace lead service lines at daycare centers. This grant is coupled with funding for water testing at daycares and will help to ensure that the daycare centers have clean and reliable drinking water.

At the request of the National Weather Service, H2Ohio is supporting the installation and monitoring of 20 new rain gage stations across northwest Ohio. Northwest Ohio has a need for additional rain gage stations due to the distance from regional Doppler radars and a lack of existing stations in the region. These rain gages will vastly improve the Service's rainfall and flooding forecasting. The new data also will increase the quality of modeling the runoff of nutrients and other pollutants throughout the Western Lake Erie Basin watershed and improve the accuracy of the Ohio Department of Agriculture's Ohio Nutrient Applicator Forecast. Ohio EPA has entered into an agreement with USGS for $111,000 to purchase and install rain gage equipment and $30,750 for monitoring and maintenance through the current state budget year using H2Ohio funds.

In Southern Ohio, H2Ohio invested $432,500 in water quality monitoring gages at three Ohio River tributary streamflow gages. This adds nearly 3,000 square miles of watershed coverage to Ohio EPA's Nutrient Mass Balance study and brings the total area monitored to 72 percent of the state.

Per- and Polyfluoroalkyl Substances (PFAS)

Ohio and states nationwide are faced with challenges related to per- and polyfluoroalkyl substances (PFAS), which have been manufactured and used for years in everyday items such as nonstick cookware, water-resistant clothing, and personal care products. PFAS chemicals have also been widely used in firefighting foams, at military installations and fire training facilities.

On Sept. 27, 2019, Governor Mike DeWine announced the establishment of an inter-agency workgroup to address the emerging issue of PFAS in Ohio, both for the protection of our natural resources and public health. In his announcement, he directed Ohio EPA and the Ohio Department of Health (ODH) to work together to develop a statewide PFAS action plan to address potential threats

The statewide action plan to analyze the prevalence of per- and polyfluoroalkyl substances (PFAS) in Ohio's drinking water was released in December 2019. The Ohio Statewide PFAS website at *pfas.ohio.gov* features a link to the action plan as well as an interactive PFAS dashboard and map.

The action plan will apply to nearly 1,500 public water systems regulated by Ohio EPA. Community water systems (CWS) serve at least 15 service connections used by year-round residents or regularly serve at least 25 year-round residents. Examples include cities, mobile home parks, and nursing homes. Non-transient, non-community systems (NTNC) serve at least 25 of the same persons over six months per year. Examples include schools, hospitals, and factories.

To date, nearly 250 public water systems have been tested for PFAS with the goal of completing the remaining systems by the end of calendar year 2020. In addition, the Agency's lab began PFAS sample confirmation analysis in support of the action plan in January 2020 and will continue until the action plan has been completed.

Private water systems are regulated by ODH. Private water systems are defined as any water system for the provision of water for human consumption if the system has fewer than 15 service connections and does not regularly serve an average of at least 25 individuals at least 60 days out of the year (e.g. private homes, small churches, etc.). ODH will evaluate the PFAS source water results from the public water systems sampled by Ohio EPA. If the data suggest that nearby private water system sources may potentially be contaminated, ODH will coordinate with local health districts and private water system owners for appropriate response measures, including providing guidance on testing recommendations and steps to reduce risks, including treatment options for private water systems.

Ensuring Safe and Reliable Drinking Water

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 $204 million to help communities address drinking water infrastructure needs. Small, disadvantaged communities received about $12 million in principal forgiveness funding. $96,000 in grants for emergency generators were supplied to water systems to enable continued operation of facilities during power outages.

The map here shows funding amounts provided through the WSRLF and companion Water Pollution Control Loan Fund (WPCLF) program which addresses wastewater needs.

SFY20 State Revolving Loan Fund Awards Through the WSRLA and WPCLF

Award Amount

- $0-$250K
- $250K-$500K
- $500K-$1M
- $1M-$5M
- $5M-$20M
- More than $20M

Ensuring Access to Drinking Water During the Pandemic

On March 31, 2020, Ohio EPA issued orders in the interest of public health to ensure that as many Ohioans as possible had access to drinking water as they followed the stay-at-home order to prevent the spread of COVID-19. The orders required that, statewide: (1) no public water system customers be disconnected from their water service for reasons of non-payment; (2) that anyone who had been disconnected as of January 1 be reconnected; and (3) that any such reconnection was to occur without a charge to the customer. HB 197, passed by the General Assembly on March 25, granted the director of Ohio EPA temporary authority to issue such an order. After the stay-at-home order was lifted at the end of May, Ohio EPA conducted outreach to mayors and terminated the orders on July 13.

Preventing and Addressing Harmful Algal Blooms (HAB)

To assist communities in detecting and treating HABs, Ohio EPA allocated $150 million for no-interest loans. In 2019, the HAB program performed more than 60 follow-up sampling events at Ohio water systems to assist with treatment optimization and HAB characterization.

One example of our important HAB investments includes the Village of Put-In-Bay. The Village uses Lake Erie as its source water, then treats it thru a multi-tech filtration system. Although there are only 311 service connections, the population swells to more than 20,000 during the tourist season. The treatment has proved efficient to remove turbidity but would not be effective in removing microcystins. Cyanobacteria (blue-green algae) in addition to producing toxins, can pose other treatment challenges for public water systems, including taste and odor, and shortened filter run times.

Based on the threat of HABs in the village, Put-In-Bay installed an ozone generation system. The village received a WSRLA loan and completed construction by the end of July 2019. In addition to the ozone installation, the village constructed a new water laboratory and a large break wall to protect the water plant from high lake levels. The coordination of the expedited project required extra effort from all the stakeholders. In the end, the village of Put-In-Bay is better equipped to produce safe drinking water year-round.

Addressing 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, eliminating sewer infiltration/inflow, addressing unsewered areas, and improving infrastructure to address combined sewer overflows. During SFY20, Ohio EPA awarded more than $481 million in WPCLF loans to Ohio communities. The map on the previous page shows funding amounts provided through both the WSRLF and WPCLF programs.

In 2016, Ohio EPA initiated the Home Sewage Treatment System (HSTS) program, which provides funding to communities to help low- to moderate-income homeowners repair and replace failing home sewage treatment systems. In SFY20, 72 local health districts applied for up to $150,000 each to distribute under the HSTS program. Since the program began, more than $33 million has been disbursed. To date, 2,478 soil evaluations and design projects have been completed and 3,081 systems have been repaired or replaced. In addition, close to $22 million in principal forgiveness provided collection capacity in unsewered areas and addressed other infrastructure priorities, particularly in economically disadvantaged and small communities.

Ohio EPA leverages financial resources through its 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 $73 million were awarded during SFY20 through the WPCLF program for infrastructure improvements and equipment to reduce phosphorus and other nutrients. Ohio EPA committed WPCLF funding at no interest to help communities address aging and failing storm water and sewer infrastructure. Sixteen loans totaling nearly $90 million, many of which were no interest, were awarded during SFY20 for combined sewer overflow projects.

Water Quality Improvements

Water quality trends in large rivers greater than 500 square miles have been consistently improving throughout the state of Ohio. Ohio EPA measures the ecological restoration of streams by evaluating fish and aquatic insect communities as well as the habitat of the streams.

In May 2020, U.S. EPA approved Ohio EPA's Final 2020 Integrated Water Quality Monitoring and Assessment Report. Highlights of the report include new harmful algal bloom recreation assessment methodologies and results for Lake Erie's Sandusky Bay shoreline and open water and central basin shoreline and open water units. Ohio EPA also assigned a high priority to Lake Erie's western shoreline, western open water, and islands shoreline assessment units for impairments of public water supply and recreation uses due to harmful algal blooms, and committed to begin developing a Total Maximum Daily Load report over the next two to three years.

The fish community in large rivers has steadily responded to improvements in water quality such as upgrades to wastewater treatment plants, improved farming practices (no-till, livestock fencing), and improvements in habitat (dam removal). In southeastern Ohio, reclamation of abandoned mines through the abandoned mineland program also has resulted in improved biological communities. Ohio EPA will be assessing all the large rivers in 2020 and 2021 and expects to see continued improvements of the biological communities.

Statewide Fish Consumption

Eighteen waterbodies now have less restrictive fish consumption advisories or remained at their previous advisory levels, which were all at or below the statewide one meal per week advisory. Seven advisories were updated from one meal per week to unrestricted consumption, three advisories from one meal per week to two meals per week, and nine advisories from one meal per month to one meal per week. Ohio EPA's role includes collecting fish from Ohio's rivers, lab analysis (approximately 400 fish samples), and working with the Ohio Department of Health in data calculations and advisory reviews.

Scioto and Muskingum Rivers

The lower Scioto River continues to show ecological restoration. Sensitive fish such as state threatened blue suckers are found in the lower section of the Scioto River. The removal of dams and improved water quality in the Scioto River have also allowed fish to return to their ancestral spawning grounds, especially prehistoric fish such as paddlefish and shovelnose sturgeon shown on the following page. The Muskingum River also has shown improvements with the return of sensitive species such as river redhorse and state threatened blue suckers. Removal of the dams on the Muskingum River would greatly improve habitat and allow fish passage to ancestral spawning grounds.

Improving Air Quality

During SFY20 the Division of Air Pollution Control (DAPC) issued more than 1,580 permitting actions and 410 permit-by-rule authorizations. Ohio EPA issued several major installation permits this year, including permits for AMG Vanadium, LLC for a ferroalloy production facility in Zanesville and the NorthStar Bluescope Steel, LLC expansion of its steelmaking operations located in Delta.

Reducing Diesel Emissions

Ohio's Diesel Mitigation Trust Fund (DMTF) will provide $75 million over the next decade for projects to reduce diesel emissions. Ohio EPA awarded $12.8 million in the second round of competitive grants from Ohio's share of the Volkswagen settlement to replace or repower heavy-duty diesel vehicles and off-road equipment in 26 Ohio priority counties.

The 42 projects receiving grant awards are estimated to reduce annual emissions of more than 49 tons of nitrogen oxides (pollutants that form ozone smog) and more than 23 tons of other pollutants. These new grants will provide a portion of the cost to replace 123 school buses, 19 public transit buses, 92 heavy diesel trucks, two pieces of airport ground support equipment, and one switcher locomotive.

The new vehicles requested by the fleet owners include 201 new clean diesel, 16 compressed natural gas, seven propane, and 13 all-electric. A third round of funding for diesel vehicle and equipment replacements opened June 1, 2020, and Ohio EPA is preparing to offer the first round of funding for electric vehicle charging stations to open July 1, 2020.

Steubenville Area Attains 2010 Sulfur Dioxide Standard

On June 22, 2010, U.S. EPA set a lower one-hour sulfur dioxide (SO2) standard of 75 ppb. The Steubenville and Muskingum River areas of Ohio classified as nonattainment for this new standard. In 2019, the Steubenville area was recognized by U.S. EPA as attaining and was redesignated effective Nov. 29, 2019. Based on current air quality data, the entire state now meets the 2010 sulfur dioxide standard and Ohio EPA is working with U.S. EPA to redesignate the remaining nonattainment area.

Columbus Attains 2015 Ozone Standard

On Oct. 1, 2015, U.S. EPA revised the air quality standard for ozone, replacing the 2008 eight-hour standard of 75 ppb with a standard of 70 ppb. Three Ohio areas – Cleveland, Cincinnati, and Columbus – did not meet the standard and were designated nonattainment by U.S. EPA. On August 21, 2019, the Columbus area, which includes Delaware, Fairfield, Franklin, and Licking counties, was the first area in the country to be recognized by U.S. EPA as attaining this standard.

Columbus Meets Ozone Air Quality Standard

Solid Waste in Ohio

During SFY20, the Agency reviewed and approved the following projects to increase landfill capacity while also ensuring the safe management of solid waste facilities in Ohio.

Rumpke Sanitary Landfill

Vertical and lateral expansion, increased limits of waste placement by 240 acres to a total of 570 acres and increased capacity by 105 million cubic yards to a total of 196 million cubic yards.

Wilmington Sanitary Landfill

Vertical and lateral expansion, increased limits of waste placement by 24 acres to a total of 45 acres and increased capacity by 3,201,972 cubic yards to a total of 5,147,929 cubic yards.

Pike Sanitation Landfill

Increased final slopes, reconfigured grades of the floor and leachate collection system, incorporated 5 acres of the inactive scrap tire monocell, increased limits of waste placement by 1 acre to a total of 133 acres and increased capacity by 1,774,000 cubic yards to a total of 26,054,000 cubic yards.

Ohio EPA also guides efforts to reduce waste. The new 10-year state solid waste management plan, which was approved in April 2020, guides the future programming and plan development for all of Ohio's 52 solid waste management districts. The plan incorporates several changes, including renumbered goals for solid waste management, revised protocols for calculating recycling opportunities, and increased programs and services requirements for the industrial sector. Ohio's waste reduction efforts are highlighted in the table to the right.

Ohio EPA's Recycling and Litter Prevention Grant Program awarded five grants, totaling approximately $211,000, to a strategically and geographically diverse group of communities to work with The Recycling Partnership to tackle the issue of non-recyclable trash in recycling. These efforts, spanning three years and reaching more than 105,000 households, are focused on education and outreach in pilot areas around the state to create

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Waste Reduction/Recycling Top Five*

Residential/Commercial

29.7 percent (4,321,847 tons) reduced/recycled
- yard waste – 1,357,574 tons (31 percent)
- corrugated cardboard – 815,300 tons (19 percent)
- metals – 574,936 tons (13 percent)
- all other paper – 464,070 tons (11 percent)
- commingled recyclables – 287,979 tons (7 percent)

Industrial

50.24 percent (8,056,035 tons) reduced/recycled
- metals – 4,207,265 tons (52 percent)
- FGD – 926,392 tons (12 percent)
- other (combined) – 775,275 tons (10 percent)
- corrugated cardboard – 644,560 tons (8 percent)
- plastics – 403,174 tons (5 percent)

* The top five recovered materials by weight and percent of total (excluding "all else") in 2018.

the best model for replicable success statewide. Community partners include Akron, Centerville, Cincinnati, Columbus, and Fairfield county.

Supporting Composting as a Sustainable Alternative to Landfill Disposal

Ohio EPA has received increased interest in capturing the food waste stream for purposes of composting by universities, businesses, and organizations. The motivations for this initiative generally include diversion of the waste stream from landfills, the processing of the waste into a compost product, and other environmental benefits associated with composting. Grocery stores and other food waste generators send a significant amount of waste to landfills. Some studies suggest up to 80 percent of a grocery store's waste stream is comprised of food waste, while approximately 50 percent of all food waste generated in the United States comes from businesses that handle food. Statewide, during 2018, approximately 65,085 tons of food scraps were processed by registered composting facilities in Ohio.

The Ohio Department of Rehabilitation and Corrections – Composting Food Waste and Providing Training Opportunities

Ohio EPA assisted the Ohio Department of Rehabilitation and Corrections (ODRC) with permitting a class II composting facility at the London Correctional Institution in London. The establishment of this facility follows a successful composting facility at ODRC's Allen County facility. Not only do these facilities support ODRC's mission of more environmentally sustainable operations, they also provide educational and skill-building opportunities for inmates.

Ohio EPA and ODRC partnered with The Ohio State University's Ohio Compost and Manure Management Program to develop the Composting Facility Operator Certification program. This program provides the training to prepare ODRC inmates for jobs in the composting industry and provides certification of expertise upon passing the written examination. Private partners are required to hire the trainees upon release or assist in securing employment within the composting industry.

With additional financial assistance from Ohio EPA's community recycling grants program, these facilities operate as public-private partnerships, which are the first such partnerships with prisons in the nation. The new London facility has the potential to process 20,000 tons of food scraps per year, which would otherwise be disposed of in landfills.

Overseeing Construction and Demolition Debris Operations

Senate Bill 2, passed by the Ohio General Assembly in 2017 with support from industry, gave Ohio EPA the authority to regulate construction and demolition debris (C&DD) processing facilities for the first time. Under SB 2, Ohio EPA established a program to certify operators of C&DD landfills to oversee the day-to-day operations of these facilities. C&DD certified operators must have operational experience and complete 10 hours of continuing education training annually. In the first year of the program, six training courses from a variety of providers helped to certify 27 operators and 16 interim operators.

Cleaning Up Scrap Tires

For more than two decades, Ohio EPA has been working diligently to address the problem of illegal scrap tire dumping in Ohio. In the late 1980s, an estimated 47 percent of all scrap tires generated in the state were unaccounted for and presumably open dumped or otherwise improperly disposed. This was a huge problem, considering that Ohio citizens generate, on average, 11 million scrap tires per year.

Today, Ohio has a comprehensive regulatory framework for managing scrap tires that covers all aspects of scrap tire management including transportation; collection; storage; recovery; disposal; beneficial use; remediation; and market development. During SFY20, Ohio's scrap tire remediation program completed 145 jobs, removing almost 1,300 tons of tires through clean-up efforts totaling approximately $611,000. Funding for clean-up comes from scrap tire collection and disposal fees.

One successful project completed during SFY20 was Bob's Tire in Ottawa County. As a result of negotiations between Ohio EPA, the property owner, facility operator, and scrap tire transporter, conditions at the site were addressed quickly, including the removal and proper disposal of the tires. See before and after photos on the following page.

Before

After

Mosquito Control Grants

The drive to address scrap tires stems not only from the vast number generated, but also two main associated health threats – mosquitos and fires. Scrap tires provide an ideal breeding environment for mosquitos due to their circular shape that holds water and organic debris which provides nutrition for the larvae and insulating properties that can speed up mosquito egg hatching and larval growth. A bite from an infected mosquito can spread the disease to humans and livestock. Scrap tires are also made of very combustible compounds. When burned, the average passenger car tire is estimated to produce more than two gallons of oil, in addition to run-off oil and air pollutants released during fires.

In SFY20, Ohio EPA awarded more than $795,000 in grant funding to 45 local health departments and one sanitary district for mosquito control activities, including more than $139,000 to remove scrap tires. The Carroll and Jefferson county general health districts received mosquito control grants for the first time.

The counties are highlighted in the map here, and a full list of grant recipients and the amounts of each grant is available at *epa.ohio.gov/Portals/47/media/20-21MCGFundingRecommendations.pdf*.

Mosquito control grants specifically target:
- mosquito surveillance;
- larval control;
- adult mosquito control, such as spraying where mosquito presence poses a risk to public health;
- community outreach; and
- breeding source reduction, including trash or tire removal.

Grants are issued in collaboration with the Ohio Department of Health's larger effort to mitigate the potential for an outbreak of mosquito-borne viruses. Over the last four years, Ohio EPA and the Ohio Department of Health have awarded $5.1 million to local health departments and communities for mosquito control programs.

Handling Hazardous Waste

The Agency conducted more than 500 compliance monitoring evaluations at operating facilities that generate, store, or dispose of hazardous waste. It also ensures that companies provide adequate financial assurance to perform cleanup at approximately 100 sites and oversee permit applications and modifications for more than 40 permitted treatment, storage, or disposal facilities. The program has worked extensively with two different companies to expand their operations and created additional job opportunities in Ohio.

The Hazardous Waste Remedial Program includes both corrective action and closure sites. There were four closure certifications completed during SFY20. Eight sites totaling more than 900 acres were deemed ready for reuse. An additional 58 sites underwent investigation and cleanup.

Waste Reduction through Innovation

Cinco Electronics Recycling (Cinco), a full-service electronics waste recycler, approached Ohio EPA about expanding its business into Central Ohio by starting a new, innovative lithium battery shredding operation. The entire process would be self-contained, the product material would be sent offsite for further recycling/reuse, and thousands of pounds of batteries would be diverted from disposal in landfills.

In order to process lithium batteries for recycling, a business must comply with Ohio's hazardous waste rules. The Agency communicated openly and regularly with Cinco about its proposed battery recycling line and the regulatory and permitting requirements associated with operating the facility. The new facility received final permits to begin site operations in February 2020. When the facility is fully operational, it will have the capacity to process approximately 40,000 pounds of batteries per day for recycling.

Supporting Economic Development through Property Cleanup and Reuse

The Joseph & Feiss Co. facility in Cleveland was redeveloped into the Menlo Park Academy.

In Dayton, the Mendelson Liquidation building was redeveloped into Delco Lofts and Lock 27 Brew Club.

Ohio EPA's Site Assessment and Brownfield Revitalization (SABR) program provides environmental site assessments, technical assistance, and training to communities to support the clean-up and redevelopment of brownfield properties - abandoned, idled, or under-used industrial, commercial, or institutional properties where expansion or redevelopment is complicated by known or potential releases of hazardous substances or petroleum.

During SFY20, SABR assisted 29 communities in performing site assessments at brownfield properties in 22 counties to support redevelopment of more than 297 acres. SABR also worked to match sites with other funding and, through a partnership with Ohio Development Services Agency and Bureau of Underground Storage Tank Regulation (BUSTR), provided 12 communities with the prerequisite assessments to apply for the abandoned gas station cleanup program, leveraging $690,000 in cleanup funding. Project successes include business expansion, commercial, and mixed-use development.

Ohio EPA Celebrates 25 Years of Cleanups, Redevelopment of Old Industrial Properties around the State

Ohio EPA's innovative Voluntary Action Program (VAP) has benefitted communities across the state economically and environmentally by encouraging property owners to voluntarily clean up land for redevelopment.

During SFY20, the program granted 36 covenants not to sue and provided thousands of hours of technical assistance on an additional 88 ongoing cleanup projects. Cleanups were completed in 10 counties totaling more than 530 acres, with an additional 13 projects currently under review. More than 13,540 acres on 615 sites in 69 counties have been cleaned up since the VAP was created in September 1994.

The Voluntary Action Program was created to cut through red tape that could stall redevelopment, providing property owners and communities a path to follow for remediating old industrial sites.

The program fits properties of all sizes – from former gas stations to properties covering hundreds of acres where former steel mills and factories once were located. The program has opened old lands to new industrial and commercial enterprises as well as new housing and parkland in communities large and small.

The Voluntary Action Program and a handful of redeveloped former industrial sites around the state are highlighted in a 25th-anniversary video available at *epa.ohio.gov/derr/volunt/volunt*.

Federal Facilities and Superfund

The Federal Facility program continues to oversee cleanup at sites operated by the Department of Defense and Department of Energy (DOE). In July, U.S. EPA presented the DOE Fernald Preserve with the second annual *National Federal Facility Excellence in Site Reuse* award for the National Priorities List category. The annual award program was established in 2018 to recognize outstanding efforts to remediate and restore federal sites for reuse.

Ohio EPA serves primarily in a regulatory support role to U.S. EPA for Superfund sites. During SFY20, the agencies coordinated on a substantial update to the Superfund Memorandum of Agreement, which memorializes responsibilities and communications between the parties. Ohio EPA referred four sites to U.S. EPA for removal actions, provided regulatory support for 45 sites and worked with U.S. EPA to complete five-year remedy reviews for six sites.

Outreach, Training, and Citizen Engagement

The Office of Compliance Assistance and Pollution Prevention (OCAPP) provides free and confidential assistance to help businesses comply with environmental requirements. During SFY20, the Agency responded to nearly 9,000 environmental assistance requests from Ohio's businesses, communities, and other organizations. This includes 98 site visits and assistance in completing 1,545 forms, including permit applications and other Ohio EPA paperwork. Staff participated in 25 presentations and training events, reaching more than 5,896 people with information on pollution prevention and environmental compliance.

Ohio EPA's internal training efforts during SFY20 included providing extensive training to employees on various technical subjects and software tools and technologies. Ohio EPA, along with other state agencies, adopted the Learn Ohio platform as a tool to organize and track training activities. In addition, Ohio EPA conducted training on LEAN management and initiated nine LEAN process improvement projects, with five now in the implementation phase of the project and four still in process.

During SFY20, Ohio EPA issued more than 100 news releases and moderated 56 public meetings and/or information sessions attended by more than 1,100 people. Staff members responded to about 2,700 calls, letters, and emails from the public and sent out citizen advisories to more than 6,500 people announcing public meetings/comment periods and permit decisions for nearly 50 topics. The staff also helped set up Agency displays and provided information for the 2019 Ohio State Fair and other community events. Our social media presence includes 7,600 Twitter followers, 600 Instagram followers, 4,600 LinkedIn followers, and 700 YouTube subscribers. Our graphics department produced or assisted with the formatting of more than a hundred publications, kept the Agency's website current, and created, edited, or posted more than 175 videos throughout the year.

Embracing and Leveraging Technology

Drinking Water Online Portal (DROP)

As part of the drinking water asset management rules, public water systems must submit metrics on an annual basis. The Agency is working with systems to submit the metrics electronically and providing internal and external trainings on the use of the new Drinking Water Online Portal (DROP). This data will then be used to look at long-term system trends and indicators on where the program can provide more assistance to public water systems in the future.

Electronic Service for Submitting Solid Waste and Composting Reports

The Agency added online services for submitting quarterly fee reports for solid waste facilities and composting facility annual reports. The new services eliminate the need to print and mail the reports and allows reporting entities easy access to past reports. It also enhances the Agency's ability to compile and analyze the annual data we provide to solid waste management districts so they can evaluate the success of their programs.

Promoting Environmentally Sustainable Practices

The Ohio Materials Marketplace (OMM) is a free, online platform for Ohio businesses, non-profits, and government organizations to facilitate the reuse of materials that would otherwise be destined for disposal in landfills. To date, more than 1,000 members have joined the OMM, saving more than $220,000 while diverting nearly four million pounds of material from Ohio landfills through material reuse exchanges.

Ohio EPA's Encouraging Environmental Excellence (E3) Program recognizes businesses, organizations, and government entities for achievements in environmental stewardship. During SFY20, Ohio EPA acknowledged four Platinum, eight Gold Level, and five Silver Level E3 recipients.

The Encouraging Environmental Excellence in Education Program (E4) recognizes any K – 12 public or private school for their achievements in environmental stewardship and their efforts to educate students on environmental topics. Nine schools have been recognized at one of the program's three recognition levels: root, branch, and leaf, which are based on how many of the "three R" environmental principles (reduce, reuse, and recycle) the school is incorporating in its curriculum or school activities.

Rules – Summary (from 7/1/19 – 6/30/20)

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	Sulfur Dioxide Nonattainment Area	Contains the sulfur dioxide (SO2) emission limit for facilities in Jefferson County.	3	N	Y	7/05/2019
Agency	Public notice	Contains the administrative procedures Ohio EPA utilizes to govern public notices performed by the agency.	1	N	Y	7/27/2019
DDAGW	Drinking Water Source Protection Plan	3745-81: Contains the primary drinking water standards for public water systems (PWS), as set forth in the federal Safe Drinking Water Act Amendments. 3745-91: Establishes requirements for submission of plans for construction of PWSs or for making significant alterations to existing PWSs.	9	Y	Y	No-change - Not applicable
DAPC	NOx Budget Program (amends)	Contains Ohio's Nitrogen Oxides (NOx) Budget Program (NBP) definitions, compliance certification, and monitoring and reporting.	5	Y	Y	8/22/2019
DAPC	NOx Budget Program (no-change)	Contains Ohio's Nitrogen Oxides (NOx) Budget Program (NBP) permit requirements.	1	Y	Y	No-change - Not applicable
DERR	Voluntary Action Program	Contains the requirements for participation in the VAP, fees, certified laboratories, property assessments, risk assessment, ground water classification, urban setting designations, remediation, variances, no further action letters, and audits.	15	Y	Y	10/17/2019
DAPC	NOx Budget Trading Program	Contains the definitions and methods of measurement for the NOx Budget Trading Program.	2	Y	Y	No-change - Not applicable
DMWM	Chapter 513 Activities	Contains the requirements for engaging in filling, grading, excavating, building, drilling, or mining on land where a hazardous waste facility or solid waste facility was operated.	11	Y	Y	1/01/2020
DDAGW	Public Water System Licenses	Contains the definitions and requirements for a license to operate or maintain a public water system.	6	Y	Y	No-change - Not applicable
DDAGW	Surface Water Treatment	Contains the requirements for source monitoring, filtration, and disinfection of surface water sources.	3	Y	Y	No-change - Not applicable

DDAGW	Surface Water Treatment	Contains the requirements for notification, disinfection, filtration, recordkeeping, and backwash recycling for surface water systems.	5	Y	Y	3/23/2020
DAPC	Ambient Air Quality	Contains definitions and ambient air quality standards.	2	Y	Y	3/10/2020
DAPC	Air Pollution Emergencies	Contains air pollution emergencies, action programs, and emergency orders.	3	Y	Y	No-change - Not applicable
DDAGW	Primary Drinking Water Standards Rules	Contains requirements for the inorganic chemical monitoring, reporting, recordkeeping, classification and treatment techniques, and microbial options for Cryptosporidium treatment.	5	Y	Y	Has not been final filed.
DDAGW	Underground Injection Control	Contains requirements for the signatories, well area permits for Class V wells, and conditions applicable to all permits.	3	Y	Y	No-change - Not applicable
DAPC	NOx RACT	Contains definitions and applicability, and the requirements for RACT emission limits, compliance deadlines, and compliance methods.	5	Y	Y	6/18/2020
DSW	Human Health Criteria	Contains the water quality criteria for the protection of public health in the Ohio River mainstem, Ohio River basin, and Lake Erie basin.	3	Y	Y	In 'To Be Refiled' status with JCARR
DMWM	MSW Licensing	Contains the licensing requirements for solid waste facilities, infectious waste facilities, and construction and demolition debris facilities.	27	Y	Y	7/01/2020
DAPC	ERC Banking	Contains the definitions and requirements for Emission Reduction Control Banking program.	5	Y	Y	No-change - Not applicable
DAPC	Toxic Air Contaminants	Contains the requirements for toxic air contaminants.	1	Y	Y	No-change - Not applicable
DMWM	Professional Engineer	Contains the requirements for what type of actions submitted to the division need to be stamped by a professional engineer.	1	Y	Y	JCARR jurisdiction ends 8/29/20.