



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

# Letter from Director Nally

Dear Ohioans:

My first six months as director of Ohio EPA were a whirlwind. During my first week in office, I traveled with my colleagues from the departments of agriculture and natural resources to Grand Lake St. Marys to meet area officials and learn more about locally developed solutions to problems plaguing the state's largest inland lake.

We immediately began working together to implement solutions, including conducting a whole-lake alum treatment, increasing dredging, removing rough fish, installing water quality conditioners in tributaries and working to develop a farmer-led watershed improvement group. We have high hopes for improved water quality in Grand Lake St. Marys.

I have spent considerable time on the road since January, getting to know the highways and back roads of Ohio. I've done 140 speeches and public events, and have learned a great deal about Ohio's needs, challenges and opportunities. I have great vision for Ohio EPA's role in creating those opportunities. Some of my priorities include improving permit processing efficiency; enhancing technology; and providing more assistance to regulated facilities.

Here are some accomplishments from my first 100 days at Ohio EPA:

## Reduced Permit Backlog

Since January 1, 2011, the Division of Surface Water reduced the number of permit-to-install applications pending for greater than the statutory review timeline of 180 days by 36 percent, from 78 to 50 projects.

## Streamlined Operations

Three waste divisions were merged into two. The consolidation, which occurred in April, will save about \$475,000 annually.

## Revamped Small Business Compliance Outreach Program

We are re-tooling the Office of Compliance Assistance and Pollution Prevention and stepping up our marketing efforts so businesses are aware of our services, including: a toll-free hotline for regulatory questions; plain-English publications; workshops/training; and assistance with permit applications and other forms.

## Launched Efficiency Task Force

Within my first three weeks, I created a Streamlining and Efficiency Task Force to make recommendations about how the Agency can improve operations. The group received 1,400 suggestions; many will be implemented.

Ohio EPA has a dedicated, professional workforce that cares deeply about Ohio's environment. I look forward to working with the staff, businesses, local officials and communities as we move Ohio forward. It's going to be an exciting and progressive year.



Scott J. Nally



# State Addresses Harmful Algal Blooms

In June, Ohio EPA, Ohio Department of Health (ODH) and Ohio Department of Natural Resources (ODNR) released the *Ohio Harmful Algal Bloom Response Strategy*. The purpose of the strategy, which focuses on publically owned, recreational lakes with public beaches and/or boat ramps, and drinking water source waters, is to protect people from toxins produced by cyanobacteria that may be in recreational or source waters at concentrations that can affect human health. Cyanobacteria can produce a variety of toxins which can cause illness and death in humans and animals. These toxins include liver toxins, nerve toxins and skin toxins.

The report outlines the thresholds set for identified algal toxins, establishes monitoring protocols and identifies the process for posting and removing surface and drinking water use advisories.

To ensure that the public could find the information they needed about HABs and the current state of public waters, including any advisories posted, ODH, ODNR and Ohio EPA developed [www.ohioalgaefinfo.com](http://www.ohioalgaefinfo.com). This one-stop shop provides background information about HABs, tips for staying safe when visiting public lakes, links to sampling information and current advisories and contact information for reporting suspected HABs.

In addition to helping develop the state strategy, Ohio EPA worked on other HAB-related projects in SFY11.



Algal bloom at Lake Hope State Park.  
Photo courtesy of ODNR.

## Division of Drinking and Ground Waters

In response to the harmful algal blooms detected in 2010, Ohio EPA sampled the raw and finished drinking water of 19 surface water public water systems for algal toxins. Out of 131 samples collected, only one sample of finished (treated) drinking water contained microcystin above detection limits; it was still below Ohio EPA's 1 part per billion drinking water threshold.

To assist public water systems, the division developed customized harmful algal bloom educational materials, including a bloom characterization guide and algacide application fact sheet. The division also partnered with the American Water Works Association Ohio Section Technology Committee to develop a white paper about algal toxin treatment for drinking water facilities.

## Division of Surface Water

The division collected data and coordinated with the other state agencies on posting advisory notices. The advisory notices are designed to provide information and warnings to protect public health from the potential health impact of algal toxins present in HABs.

The Ohio Water Development Authority awarded Ohio EPA a grant to look for microcystins in fish fillets from Grand Lake St. Marys. The division is contracting with State University of New York – Syracuse to analyze the fish fillet samples. Preliminary results from fish collected in November 2010 indicate that microcystin is not accumulating or persisting in fish fillets, with reporting limits of approximately 0.2 parts per billion (ppb), well below any health-based advisory limits.

The division collected a second round of fish in June 2011. At the time of this report, the samples were in the process of being analyzed. With the help of ODNR, the division plans to collect three more rounds of fish fillets for microcystin analysis. Depending on the results of the analyses, Ohio EPA will issue advice or conduct additional fish tissue monitoring if microcystin is found in fillets at or near levels that might trigger a "Do Not Eat" fish advisory, which is currently set at 28 ppb.

## Division of Environmental Services

In response to the presence of blue-green algae in water bodies across Ohio in the summer of 2010, the division implemented additional methods to analyze algal toxins samples. In SFY11, DES analyzed 376 algal toxins samples.

The division also researched analytical equipment that could be used to perform toxin analysis, evaluated rapid test kits for microcystin analysis, prepared fish tissue samples for algal toxin analysis and helped develop a workshop for algae identification and cell counting.

# Division of Air Pollution Control

The 1970 federal Clean Air Act and its 1990 amendments require U.S. EPA to set clean air standards to protect public health and welfare. The division ensures those standards are met throughout Ohio by developing air quality emission limitations, issuing permits to emissions sources and monitoring outdoor air quality.

## Attaining Air Quality Standards

The Clean Air Act requires U.S. EPA to periodically review and update the air quality standards as needed. U.S. EPA has standards for six contaminants: sulfur dioxide; carbon monoxide; nitrogen dioxide; lead; particulate matter; and ozone.

To measure air quality, Ohio EPA operates one of the country's most extensive air pollution monitoring networks, comprised of 245 ambient air monitors, including 48 ozone monitors.

Once U.S. EPA adopts a revised standard, Ohio EPA must determine if areas of the state are meeting the new standard, and, if not, develop plans to bring the area into attainment. States have three years to submit plans and five years to attain the standard, with extra time available if the state is making good faith efforts to meet the standards.

U.S. EPA adopted more restrictive air quality standards for sulfur dioxide and nitrogen dioxide during SFY11. Ohio EPA has monitored violations of the more restrictive standard for sulfur dioxide in Belmont, Columbiana, Jefferson, Lake, Meigs and Morgan counties and will be required to develop plans to reduce emissions from sources there. Ohio EPA will be required to deploy additional air quality monitors for nitrogen dioxide to determine if the new standard is being achieved.

The entire state is currently attaining the standards for carbon monoxide and ozone. At the close of SFY11, Ohio had 27 nonattainment counties for fine particulates (PM<sub>2.5</sub>) and lead. U.S. EPA anticipates adopting a new standard for ozone in SFY12 and PM<sub>2.5</sub> in SFY13.

## Efficient Permitting

Each year, the division reviews more than 1,100 permit applications. In SFY11, work continued to streamline the permit issuance process. In SFY11, the division issued:

- 1,713 installation permit approvals (installation permits and permit-by-rule approvals);
- 996 operating permit approvals;
- 646 installation permits (permit-to-install/permit-to-install and operate/general permit) in an average of 116 days, exceeding the goal of 180 days;
- 902 permit-by-rule approvals in an average of 21 days; and
- 60 installation general permits in an average of 33 days.

The division also reduced the backlogged number of installation permits in-process statewide to 179, better than the goal of 200. One year earlier, there had been 239 installation permits in process.

Division staff members continue to process high-priority, complex permits for new facilities or major expansions of existing facilities to retain and support Ohio business opportunities. For example, Ohio issued the final permits for: an increase in the steel production capacity of Nucor Steel in Marion; new sand mold lines at Defiance Castings in Defiance; additional fuels to be burned at Mingo Junction Energy in Steubenville; new gas boilers at Campbell Soup in Napoleon; and a new biomass renewable fuels project at the DP&L, Killen Generating Station in Manchester. The division continued to receive positive comments from companies in appreciation of the efficient permit processing.

## Ensuring Compliance

The compliance rate for 1,498 high-priority facilities (those with large sources of air pollution) was 89.9 percent at the end of SFY11.



# Division of Drinking and Ground Waters

## Drinking Water Infrastructure Improvements

Ohio EPA awarded 36 drinking water loans totaling \$36.7 million and offered \$8.5 million in principal forgiveness (subsidies) through the Water Supply Revolving Loan Account (WSRLA). Twenty-five small (fewer than 10,000 people) public water systems serving a total of 58,500 people received \$13.4 million in subsidized drinking water loans, including \$8.8 million awarded to economically disadvantaged communities. As a result of the loan program, Ohio communities will save an estimated \$23.3 million in costs when compared to market loan interest rates. Funded drinking water projects included new or improved water distribution, treatment, storage and source water infrastructure that will help ensure that 1.5 million Ohioans have access to adequate and safe supplies of drinking water.

## Free Operator Certification Tests

The operator certification unit tested more than 2,300 potential water and wastewater operators. Using U.S. EPA grant funds, Ohio EPA provided 977 free exams, saving current and potential future operators of small public water systems more than \$105,000. The certification unit is developing a free web-based multimedia training for Class I Water Supply operators. Operators will be able to use the course for continuing education and to assist in preparing for the Class I examination.

## Ensuring Safe Drinking Water

Ohio EPA continued to ensure Ohioans have access to adequate quantities of safe drinking water through compliance assurance and enforcement actions. In SFY11, 98 percent of community public water systems met all health-based water quality standards.

The division finalized 62 enforcement actions, including: 22 Director's Findings and Orders; seven referrals to the Attorney General's office; four bi-lateral compliance agreements; and one set of emergency orders. The division continued to work with its recent authority to condition licenses to operate a public water system. In SFY11, the division issued 25 conditioned licenses to operate and proposed to deny three licenses to operate. Using this authority has improved Ohio EPA's working relationship with other regulating agencies, such as local health departments and liquor control enforcement officials. As part of these enforcement actions, the division assessed \$45,154 in penalties, including \$26,002 for supplemental environmental projects.

## Electronic Drinking Water Reports

Since July 2009, a system has been available for water systems and laboratories to report their data to Ohio EPA over the Internet. The implementation of eDWR reduced the number of monthly reports required to be submitted from as many as seven different types of monthly and quarterly reports to two monthly operating reports (MORs).

In July 2010, Ohio EPA regulations required certified laboratories to report all of their public water system data via eDWR. All certified laboratories complied with that requirement. The division receives approximately 12,000 coliform analysis reports and an additional 1,700 chemical analysis sample reports every month. The electronic receipt of both the MORs and sample data allows compliance determinations for each system to be substantially automated by the Safe Drinking Water Information System database.

## Source Water Protection

To further protect water resources that supply public drinking water, the division provided direct technical assistance with ground water flow modeling and mapping to 70 public water systems. Ohio EPA also endorsed 16 locally developed plans to protect sources of drinking water that together provide drinking water to more than 85,000 Ohioans. Almost a quarter of Ohio's cities and villages now have endorsed source water protection plans.

## Monitoring Underground Injection of Waste

The division's Underground Injection Control (UIC) unit investigated 39 Class V injection wells that were potentially located in source water protection areas to determine their potential impact on the drinking water source. Class V wells are used to inject non-hazardous fluids underground. Fluids are injected either into or above an underground source of drinking water. Examples of Class V wells include surface water runoff drainage wells; septic systems; dry wells; motor vehicle waste disposal wells; and industrial, commercial and utility disposal wells. In SFY11, the UIC unit facilitated the closure of 40 Class V wells that posed a danger of contaminating a drinking water source.

## Permit Requirements Removed for Some Small Businesses

Rules were modified to no longer require underground injection control Class V permits for facilities that inject less than 2,500 gallons per month of water softener reject water into their septic system. About 365 facilities will be affected by the new business-friendly rule provision that releases them from the requirement. The rule amendments will eliminate the \$2,000 permitting fee for these businesses if they fall under the exemption from obtaining the Class V permit. Facilities also avoid requirements to report monthly on the amount injected and analysis of the injectate.

## Protecting Ground Water

To ensure a consistent and effective approach to protecting Ohio's ground water, the division's ground water specialists completed 2,757 projects – including overview of permit applications, closure plans, ground water monitoring plans and data analysis – in support of Ohio EPA's regulatory divisions.

Two projects of particular note involved conducting an “unsafe water supply investigation” in Washington County to determine the source of nitrate contamination in Putnam Community Water Association water supply wells and assisting the Village of Camden in evaluating the extent of road salt contamination in its wellfield and monitoring its water supply wells. The division also assessed another four locations where the management and storage of road salt contributed to ground water contamination which affected public or private water supply wells.

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## Division of Surface Water

### Actions to Improve Water Quality

The division awarded 10 subgrants to local governments, watershed groups and others totaling more than \$2.8 million. Projects to be completed under these grants include restoration of streams, wetlands, riparian forests and habitat; removal of low head dams, conservation easements and innovative storm water improvement practices.

The division conducted water quality monitoring in the following water bodies: Ashtabula River, Deer Creek, upper Little Miami River, lower Scioto River and Tenmile Creek. U.S. EPA approved Ohio EPA's Total Maximum Daily Load (TMDL) reports for the lower Little Miami and Salt Creek.

The division completed comprehensive biological and water quality reports for five Ohio watersheds: Killbuck Creek, upper Great Miami River, Ohio Tributaries to the Shenango River (all since January), Ohio Brush Creek, and Sunfish Creek.

### Enforcement Program

In SFY11, the division issued 34 enforcement orders, assessed \$288,915 in cash penalties and secured \$56,966 toward implementation of supplemental environmental projects. In cooperation with the division, the Attorney General's Office secured six consent orders that included \$402,050 in cash penalties and \$150,000 toward supplemental environmental projects.

### Improved Customer Service and Efficiency

The average number of Agency review days for permits-to-install (PTI) decreased from 40 days in 2010 to 38 days in 2011.

From January through June 2011, the division reduced the number of PTI applications pending for greater than the regulatory deadline of 180 days by 75 percent (from 78 to 19 projects). This reduction resulted from a heightened awareness and focus on aging projects. Staff also worked to formalize additional protocols to work more aggressively and proactively with applicants and their consultants to prevent delays.

As of July 2011, the division eliminated the backlog of 401 water quality certification applications that had been under review for longer than the regulatory deadline. Ohio Revised Code mandates that 401 water quality certification applications be acted upon within 180 days of the application being considered complete. This is the first time the division has achieved this level of performance since electronic tracking was initiated in August 2008.

The division also used the Kaizen process to improve its process for issuing 401 water quality certifications and isolated wetland permits, and began developing an electronic process for submitting water quality certification applications.

## Rules

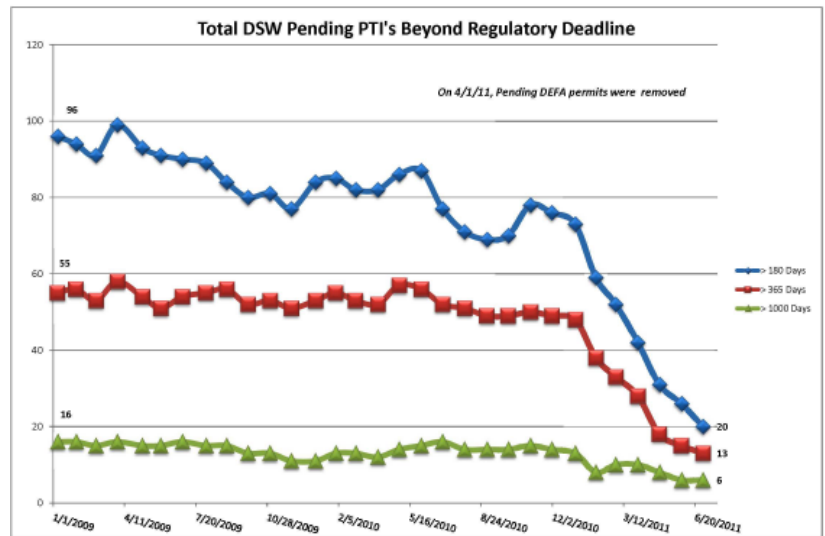
The division finalized the review of three rule packages and had five other rule packages in various stages of external review. The credible data rules were revised to update the necessary training and experience needed to submit credible data, as well as the requirements for sample collection, analytical methods, data assessment and quality assurance/quality control procedures for each of the three levels of credible data. Final revisions to water quality standards rules containing the beneficial use designations for specific water bodies throughout the state were adopted. Final revisions to rules addressing procedures to implement surface water quality standards and Ohio discharge permit requirements were adopted.

## Permits/Certifications

The division met wastewater discharge permit issuance goals for the eighth straight year, renewing more than 660 permits in SFY11. Staff also conducted more than 2,200 compliance inspections at regulated facilities.

The division continued to work with Ohio's combined sewer overflow (CSO) communities to meet U.S. EPA's national goal for CSO communities to come into compliance via an appropriate enforceable mechanism (discharge permit, consent decree, etc.). At the end of SFY11, 73 of 89 CSO communities had such mechanisms in place, meeting U.S. EPA's goal.

Since January 2011, the division issued a new general permit for geothermal system discharges and petroleum-related corrective actions.



## Outreach

Compliance assistance staff provided on-site technical assistance to more than 67 wastewater treatment plants. Ohio EPA's advice helped local operators improve efficiency, save money and achieve compliance.

Staff worked with the Ohio Department of Natural Resources, Ohio Water Development Authority and U.S. Army Corps of Engineers to develop an in lieu fee program for Ohio. Implementation of this program will provide additional mitigation opportunities for applicants for federal 404 permits, state 401 water quality certifications and state isolated wetland permits.

The division, along with the Ohio Department of Natural Resources and the Ohio Department of Health, updated the sport fish consumption advisories and informed the public of the latest results.

## Federal Oversight

A joint evaluation of the performance of Ohio's water programs was conducted by Ohio EPA and U.S. EPA in 2010. These water programs are partly funded through U.S. EPA grants. The joint evaluation found that the Ohio water program achieved significant accomplishments in several areas. For example, Ohio EPA's annual Significant Non Compliance (SNC) rate for SFY10 was 15.4 percent. This is significantly below the current projected national SNC average of 24.9 percent. Ohio EPA has 196 approved TMDLs, exceeding the SFY10 goal of 75 TMDLs. Ohio EPA made significant progress on several water quality standard actions including development of draft streams and lakes nutrient criteria, proposed revisions to human health criteria, proposed revisions to aquatic life use designations, and draft triennial revisions of the standards.

## Division of Environmental and Financial Assistance

The Water Supply Revolving Loan Account (WSRLA) and the Water Pollution Control Loan Fund (WPCLF) support major Ohio EPA priorities to protect public health and improve water quality. In 2011, WSRLA loans for drinking water improvements totaled \$36.7 million and WPCLF loans to address water pollution totaled \$498 million.

### Protecting and Restoring Aquatic Habitats

Columbus and Franklin County Metro Parks received \$2,438,000 from the WPCLF to restore Morgan Run headwaters. As one of the largest and healthiest upland wetland complexes known in the Darby watershed, protection and expansion of this important habitat will provide significant long-term surface water benefits for the watershed. Failure to protect the project area would likely result in the area being converted to residential uses in the coming years, or, at a minimum, allowing it to continue to discharge agricultural sediment and nutrient inputs into the watershed via Morgan Run, Hamilton Run and Hellbranch Run. Up to 244 acres will be restored to native vegetation and natural hydrology.

### Eliminating Sewage Overflows

The City of Toledo received \$10,778,918 from the WPCLF to construct a 2.7-million gallon storage basin, diversion chamber, influent and effluent piping, and dewatering pump station to capture wet weather flows from Regulator 33, which discharges excess wet weather flows to the Maumee River. The project is part of the city's 2009 long-term control plan for combined sewer discharges to Toledo's waterways. It will reduce untreated sewage discharges from the Maumee Avenue regulator from an average of 33 per year to no more than three per year. It will also decrease wastewater pollutant loadings to the Maumee River, thereby helping meet the water quality improvement goals of the plan.

### Fostering Local Cooperative Efforts

The City of Independence received \$53,323 from the WPCLF for the Lower Brookside Watershed Study to evaluate more than 520 acres of residential and park area that experience excessive flooding due to drainage issues in the watershed. This study will foster the creation of an ad-hoc watershed group of all stakeholders such as residents, municipal entities and governmental agencies. This partnership will be instrumental to the identification of the problems as well as the short-term and long-range structural and non-structural improvements and best management practices that can be pursued to benefit the watershed and its natural resources. The results of the study will provide an action plan to implement throughout the 530-acre watershed. A major emphasis of this study will be on the effects of storm water runoff on in-stream and stream corridor habitat. Currently, the Lower Brookside area is adversely affected by excessive quantities of storm water, not just flooding events. The study will recommend measures to control storm water at its source, and before it enters area streams. The study also will identify actions that will be eligible for WPCLF design and construction loan assistance.

### Improving Operations and Saving Money

The City of Vermilion received \$733,896 from the WPCLF for improvements at its wastewater treatment plant which will remove the existing, inoperable sludge centrifuge and appurtenances and install new dewatering components. Adding dewatering capacity will bring Vermilion into compliance with biosolids regulations, provide more flexibility in biosolids disposal, and save the City approximately \$50,000 annually in disposal costs.

### Protecting Human Health

The Village of Yorkshire received \$527,816 from the WPCLF to install a sanitary sewer system and participate in the joint construction of a regional wastewater treatment lagoon, which will alleviate problems associated with failing on-lot treatment systems. The lagoon construction will also be funded by grants and loans obtained by the villages of Osgood and North Star. These improvements are being conducted at the request of the villages, and are supported by Ohio EPA and the Darke County Health Department. Yorkshire needs sewers to abate a long-standing environmental hazard by preventing inadequately treated wastewater from entering village's storm water systems, and from eventually discharging into a tributary of Loramie Creek.



# Division of Environmental Response and Revitalization

The division oversees investigation and cleanup of hazardous substances and wastes that present a threat to human health and the environment, provides initial time-critical response to these threats, and oversees cleanup of unplanned releases of pollutants due to spills, accidents and other events.

## Responding to Emergencies

The Emergency Response (ER) program receives more than 10,000 calls each year on its toll-free emergency spill hotline, documenting pollution incidents, providing technical assistance and guidance. In SFY11, duty officers recorded 4,080 initial pollution incident reports for incidents involving releases of hazardous substances, oil and other pollutants; approximately one fourth of these reports were received after regular business hours.

On-scene coordinators responded to more than 935 incidents to investigate, provide technical assistance to local and federal first responders, abate releases and oversee cleanup activities. They also provided technical assistance by phone on at least 360 additional incidents.

In SFY11, ER received 91 calls on mercury spills.

## Addressing Abandoned Waste

The Orphan Drum Program received 53 complaints of abandoned drums on the toll-free emergency spill hotline in SFY11 and assisted with dozens of non-emergency and technical assistance calls. As a result of the complaints, 29 abandoned drums sites were characterized, transported and disposed of properly.

## Promoting Property Reuse

Through the Voluntary Action Program (VAP), the division issued 35 covenants not to sue to properties deemed protective of human health and the environment and available for productive reuse. Since the inception of the program, more than 9,000 acres of Ohio land have been made available for reuse.

The program provided technical assistance to 105 property owners or volunteers to facilitate voluntary action activities. Pass-through brownfield grants from U.S. EPA financed free assistance for 48 municipalities, allowing them to make significant progress with site assessments and cleanups.

The Site Assistance and Brownfield Revitalization (SABR) section assists local governments with the cleanup and marketing of contaminated and potentially contaminated properties, at conferences, through the web and other venues by:

- coordinating targeted brownfield assessments (TBAs);
- overseeing brownfield programs;
- marketing cleanup programs;
- maintaining the brownfield inventory;
- coordinating the VAP professional and laboratory certification and training programs;
- overseeing the VAP environmental insurance program; and
- providing outreach and training to local governments.

SABR assists the Ohio Department of Development with management of the Clean Ohio Fund, providing technical assistance to applicants and reviewing grant applications.

The division conducted 17 TBAs during SFY11 to determine if contamination exists at properties around the state. To date, Ohio EPA has used TBAs to assess more than 1,629 acres at 77 properties. TBAs are conducted free of charge at the request of local governments. The results of these assessments can help communities plan cleanup and redevelopment of brownfield properties.

## Assessing Environmental Conditions

Ohio EPA performs site assessments where there is suspected contamination to determine whether additional investigation or remedial action is needed to address threats to human health or the environment. During SFY11, division staff members completed four state site assessments and 10 federal site assessments.

## Site Investigation, Cleanup and Enforcement

The federal facilities program provides oversight of Department of Defense (DoD) remediation projects on active and former military sites with chemical and/or munitions hazards. During SFY11, the division oversaw projects at 10 active military installations and 28 formerly used defense sites. Division leadership also successfully settled a dispute with the U.S. Army to investigate and remediate unexploded ordnance washing ashore on Lake Erie originating from former military munitions ranges. Field work is scheduled to commence during SFY12 with oversight from the division.

In SFY11, Ohio EPA approved 10 hazardous waste closure plans and verified eight closure certifications.

While the ultimate goal of the Ohio EPA's RCRA Corrective Action Program is to achieve final cleanups, intermediate milestones – called “environmental indicators” – are used as a measure of program success. The two intermediate milestones track current human exposures and migration of contaminated ground water at sites subject to corrective action. In SFY11, Ohio EPA made nine determinations that human exposures were under control. This means there are no unacceptable human exposures to contamination at a site undergoing corrective action. In addition, Ohio EPA made eight determinations that contaminated ground water was under control. This indicates that the migration of contaminated ground water has stabilized.

During SFY11, the remedial response program oversaw investigation and cleanup activities at over 85 sites across the state by parties under orders. Six new administrative orders were successfully negotiated or closed out in SFY11, while three additional administrative orders remained in negotiation.

Additional SFY11 remedial response activities included:

- continued negotiation of seven Natural Resource Damage Assessment cases;
- continued development of preferred (cleanup) plans and final decision documents for six sites;
- ongoing enforcement actions (via the Attorney General's Office) in 12 cases;
- bankruptcy settlements in three cases involving four sites, and ongoing settlement negotiations (via the Attorney General's Office) in four cases involving 13 sites; and
- overseeing investigation and/or cleanup at six federal facilities.



Ordnance on the Lake Erie shoreline.

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## Division of Materials and Waste Management

### Providing Technical Assistance and Outreach

During SFY11, division employees provided technical assistance and educational outreach to the public and regulated community through public presentations, newsletters, the Answer Place, telephone calls, and other media. In light of growing concern regarding the handling of unused medications, DMWM published a guidance document on the proper disposal of hazardous pharmaceuticals from medical operations and provided a presentation on that subject to the Ohio Hospital Association.

DMWM continues to be a nationally recognized leader in hazardous and solid waste programs, which was demonstrated by its participation on association and agency workgroups including the Association of State and Territorial Solid Waste Management Officials (ASTSWMO), Organics Recycling Association of Ohio, Ohio Lead Prevention Committee, and State Coordinating Committee on Ground Water. Staff participated as presenters at national conferences hosted by ASTSWMO and BioCycle. Staff also regularly provided expertise in national discussions regarding the definition of solid waste and provided comments on U. S. EPA's proposal to regulate power plant ash as hazardous waste.

## Improving City Recycling Programs

The division sponsored discussions with Ohio's largest municipalities focused on improving the performance of their curbside recycling programs. Discussions focused on many operational issues, such as frequency of collection, appropriate container size, and truck selection, as well as citizen education, funding approaches and contracting for recyclable processing. Columbus, Cleveland, Cincinnati, Dayton, Akron and Toledo participated in these discussions, which have already resulted in positive outcomes. One participant has reported saving around \$300,000 annually based on the information that they learned during the meetings. The division plans to continue this effort in the future with additional, smaller cities.

## Ground Water Monitoring at Ohio's C&DD Facilities

As required by law, Ohio EPA developed a draft numerical evaluation system to prioritize how the division will spend funds collected for ground water monitoring at Ohio's construction and demolition debris (C&DD) facilities. These priority criteria include the facility's potential impact to human health, safety, the environment, and the potential to create a nuisance or cause or contribute to water pollution. Ohio EPA will begin ground water monitoring in SFY12.

## Compliance and Enforcement

The division issued six solid waste-related enforcement orders that assessed \$120,308 in cash penalties and secured \$30,202 toward implementation of supplemental environmental projects and \$283,552 in late fees. In cooperation with the division, the Ohio Attorney General's Office secured three judgments that included \$101,379 in cash penalties and \$37,571 toward supplemental environmental projects.

Hazardous waste staff completed 508 compliance evaluation inspections, including 145 at large-quantity hazardous waste generators and 40 at hazardous waste treatment, storage and disposal facilities. They also completed 111 financial record reviews and 245 focused compliance inspections. The division investigated 303 citizen complaints to determine compliance with hazardous waste rules.

In addition, the program issued 13 hazardous waste-related enforcement orders that assessed \$181,948 in civil penalties, secured \$110,632 toward implementation of supplemental environmental projects and required two companies to clean up areas where hazardous waste was not managed properly. In cooperation with the division, the Ohio Attorney General's Office secured four judgments that included \$57,500 in cash penalties.

## C&DD Rules

The division released rules for new and existing C&DD facilities for interested party review. Based on comments received, the division has been meeting with stakeholders from the regulated community to better understand their issues and concerns before filing the draft rules with the Joint Committee on Agency Rule Review.

## Finding New Options for Food Scrap Disposal

In collaboration with Ohio EPA's Office of Compliance Assistance and Pollution Prevention and Ohio Department of Natural Resources' Division of Recycling and Litter Prevention, the division continued to expand the Ohio Food Scraps Recovery Initiative. Participating businesses include supermarkets, restaurants, conference centers, stadiums, amusement parks, hospitals, zoos and universities. The Kroger Company, which piloted stores in its Columbus division in 2008, continues to expand its program and in SFY11, all Walmart and Sam's Club Ohio-locations participated in food scraps recovery programs that send the organic material to area composting and anaerobic digestion facilities. By focusing on this organic waste stream, Walmart and other businesses have been able to increase their recycling rate to 85 percent. Curbside collection programs are in place in five Ohio communities that offer residents with the opportunity to divert this nutrient-rich material from the landfill. Collectively, residential and commercial food scraps collection programs have resulted in a 38 percent increase in recovered food scraps from 2009 to 2010.

In 2010, food scraps composted by licensed composting facilities resulted in the reduced emissions of the equivalent of 34,403 metric tons of carbon dioxide. This reduction of greenhouse gas emissions is equivalent to removing 6,746 passenger vehicles from roadways, conserving nearly four million gallons of gasoline or providing annual electricity needs to 4,290 homes.

## Cleanup of Scrap Tire Dump Sites

During SFY11, Ohio EPA contractors removed and disposed of 184,792 passenger tire equivalents (PTEs) or about 1,900 tons of illegally dumped scrap tires collected from 86 sites in 30 counties. The scrap tire cleanups included one enforcement site (nearly 47,000 PTEs) and approximately 148,000 PTEs from 85 sites under Consensual Scrap Tire Agreements with property owners. Additionally, two sites had other solid wastes comingled with scrap tires. A total of 75 tons of solid waste was removed from those sites and properly disposed.

More than 90 percent of the scrap tires collected in Ohio continue to be recycled and reused in numerous ways, primarily as aggregate substitute for civil engineering projects and for the production of many rubber products. Tires are banned from disposal in landfills in Ohio, except for rare exceptions.

The Ohio General Assembly recently extended the Ohio Scrap Tire Program through June 30, 2013. This will allow continuation of program activities including scrap tire site cleanups, operation of a toll-free hotline at (877) 372-2621 for citizens to report tire dumps, law enforcement efforts, and the Ohio West Nile Virus Prevention Program.

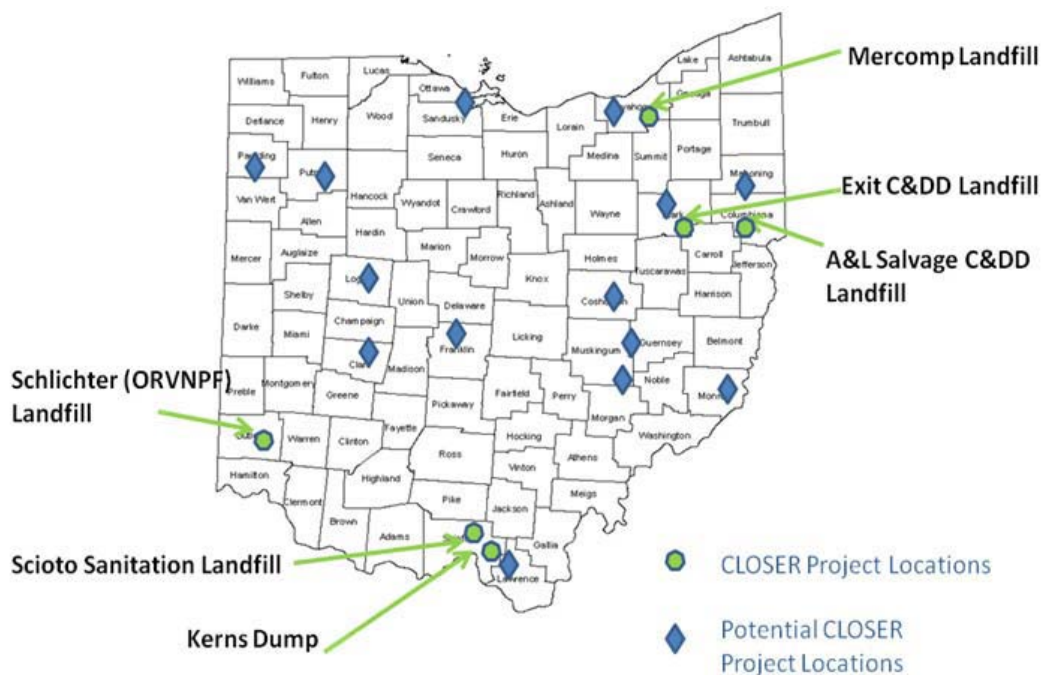
## Continuing to Address Abandoned Landfills

Ohio EPA continues to receive national recognition of its CLOSER program and successful results. In October 2010, the National Registry of Environmental Professionals recognized the CLOSER program with an Innovative State Program award.

The CLOSER program (Closed Landfills and Orphaned Site Evaluation and Rating) completed seven remediation projects at five sites with expenditures totaling more than \$6 million. Work provided by Ohio EPA contractors included erosion controls at an abandoned municipal waste landfill (Scioto Sanitation Landfill, Scioto County); placement of a landfill soil cap at the former Schlichter Landfill (Butler County); leachate management at the Exit C&D Landfill (Stark County); off-site landfill gas migration monitoring at the Mercomp Site (Cuyahoga County) and placement of a geo-composite cap with a passive gas monitoring system and leachate controls at the A&L Salvage Inc. Landfill (Columbiana County).

A&L Salvage Inc. (A&L) Landfill experienced numerous operational violations and environmental issues during its history as a construction and demolition debris landfill between 2001 and February 2009. A March 2010 agreed preliminary injunction required the landfill owners to forfeit \$3.7 million in closure bonds, while providing Ohio EPA access to the site to cap and close the landfill. The CLOSER Team worked with a contractor to prepare site-specific engineering designs as construction proceeded and coordinated regulatory and oversight issues. This unprecedented approach to a landfill closure project won the appreciation of local residents by eliminating health-threatening and oppressive hydrogen sulfide odors. The project approach resulted in substantial time and cost savings and was completed within eight months. Total project costs were \$4.3 million, with 99 percent of the expenditures paid to or through Ohio companies.

### Ohio CLOSER Project Locations



## Division of Environmental Services

In SFY11, the Agency's analytical laboratory analyzed 10,811 chemistry, microbiology and bioassay samples including water (7,519), air (2,071), fish tissue (981) and sediment (240). Analysis of these samples resulted in 140,296 inorganic and 86,993 organic test results being approved.

DES conducted 246 chemistry and 186 microbiology laboratory surveys and reviewed 249 applications, 24 plans and 86 correction statements for the drinking water laboratory certification program.

DES conducted 13 inspections of wastewater laboratory facilities and issued 13 performance audit reports under the auspices of U.S. EPA's Discharge Monitoring Report - Quality Assurance program.

### Improving Service and Efficiency

In order to increase lab capability in analyzing special samples from the Division of Drinking and Ground Waters, the lab added analytical parameters to its volatile organic compounds method.

By expanding its laboratory information management system to include QA/QC modules for microbiological, solids, and total organic compounds analyses, the lab decreased the time necessary to enter data and review sample data for accuracy.

To improve efficiency in analyzing BOD samples DES replaced a manual control reader with an automated sampler. In SFY11, the lab analyzed 1728 BOD samples.

DES purchased new analytical equipment to increase capabilities, efficiency and accuracy for some analyses. In addition, the new equipment replaced older equipment which could no longer be serviced or repaired.

### Outreach and Technical Assistance

Lab staff responded to 2,195 technical assistance requests from individuals outside Ohio EPA, 1,007 technical assistance requests from Ohio EPA staff and 1,579 sample submission coordination calls. The division provided training or presentations at 13 non-Ohio EPA events with 464 participants, as well as four Ohio EPA events with 62 participants.

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## Office of Compliance Assistance and Pollution Prevention

The Office of Compliance Assistance and Pollution Prevention (OCAPP) is an independent office within Ohio EPA that provides information and resources to help businesses achieve compliance with environmental requirements. Another primary goal of the office is to help its customers identify and implement pollution prevention measures that can save money, increase business performance and benefit the environment. Information obtained by the office is not shared with Ohio EPA inspection or enforcement staff.

In SFY11, the office helped more than 2,200 Ohio businesses and 780 other external customers with their pollution prevention and compliance needs, and conducted 223 site visits to help Ohio companies with compliance and pollution prevention projects. They conducted 41 presentations and training events to help educate Ohio businesses and organizations about pollution prevention and environmental compliance, reaching more than 1,400 individuals. Staff also distributed 4,891 publications; developed 25 new publications to show companies how to prevent pollution and comply with environmental requirements; and published four editions of the *Compliance and Prevention Quarterly* newsletter for distribution to more than 5,000 people.

A major marketing push was initiated in 2011 to make all Ohio businesses aware of the environmental services provided by OCAPP and Ohio EPA. This effort includes the development and ongoing implementation of a marketing plan that identifies key initiatives to engage Ohio businesses and business organizations in compliance assistance and pollution prevention activities.

The office created a series of industry sector-specific web pages to bring together the different regulatory requirements for a specific business sector into one location. This makes it easier for businesses, particularly small businesses, to understand their environmental requirements. The initial series included gas stations, auto body shops and dry cleaners that are part of the "EPA Regulations for Businesses" portion of OCAPP's web pages. Additional business sectors will be added in the future.

OCAPP completed an intensive four-month assistance effort with GOJO Industries in Cuyahoga Falls to identify pollution prevention and sustainability opportunities for their corporate sustainability strategy. Water usage is responsible for the majority of their wastes, so OCAPP's assistance focused on the company's enterprise goal for water reduction.

To reduce the impact of mercury on the environment, OCAPP continued to work with the Ohio Dental Association and other partners on the Ohio Good DEED (Dedicated to Environmental Excellence in Dentistry) recognition program. This program encourages dental offices to install mercury amalgam separators to reduce the amount of mercury going to local wastewater treatment plants. There are 67 Ohio dentists participating in the program.

OCAPP coordinated the Awards for Outstanding Achievement in Environmental Stewardship and recognized two Ohio companies and other organizations for their commitment to being outstanding stewards of Ohio's environment.

In addition, staff coordinated a series of training events to help northeast Ohio communities and businesses prepare for new municipal storm water requirements and provide certification for storm water personnel.

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## Office of Environmental Education

Students on 592 school buses are breathing easier, thanks to grants awarded from the Ohio Clean Diesel School Bus Fund. Funding comes from environmental civil penalties collected by Ohio EPA and the Ohio Attorney General's Office, as well as clean diesel grants from U.S. EPA. The grants help local communities install pollution control equipment on their school buses.

This year, Ohio EPA awarded \$1,355,427 in grants to 38 local school districts and three county boards of developmental disabilities. The grants are being used to install emission controls onto 408 school buses, and idle reduction equipment onto an additional 184 buses. This equipment will reduce student and driver exposure to the harmful pollutants in diesel exhaust, and remove more than 88 tons of air pollution from Ohio skies, benefits that will compound every year that these buses continue to operate. Ohio EPA estimates that these grants will reduce annual emissions of 8,143.5 pounds of fine particulates (soot particles), 134,219.4 pounds of carbon monoxide, 6,345.8 pounds of nitrogen oxides, and 28,341.6 pounds of hydrocarbons. The idle reduction equipment also provides significant fuel and cost savings to the local schools.



**Marlington Local Schools in Stark County received \$61,775 this year to install idle reduction equipment on 25 school buses.**

Civil penalties from pollution violations also supported \$800,256 in grants from the Ohio Environmental Education Fund (OEEF), for education projects targeting the regulated community, the adult general public, and pre-school through university students and teachers.

- Projects to help businesses comply with environmental regulations included zero waste audits for companies in six northeast Ohio counties; programs on managing runoff from construction sites and golf courses; workshops for fleet managers on electric vehicle safety and infrastructure; and seminars on the operation of anaerobic digesters to convert organic waste from livestock operations to renewable energy.
- Adult education projects focused on properly maintaining home septic systems; recycling mercury-containing lighting fixtures; reducing vehicle idling, wood burning and other activities on smoggy days; and using storm water best management practices and conservation easements to preserve riparian forest and protect stream quality.
- K-12 grants to schools and scout troops have students conducting waste audits in their classrooms; designing and testing small solar race cars and windmill blades; using handheld GPS units to map watershed boundaries; exploring wetland ecology in the Lake Erie marshes; and collecting macro-invertebrates and water samples in local streams.

The OEEF also supported four initiatives encouraging students to explore careers in environmental science and engineering. Nineteen students at 13 Ohio colleges and universities received a total of \$46,250 in scholarships in 2011. The OEEF also sponsors State Science Day, the state championship competition for student science research projects; the Ohio Envirothon competition for high school teams; the National Engineers Week Future City Competition for middle school teams; and the Ohio Chemistry Technology Council's "Teachers, Industry and the Environment" conference.

# Office of Special Investigations

The Office of Special Investigations (OSI) specializes in investigating complex criminal activity and has the flexibility to cross Ohio EPA program boundaries in the course of its investigations. Their investigation of environmental crime allegations can result in criminal, civil and administrative enforcement.

The activities below are examples of situations that may warrant OSI's involvement:

- illegal disposal or abandonment of hazardous waste, solid waste or construction and demolition debris;
- burial of waste at unpermitted locations;
- unpermitted discharges into waters of the state;
- unpermitted emissions of toxic air pollutants;
- open burning;
- bypassing waste treatment systems;
- filling of wetlands;
- rip-and tear asbestos projects; and
- falsification of documents such as manifests, waste receipt logs, monthly operating reports and drinking water analyses.



Ohio EPA staff conduct sampling as part of a graded bioterrorism exercise.

## Ensuring Compliance

In SFY11, staff members conducted 135 investigations, obtaining 49 convictions that resulted in 38 felony counts and 28 misdemeanor counts. These convictions resulted in approximately \$615,750 in fines; \$501,231 in restitution; 605 days of jail time; 53 years of probation; 121 months of home arrest; and 1,818 hours of community service. In one case, the defendants agreed to donate \$70,000 to Ducks Unlimited for the preservation of wetland habitat.

In addition, staff members serve on Ohio EPA's Counter-Terrorism Response Team and are trained to work in hazardous environments (chemical, biological and radiological).

## Agriculture Pollution Initiative

Overall, the Ohio agricultural community does a good job at properly managing their manure and wastewater. During SFY11, OSI continued an initiative to investigate large releases due to reckless or negligent acts by the operator or the manure applicator which results in significant pollution to waters of the State. These releases typically cause large fish kills, result in odor complaints from downstream neighbors and may be a contributing factor in the recent algae growth problem in many Ohio lakes.

Working with state and federal partners, OSI's SFY11 investigations resulted in four prosecutions that obtained 12 convictions. Sentences from these convictions resulted in 12 misdemeanor counts of water pollution; more than \$148,373 in fines and restitution; and public notifications in farm journals informing farmers where to go to receive assistance to prevent releases in the future.



Illegal manure application causes stream pollution.

## Public Interest Center

In SFY11, the media relations staff issued 374 news releases; responded to 2,313 media inquiries; and organized and secured coverage of numerous media events around the state. Employees arranged numerous field trips with reporters to educate them about stream and lake sampling. Staff members also created online media kits to provide an economical way to distribute information, photos and audio clips in support of news conferences and media events.

The public involvement staff moderated 88 public meetings or informational sessions attended by about 2,870 people. They responded to about 4,215 calls, letters and e-mails from the public and sent out more than 25,714 individual citizen advisories. Staff also responded to more than 480 requests for information submitted via the Agency's website.

Staff helped set up and work at Agency displays including the Ohio State Fair, Earth Day, Buckeye Boys and Girls States and other community events. PIC staff regularly engages with the public throughout the state at speaking engagements for schools, camps and civic organizations.

Additionally, public involvement staff helped coordinate Agency efforts to disseminate funds to local organizations affected by odors at Countywide Landfill through the Community Benefit Fund.

The office manages the Agency's website and creates web feature stories. Working with staff in some of the program divisions, the office created websites to ensure residents are well informed about harmful algal blooms and shale drilling in Ohio.

To improve internal communication, the Print and Electronic Communications section redesigned the main intranet pages and now maintains a daily announcements page. Office personnel reviewed and/or formatted newsletters for three divisions and numerous other articles for outside publication; wrote and designed 26 issues of the employee newsletter; took photographs to document Agency events; helped develop PowerPoint presentations for viewing in the Agency's main reception area; and created a lake snapshot fact sheet template for the Inland Lakes Program.

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## Office of Employee Services

### Processing Personnel Actions

The Office of Employee Services (OES) provided hiring activities such as posting vacancies; recruiting and screening applicants; preparing applicant pools for management review; conducting background checks; offering employment and providing initial employee orientation. At the end of SFY11, Ohio EPA had 1,131 permanent employees, down from 1,154 one year earlier.

The office created, updated and/or reclassified 344 electronic position descriptions; provided temporary clerical support to seven divisions, three support offices and Central District Office; and coordinated the Agency's college intern program, hiring 81 interns for the 2011 field season. Staff also processed 9,500 applications for 95 vacant positions; 21 resignations; and 54 retirements.

Other administrative tasks include maintenance of the Agency's table of organization and performance of task analysis reviews; development, formulation, revision and implementation of Agency employment policies; and coordination of the Agency's Ohio Performance Review System (OPRS) employee evaluation process.

### Managing Workforce Benefits and Policies

Office staff members also administer the Agency's benefits program, including health, dental, vision and life insurance. During SFY11, the office processed 92 disability claims and 127 Family and Medical Leave Act requests; reviewed and responded to working out of class grievances and job audits; served as Agency point of contact for class plan proposals; developed, formulated, revised and implemented Agency employment policies; and provided technical advice regarding civil service, employment law and human resources policies and/or programs, classification and pay range issues.

The office also coordinated Bring Your Child to Work Day; and managed the Agency's Healthy Ohioans Wellness Program.



## Office of Equal Employment Opportunity

In SFY11, the Office of EEO investigated four formal complaints of discrimination, counseled seven informal complaints, received 10 requests for ADA reasonable accommodations and provided four employees with ADA reasonable accommodations. In addition to investigation and counseling, staff also conducted EEO training for all new employees.

EEO's regional program administrators completed coursework from the Ohio Department of Administrative Services and OSU's Office of Continuing Education to earn their Executive EEO Practitioner status, along with receiving up-to-date information on the amended AADA.

The office is also involved in the Agency's diversity council, a group of 13 Agency employees dedicated to promoting diversity awareness. In SFY11, the council sponsored the Agency-wide International Day event and provided brown bag lunches regarding workforce age generation gaps.

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## Office of Fiscal Administration

The Office of Fiscal Administration manages the Agency's \$187 million operating budget. In SFY11, office staff reviewed and processed 2,039 purchase orders and 20,271 payments to vendors for goods and services; deposited 36,783 fee payments to provide cash to support the Agency's operations; processed payroll for 1,135 permanent employees; provided cash management and financial reporting services for 98 federal grants with assistance totaling over \$400 million; and completed 33 evaluations to determine a company's ability to pay penalties in environmental enforcement cases.

During development of the SFY12-13 biennium budget, the office worked with the program divisions to restructure funding for staff in the divisions of Environmental Services, Environmental and Financial Assistance, Hazardous Waste Management, Drinking and Ground Waters and Program Management. The office also worked with programs to identify and implement cost-savings measures. Collectively these changes reduced Ohio EPA's budget by \$25.1 million (11.8 percent) in SFY12 and by an additional \$3.7 million (2 percent) in SFY13.

The office also provided accounting and reporting assistance to program divisions that received more than \$279 million in American Recovery and Reinvestment Act (ARRA) funding, most of which was passed through to local governments. Additional information about Agency funding and expenditures is located at the end of this report.

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## Office of Information Technology Services

During SFY11, 30.5 percent of all computer-related spending (\$902,127 of \$3,054,000) was directed to minority-owned business vendors.

### eBusiness Center Receives National Recognition

Ohio EPA developed and maintains an electronic reporting system to expedite the regulated community's reporting process and increase efficiency and security. The Agency received a \$135,000 federal National Environmental Information Exchange Network (NEIEN) grant to help finance the software development. As a result of the development and implementation of this new system, U.S. EPA has certified that Ohio EPA is fully compliant with the federal Cross Media Electronic Reporting Rule (CROMERR). Ohio EPA received national recognition for this achievement.

The office continues to expand and improve the eBusiness Center. An existing service — Annual Reports for Hazardous Waste — underwent significant upgrades to improve procedures and performance for report filers.

During SFY11, the office added two new services to the eBusiness Center. Applications for Ohio Environmental Education Fund grants and Section 401 water quality certifications can now be submitted online.

### Emissions Inventory System

To improve the amount and quality of data reported to U.S. EPA's national priority data exchange, the office created and successfully implemented the emissions inventory system. The project was funded by a federal NEIEN grant.

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## Conversion to Outlook

During the second half of SFY11, the Agency completed conversion of email services from an in-house GroupWise system to Microsoft Outlook, hosted by the State of Ohio's Office of Information Technology (OIT). The transition allows the Agency to better collaborate with other state agencies and many external customers. Over a long holiday weekend, the office migrated more than 1,200 mailboxes (a total of 4 terabytes). This major conversion, OIT's first from GroupWise to Outlook, helped to establish procedures for upcoming agency conversions.

## Infrastructure Improvements

Following OIT guidelines and recommendations, the Agency doubled electronic storage capacity to 28 TB by replacing an aging Storage Area Network (SAN) with a state-of-the-art SAN and Network Attached Storage (NAS) device. The office also began transferring data from physical to virtual servers, further improving the storage capacities.

## Internal Systems Improvements

The office improved several internal business system processes that will enable the Agency to track and report greenhouse gases generated by the Agency's motor pool fleet; support evaluation and administration of financial aid projects throughout Ohio; transform surface water monthly reporting data to XML format for efficient transfer to U.S. EPA; and provide additional tools for environmental assessment.

Also, to ensure the security of Agency data and production databases, the Agency regularly performed vulnerability scans.

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## Office of Legal Services

The Legal Office provides legal counsel to Ohio EPA divisions and offices and provides support functions for certain legal requirements. The legal work generated by the Agency can be grouped into four categories.

### General Counsel Activities

- researching and drafting legal opinions;
- review of rules and proposed legislation;
- legal reviews of public records requests; and
- advice on day-to-day issues that may arise.

### Enforcement Activities

- development, negotiation and resolution of administrative enforcement activities;
- development of unilateral Findings and Orders;
- preparation of referrals to the Attorney General's Office;
- litigation support in complex cases; and
- advice in preparing enforcement cases.

### Adjudication Hearings

- conducted for proposed actions of the director where a hearing is requested.

### Support Staff Activities

- collection and filing of certified records at the Environmental Review Appeals Commission;
- maintenance of the director's journal room;
- publication of the Weekly Review; and
- publication of public notices for director's actions.

The Office of Legal Services, with input from each program's enforcement group, developed a new Compliance Assurance through Enforcement Program with the goal of achieving more timely compliance with Ohio's environmental laws and regulations. Compliance methods range from technical assistance, education and outreach to civil and criminal enforcement through referral to the Ohio Attorney General, with several steps in between depending upon specific circumstances. In selecting a compliance method, the primary objective is to select the tool that is most likely to result in timely compliance and the best environmental protection.

One of the new tools is the offer of an Expedited Enforcement Agreement, which is an expedited pre-contest settlement agreement that substantially reduces the prescribed penalty amount in exchange for prompt, documented abatement of the documented violations and an agreement that the regulated entity will not contest the settlement agreement. The Expedited Settlement Agreement provides the regulated entity with an incentive for prompt compliance with Ohio's environmental laws and reduces the time and resources spent on contested cases. The new program takes effect July 1, 2011.

## Office of Safety

Due to its low number of accidents and injuries, the Agency's Worker's Compensation rates were again one of the State's lowest. For the upcoming fiscal year, Ohio EPA's rates are \$0.18 per \$100 of payroll. Other similar agencies have rates ranging from \$0.93 to \$2.40 per \$100 of payroll.

Ohio EPA maintains a safe environment through a combination of training, communication and hazard identification. In SFY11, 225 field employees completed Occupational Safety and Health Administration (OSHA) Refresher training. All field interns received safety orientation training to meet their specific needs for environmental sampling. The Safety Office provided HAZMAT certification training to 45 employees to support the Agency's efforts in response to chemical emergencies, bio-terrorism and pandemic flu readiness.

Safety personnel also make frequent visits to work locations to conduct site visits to ensure compliance with the Agency's safety policies and procedures. Safety concerns and suggestions raised by local safety and labor management committees were promptly addressed.

The Safety Management System has been further revised to include all Agency staff and their corresponding safety elements. The individualized hazard assessments have proven to be a definite asset to the overall field safety program.

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## Office of Operations and Facilities

Office staff continued to seek opportunities to improve its services to the Agency in a way that improved efficiency and reduced costs. By renegotiating leases for five facilities, Ohio EPA will save \$132,900 during the next biennium.

With the assistance of the Office of IT Services, the Agency's motor pool software application was updated to include detailed vehicle specifications. With this information, the Agency now has the ability to measure greenhouse gas emissions for its vehicles.

In addition, it is now possible to create detailed reports of vehicle use and maintenance records, including:

- history of fuel consumption and cost;
- maintenance records;
- history of each vehicle reservation;
- prompts for preventive maintenance (oil changes, for example)
- the ability to run a search based on numerous criteria (for example, occupancy rates)

All of these recent upgrades will allow Operations & Facilities to make the best decision in the future pertaining to vehicle type and number of vehicles needed, based upon very specific historical data.

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## Legislative Accomplishments

The following Agency-related items were included in the state biennium budget bill, signed into law on June 30, 2011:

- The General Assembly expanded the authority of the director to authorize an exemption from infectious waste requirements to allow for a quicker response to emergency situations.
- The Agency was able to eliminate a requirement to contract only with, or give preference to, owners or operators of scrap tire storage, monocell, monofill or recovery facilities for the storage, disposal or processing of scrap tires removed through removal operations. Relaxing the stringent requirements will allow for a more competitive contracting process.
- The Agency can now allow Class C "orphaned" BUSTR sites, such as abandoned gas stations, to proceed with remediation through the Voluntary Action Program (VAP). This will allow a third party to remediate the site and potentially reuse the land or create a green space.
- Ohio EPA will administer the Diesel Emissions Reduction Grant Program beginning July 1, 2011. The program had been managed by the Ohio Department of Development.

# Northwest District Office

## First Environmental Insurance Subsidy

In June, The Toledo-Lucas County Port Authority (TLCPA) was the first applicant to receive an environmental insurance subsidy under a new component of Ohio EPA's Voluntary Action Program. This component allows volunteers who are assessing and cleaning up brownfield properties, following the VAP rules, to receive a 10 percent discount on their environmental insurance premiums.

The port authority purchased environmental insurance for its Toledo Jeep Parkway Redevelopment Project. The development plan involves an expansion of State Paper and Metal Company recycling business onto a portion of the Jeep Parkway, which will add approximately 22 full-time permanent jobs. The redevelopment concept for the remainder of the Jeep Parkway property includes a building, public park and solar array to help power the site. The port authority's environmental insurance subsidy request described how the environmental insurance tool allowed them to more effectively market the property.

The \$15,000 award will help defray the cost of environmental insurance that protects against potential environmental liability beyond the protection provided by the VAP's covenant not to sue. The environmental insurance policy will protect not only the Port Authority, but companies that operate at the site in the future.

## Water Quality Sampling Support for State and Federal Initiatives

In addition to their regular sampling workload, Ohio EPA surface water staff also supported other federal and state water quality initiatives. For example, district staff:

- collected water column, sediment and fish tissue samples from Lake Erie in support of the National Coastal Condition Assessment;
- developed and implemented a Lake Erie near-shore monitoring program funded by the Great Lakes Restoration Initiative;
- collected water column and sediment samples from Grand Lake St. Marys in support of several alum demonstration projects; and
- collected sediment cores in support of the Great Lakes Legacy Act Ottawa River Cleanup.

## Arcadia Train Derailment

In February, Emergency Response staff responded to an approximately 826,500-gallon ethanol release that resulted from a Norfolk Southern train derailment in Hancock County. Of the 33 cars that derailed, 32 were carrying ethanol. Most of the tank cars were involved in a fire, which resulted in the burning off of a large amount of the ethanol. Runoff from the derailment also flowed into the south Branch of the Portage River. Several local roadways were closed and those within one mile were evacuated.

Ohio EPA staff provided technical guidance to the incident commander and identified migration routes of ethanol into the waterway. Earth dams were installed in the waterway, and Norfolk Southern contractors worked on putting the fire out in sections while controlling runoff. Surface water treatment and investigation into the extent of the contamination continue.



# Central District Office

## Air Permitting Means Jobs

With an uncertain economy, many projects in SFY11 required rapid response and permitting action. Central District Office, Division of Air Pollution Control successfully processed several urgent permits for central Ohio facilities on time and to the satisfaction of the industry while still being protective of air quality.

Valero Renewable Fuels Company, LLC purchased a bankrupt and idled fuel ethanol plant in Bloomingburg, Ohio. District personnel and Valero's environmental staff quickly and cooperatively resolved issues inherited from the previous owners and retained jobs in Fayette County.

The district staff also reviewed four highly complex permits that allowed the Owens Corning Newark Plant to implement three projects that improved product quality in an effort to regain market share from competitors. The projects also reduced toxic air emissions. A company representative acknowledged the Agency's efforts, recognizing that it was a great example of Industry and the Ohio EPA working together to improve the environment and increase local industrial productivity.

## Site Cleanups Improve Communities

A major milestone was reached in SFY11 with the long-term site wide corrective action project at the Owens Corning Technical Center near Granville. An environmental covenant for this 526-acre site was negotiated and the site remedy has been fully implemented. Maintenance of landfill caps and the ground water interceptor trench as well as routine monitoring of the site will continue under the approved operation and maintenance plan.

In SFY11, district office personnel worked in conjunction with several local health departments to identify and evaluate three small sites where scrap tires had been illegally dumped. These activities resulted in the removal and proper management of more than 1,700 scrap tires through use of the scrap tire abatement fund.



Voluntary Action Program (VAP) covenants not to sue were issued for three properties that, along with the former Ecol-Bedford Landfill #1, are part of the city of Gahanna's Central Park business campus. Two of the properties were part of the Columbus Tile Yard, a clay brick and tile manufacturer that operated from the early 20th century until the early 2000s. Central Park of Gahanna is a 200+ acre commercial/industrial park that surrounds the former landfill, which will be developed into a nine-hole executive golf course and driving range. It also has a 23.50-acre conservation area along a wooded ravine, which will include walking paths.

Cleanup of the former Columbus Steel Drum Company facility, a steel drum reconditioning facility in Franklin County, began in April. An estimated 2,029 tons of potentially contaminated soil were removed from the site.

## Robust Water Quality Data Information Equals Jobs

In 2008 and 2009, Ohio EPA staff conducted a detailed water quality survey of the Licking River watershed. Extremely high phosphorus discharges were noted emanating from the Newark wastewater treatment plant; the main source of phosphorus is a local aluminum anodizing facility, Anomatic.

Careful examination of the water quality survey information revealed that the Licking River successfully processed more than half of the phosphorus load within a few miles of the discharge and aquatic life was not impaired in that section of the Licking River.

District office staff engaged Newark in a discussion concerning phosphorus loads at a time when Anomatic was considering a potential expansion in the spring of 2011. For the company, certainty with regard to the need to install pollution control equipment was essential.

Because of the robust nature of Ohio EPA's water quality data, staff were able to issue a permit to Newark that dealt fairly with the phosphorus issue and gave Anomatic the certainty it needed. This resulted in the retention of 700 jobs in Newark, and an expansion of the company in New Albany that will yield 185 more jobs.

# Southeast District Office

## Fostering Cleanups

The district finalized Cytec's Class 3 permit modification, which authorizes the company to implement cleanup at the 54-acre Washington County facility according to Ohio EPA's selected remedies. The cleanup will address several waste areas at the site such as an old landfill, contaminated soils near an old storage pad, and ground water pollution from past activities at the site. Ongoing monitoring and maintenance of remedial measures will continue.

Working in conjunction with Ohio EPA's scrap tire abatement program, CLOSER group and local approved health districts, solid waste staff brought about the cleanup of more than 500,000 tons of scrap tires, solid waste and construction and demolition debris from illegal disposal sites and open dumps.

## Assisting Companies with Air Permit Issues

During SFY11, district air pollution control unit staff processed Director's discretionary permit exemption requests for Owens-Brockway Glass Containers (Zanesville); Globe Specialty Metals (Beverly); Kraton Polymers U.S. LLC (Marietta); American Electric Power (Conesville); American Electric Power (Cheshire); and P.H. Glatfelter Company (Chillicothe). The discretionary permit exemptions allow the companies to install or modify sources to complete environmentally beneficial projects; evaluate new production feasibility and/or air quality impacts; perform emissions testing to develop more suitable control technologies; and conduct research and development of more effective prevention or control of air pollution emissions.

## Addressing Drinking Water Needs

Burr Oak Regional Water and Sewer District completed construction of its new ground water plant and began feeding its southern satellite systems (including Sunday Creek, Jacksonville, Glouster, Hollister, Trimble, Bishopville, Murray City, New Straitsville, Carbon Hill and a small portion of Old Straitsville) in April. The complete conversion to the ground water plant will be completed after the East tank and water line project are done, at which point Burr Oak's surface water plant will be abandoned. This project received about \$5 million in federal stimulus funds and about \$9 million in state loan funds.

District staff helped conduct a week-long ground water investigation near the Putnam Community Water Association well field in Devola. The sand and gravel aquifer providing drinking water in this area has elevated nitrate concentrations. The results suggest that home sewage systems in a portion of the village are the primary source of elevated nitrate concentrations in drinking water. Putnam Community Water Association is evaluating a number of alternatives in response to the rising nitrate concentrations.



Ohio EPA conducting geoprobe study at Devola.

## Improving Wastewater Management

Island Aseptics in Byesville produces packaged fruit drinks, drink concentrates and drink mixes. Wastewaters are pretreated prior to discharge to the Village of Byesville wastewater treatment plant. The company had steadily expanded operations in recent years and was consistently overloading its pretreatment system, which in turn overloaded the Byesville plant. To reduce the impacts on the Byesville plant, the company trucked a portion of its wastewaters to Newark, Zanesville and Cambridge. Island Aseptics developed plans and completed installation and startup of a new anaerobic reactor for its pretreatment system in January. The improvements were estimated to cost about \$2 million. The treatment system has performed well and the discharge is in full compliance with permit limits.

# Southwest District Office

## Remediating and Investigating Landfills

District solid waste staff spent significant time in SFY11 responding to the August 2009 subsurface reaction at the Rumpke Sanitary Landfill in Colerain Township, Hamilton County. Rumpke completed all activities identified in the March 2010 response plan, including: 1) installing a buttress to stabilize and prevent potential slope movement; 2) installing a synthetic liner, referred to as an “odor control blanket” to minimize the release of gas from the affected area; and 3) developing a monitoring system and an isolation break plan to ensure that the reaction will not spread to other areas of the landfill. The “odor control blanket” was successful in significantly reducing the number of odor complaints compared to a year ago. Rumpke and the regulatory agencies continue to monitor the situation and will adjust the response plan as necessary to protect human health and the environment.

## Salt Pile Storage and Water Quality

In SFY11, drinking water and surface water staff continued to work with with Convey It, Inc. in Springfield to determine the facility’s impact on the local ground water resources. In August, Ohio EPA learned that a similar operation in the Village of Camden (Preble County) had impacted the public drinking water system.

The salt storage facility in Camden used unpermitted injection wells and discharge pipes to dump brine generated by the facility into a tributary of Seven Mile Creek, approximately 200 feet from the public drinking water wells. To mitigate the impacts from brine, Ohio EPA negotiated orders requiring the company to prevent additional contamination of ground water and surface water and to delineate the extent of surface water and ground water contamination. Emergency orders issued to the Village of Camden required them to obtain a new safe, sustainable source of drinking water. After exploring many potential water sources, the village selected a new well field location.



Salt pile in Camden contaminated public water supply.

Work continues at both sites to monitor and address ground water contamination.

## Improving Water Quality

Ohio EPA released the upper Great Miami River watershed study in January. The results, based on sampling conducted in 2008, show that 64 percent of the river miles fully attained the aquatic life use designation; 26 percent partially attained; and 10 percent did not attain this use designation. Impairment was most often observed in the western half of the basin, particularly in the Loramie Creek sub-watershed and other highly modified stream channels draining extensive agricultural landscapes. Other sources of aquatic life impairment include waste water treatment systems, impoundments and toxic spills. Bacteriological impairment was pervasive throughout the upper watershed impairing recreational use. The primary contact criterion for full body contact with the river was exceeded at 73 percent of sites tested. Suspected sources of contamination include agriculture, urban runoff, unsewered communities and on-site septic systems, sanitary sewer overflows and wildlife.

Separately, staff continued to work with Cincinnati’s Metropolitan Sewer District on projects to reduce the number of combined sewers and combined sewer overflows. Some of the projects will be incorporating green infrastructure to reduce the amount of storm water entering into the collection system. Another component of the project will entail the construction of a larger sanitary sewer tunnel to provide temporary storage after wet weather events.

## Overseeing Cleanup of Contaminated Sites

At AK Steel, two major cleanup projects began. At SMU 39 (the location of 17 former oil and coal tar ponds), a system was installed to contain, collect and treat dense non-aqueous phase liquids and contaminated ground water migrating from this area toward Monroe Ditch. Monroe Ditch was relocated slightly to the east to allow room to install the containment system. In addition, work began on the removal of PCB-contaminated sediments from Dick’s Creek and Monroe Ditch. The entire project will require three to four years to complete. During this first year, the remediation and restoration of the upstream portion of Dicks Creek Reach 1 (including the floodplain) was completed.

The remediation and restoration of Monroe Ditch was also completed. Between July and December 2010, more than 125,000 tons of waste were transported to permitted disposal facilities.

## Providing Technical Assistance

District staff worked with the village of South Lebanon in Warren County to accelerate improvements to its water distribution system. After a main break in February, district staff provided assistance to the Village to address the cause and to ensure that the village water supply became operational as soon as possible. They also worked with Warren County and the City of Cincinnati to accelerate the transfer of responsibility for providing water to the Village so that the community would receive necessary supplies.

## Protecting Natural Resources

Ohio EPA, along with U.S. Department of Energy and U.S. Fish and Wildlife Service, began implementation of the \$13.75 million Fernald natural resource damages settlement by partnering with Three Valley Conservation Trust on the Paddys Run Conservation Project. The project will use settlement funds to purchase conservation and agricultural easements within the Paddys Run watershed and over the Great Miami Aquifer to protect water quality in the stream and the underlying aquifer. Ohio EPA held two public meetings and began negotiations with the pilot project land owner for easements on an 800-acre farm. An application period for interested landowners will be open in August 2011.

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## Northeast District Office

### Improving Air Quality

Ohio EPA provided sampling assistance for U.S. EPA's Air Toxics School Initiative, which provided extra sampling around schools located near heavy industry. Round 2 sampling started in Columbiana County. Air monitoring stations in the East Liverpool area revealed an exceedance of Ohio's manganese standards. Ohio EPA continued to monitor for manganese near the SH Bell facility. Additional control methods were installed to reduce particulate emissions. A downward trend in manganese has been noted, but some high values require additional study.

Ohio EPA implemented an enforcement initiative for gasoline stations required to control Stage II air emissions to help reduce ground-level ozone. These enforcement cases have resulted in improved compliance rates.

District staff worked to significantly eliminate its construction permit backlog to ensure potential jobs creation related permits are processed in a timely manner. Personnel are now working to reduce the operational permit backlog.

### Small Quantity Generator Initiative

Northeast District Office's Division of Materials and Waste Management continued with an initiative started in SFY11 to inspect Small Quantity Generators of Hazardous Waste - a universe of more than 2,800 facilities. The purpose of the initiative is to conduct compliance inspections to ensure small businesses are handling hazardous waste generated in making their products in an environmentally safe manner, to provide compliance assistance and to ensure the accuracy of information contained in Agency records.

### Drinking Water Assistance

District drinking water staff conducted more than 275 site visits to provide technical assistance to water purveyors. These visits educated owners and officials, provided sampling assistance and improved compliance of many smaller public water systems.

The drinking water program continued to work with public water systems as the increase in shale gas drilling occurred in eastern Ohio. Staff provided assistance with requests for purchase of raw or finished water for gas well development as well as guidance on sampling parameters to develop a baseline of water well quality.



## Providing Landfill Oversight

Countywide Landfill in Stark County received about 17 million cubic yards of waste over the years; about 600,000 tons contained industrial aluminum process waste. In 2006, the landfill had an unusual increase in gas extraction well temperatures, forceful leachate outbreaks, accelerated settlement, and severe area odors caused by a subsurface reaction between the aluminum waste and liquid. For the past four years, Ohio EPA and U.S. EPA have partnered to oversee and provide technical assistance to the facility owners to contain the fire and abate the odor nuisance in the community. The remediation work has been completed, and there have been no odor complaints over the last few months. In October, Ohio EPA allocated \$3 million in civil penalty money paid by the landfill's owner to more than 50 projects that will benefit communities once impacted by nuisance odors emanating from Countywide Landfill in East Sparta.

## Supporting Water Quality Improvements

The City of Lorain, utilizing the Black River RAP's Lower Black River Ecological Restoration Master Plan, has improved conditions in the lower Black River by removing 1.2 million cubic yards of slag; restoring 52 acres of riparian habitat; restoring 8,000 feet of stream bank and constructing 2,700 feet of underwater fish habitat shelves. Ohio EPA is a partner in this effort.

Ohio EPA also continued to work with local stakeholders to explore more cost-effective ways of annually dredging the Cuyahoga Navigation Channel. District staff provided technical support and risk analysis to the Army Corps of Engineers and the Cuyahoga River Sediment Task Force regarding beneficial reuse of sediments. During the last year, more than 300,000 cubic yards of sediment was excavated from a former Cleveland Combined Disposal Facility to create short-term disposal capacity and placed at the CVIC Industrial facility as a part of a larger brownfield project.

## Aiding Cleanups

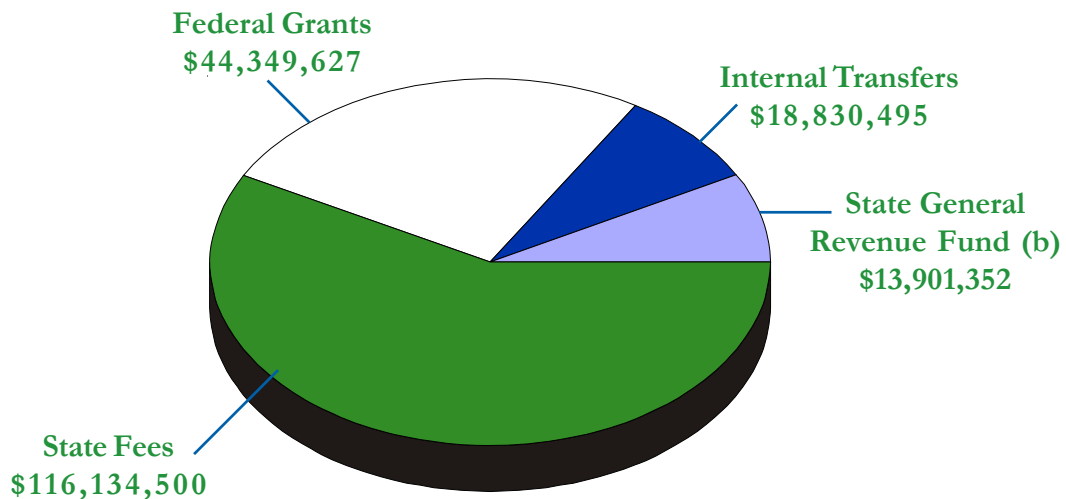
District staff provided significant technical assistance to volunteers, certified professionals and cities throughout northeast Ohio working to redevelop industrial brownfield sites. Twenty one northeast Ohio properties received VAP Covenants Not to Sue (CNS) and nine properties received Clean Ohio Revitalization Funds (CORF) awards to complete site cleanups.

Emergency Response personnel responded to numerous transportation-related accidents involving the release of petroleum or hazardous substances. In March, they responded to a train derailment in Newton Falls. Fourteen cars derailed on a bridge near the Mahoning River. An eight-block area was evacuated until surveillance could be completed and the scene was stabilized.

# Fiscal Summary

SFY11 Expenditures and Revenues		
Division/Office	Expenditures	Revenues (All sources including state fees, federal grants and internal transfers)
Division of Air Pollution Control	\$46,737,977	\$ 47,723,794
Division of Emergency and Remedial Response	\$17,476,128	\$ 29,395,304
Division of Hazardous Waste Management	\$13,677,623	\$ 13,068,741
Division of Solid and Infectious Waste Management	\$16,795,617	\$ 16,952,808
Division of Drinking and Ground Waters	\$17,862,555	\$ 17,869,981
Division of Surface Water	\$31,271,183	\$ 30,715,403
Division of Environmental Services	\$ 4,213,557	\$ 4,049,216
Office of Environmental Education	\$ 3,202,741	\$ 2,944,857
Office of Compliance Assistance and Pollution Prevention	\$ 1,150,377	\$ 739,893
Division of Environmental and Financial Assistance	\$ 4,975,826	\$ 4,902,429
Office of Special Investigations	\$ 1,229,941	\$ 1,194,643
Administration	\$19,493,995	\$ 23,658,905
<b>Total (a)</b>	<b>\$178,087,520</b>	<b>\$193,215,975</b>

## Sources of Revenue



(a) Total revenue includes one-time \$13.8 million payment for Natural Resources Damages that must be used to assess environmental damage and acquire land and conservation easements near the Fernald Preserve.

(b) Cash transferred to Ohio EPA from the GRF to pay for the auto emissions testing program. .

# Five-Year Rule Review – 2011 Summary (from 1/1/11 – 7/14/11)

Section 121.24 of the Revised Code states “Each agency shall annually report to the governor and general assembly, with regard to each of its rules that have been reviewed under this division during the preceding calendar year, the title and administrative code rule number of the rule, a brief summary of the content and operation of the rule, and a brief summary of the results of the review.”

The attached table contains those rules which were reviewed under the five year rule review provision of paragraph (D) of section 121.24 of the Revised Code. This does not include all rules adopted, amended, and rescinded in 2011, only those that were done as a five year review.

Environmental Protection Agency			
Rule Number	Rule Title	Brief Summary of the Content	Type
3745-40-01	Definitions.	Contains the definitions for the sewage sludge/biosolids chapter.	Rescission/New
3745-40-02	Purpose, applicability, general requirements, exclusions and prohibitions.	Contains the purpose, applicability, general requirements, exclusions, and prohibitions for the sewage sludge/biosolids chapter.	Rescission/New
3745-40-03	NPDES permit requirements and management plan requirements.	Contains the National Pollutant Discharge Elimination System (NPDES) permit requirements and management plan requirements for the sewage sludge/biosolids chapter.	Rescission/New
3745-40-04	Biosolids classifications.	Contains the requirements for the two classifications: class B biosolids and exceptional quality biosolids.	Rescission/New
3745-40-05	Notice and necessary information requirements for biosolids and other notification requirements.	Contains the notice and necessary information requirements for biosolids, as well as other notification requirements for the sewage sludge/biosolids chapter.	Rescission/New
3745-40-06	Authorization for a beneficial use site, site transfer requirements and site amendment requirements for class B biosolids.	Contains the requirements for obtaining authorization for a beneficial use site, site transfer and site amendment for class B biosolids.	Rescission/New
3745-40-07	Requirements for the storage of biosolids; isolation distance requirements and requirements for field and regional facility storage.	Contains the requirements for the storage of biosolids: isolation distance requirements and requirements for field and regional facility storage.	Rescission/New
3745-40-08	Requirements for the beneficial use of biosolids: general requirements, prohibitions, isolation distance requirements, site specific requirements, and additional site restrictions for the beneficial use of class B biosolids.	Contains the requirements for the beneficial use of biosolids including general requirements, prohibitions, isolation distance requirements, site specific requirements, and additional site restrictions for the beneficial use of class B biosolids.	New
3745-40-09	Approved sampling methods, monitoring frequency requirements, record retention and annual reporting requirements.	Contains the approved sampling methods, monitoring frequency requirements, record retention and annual reporting requirements.	New
3745-40-10	Facility storage requirements.	Contains the facility storage requirements for the sewage sludge/biosolids chapter.	New
3745-40-11	Signage requirements for beneficial use sites receiving class B biosolids.	Contains the signage requirements for beneficial use sites receiving class B biosolids.	New
3745-40-12	Compliance and enforcement; and spill notification requirements.	Addresses compliance and enforcement and includes the spill notification requirements.	New
3745-73-01	Definitions.	Contains the definitions and lists the materials referenced throughout this chapter and provides information on the availability of those materials.	Amendment
3745-73-02	Certification and compliance time schedules.	Contains the compliance dates for various source categories.	Rescission/New

## Environmental Protection Agency

Rule Number	Rule Title	Brief Summary of the Content	Type
3745-73-03	General emission limits.	States that the emission of total reduced sulfur from a list of source categories may not exceed specified limits or the federal new source performance standard, whichever is less stringent.	Amendment
3745-73-04	Emission test methods and reporting requirements.	Establishes the method options for compliance with the applicable emission limits for total reduced sulfur.	Amendment
3745-18-03	Attainment dates and compliance time schedules.	Contains attainment dates, time schedules and requirements for compliance with the emission limits.	Amendment
3745-18-04	Measurement methods and procedures.	Contains the requirements for demonstrating compliance with the emission limits in the chapter.	Amendment
3745-18-05	Ambient and meteorological monitoring requirements.	Addresses ambient and meteorological monitoring requirements.	Amendment
3745-18-06	General emission limit provisions.	Contains general emission limits for sulfur dioxide in the state of Ohio.	Amendment
3745-18-07	Adams county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-08	Allen county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-09	Ashland county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-10	Ashtabula county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-11	Athens county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-12	Auglaize county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-13	Belmont county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-14	Brown county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-15	Butler county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-16	Carroll county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-17	Champaign county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-18	Clark county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-19	Clermont county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-20	Clinton county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-21	Columbiana county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-22	Coshocton county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-23	Crawford county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-24	Cuyahoga county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-25	Darke county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-26	Defiance county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-27	Delaware county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-28	Erie county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-29	Fairfield county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-30	Fayette county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-31	Franklin county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment

## Environmental Protection Agency

Rule Number	Rule Title	Brief Summary of the Content	Type
3745-18-32	Fulton county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-33	Gallia county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-34	Geauga county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-35	Greene county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-36	Guernsey county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-37	Hamilton county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-38	Hancock county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-39	Hardin county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-40	Harrison county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-41	Henry county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-42	Higland county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-43	Hocking county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-44	Holmes county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-45	Huron county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-46	Jackson county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-47	Jefferson county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-48	Knox county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-49	Lake county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-50	Lawrence county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-51	Licking county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-52	Logan county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-55	Madison county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-56	Mahoning county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-57	Marion county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-58	Medina county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-59	Meigs county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-60	Mercer county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-61	Miami county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-62	Monroe county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-63	Montgomery county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-64	Morgan county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-65	Morrow county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment

## Environmental Protection Agency

Rule Number	Rule Title	Brief Summary of the Content	Type
3745-18-66	Muskingum county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-67	Noble county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-68	Ottawa county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-69	Paulding county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-70	Perry county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-71	Pickaway county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-72	Pike county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-73	Portage county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-74	Preble county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-75	Putnam county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-76	Richland county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-77	Ross county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-79	Scioto county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-18-81	Shelby county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-83	Summit county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-84	Trumbull county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-85	Tuscarawas county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-86	Union county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-87	Van Wert county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-88	Vinton county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-89	Warren county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-91	Wayne county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-92	Williams County emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-93	Wood county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-94	Wyandot county emission limits.	Contains the sulfur dioxide emission limits for this county.	Rescission/New
3745-1-06	Mixing zones.	Contains requirements for the establishing mixing zones in permits for dischargers to waters of the State.	Amendment
3745-2-02	Definitions.	Contains the definitions for the Implementation of Water Quality Standards chapter.	Amendment
3745-2-04	Determinations preliminary to development of water quality-based effluent limitations.	Establishes a procedure to determine if water quality-based effluent limitations are required to be included in a discharger's permit.	Amendment
3745-2-05	Calculating wasteload allocations.	Establishes a procedure for calculating wasteload allocations for the determination of effluent limitations in a discharger's permit.	Amendment
3745-2-06	Application of preliminary effluent limitations.	Details how to apply preliminary effluent limitations to a discharge to waters of the State.	Amendment

## Environmental Protection Agency

Rule Number	Rule Title	Brief Summary of the Content	Type
3745-2-07	Additive effects of pollutants.	Details how to consider the additive effects of pollutants in a wastewater discharge in the development of permit effluent limitations.	Amendment
3745-2-08	Mixing zone demonstration and sizing requirements.	Establishes a procedure for determining a mixing zone for a pollutant in a discharge permit.	Amendment
3745-2-09	Whole effluent toxicity provisions and water quality based effluent limit calculation procedures.	Details the application of whole effluent toxicity requirements for discharge permits.	Amendment
3745-2-10	Wasteload allocation for ammonia-nitrogen toxicity.	Describes the procedure to determine a wasteload allocation for the pollutant ammonia-nitrogen for the development of an effluent limitation in a discharge permit.	Amendment
3745-2-12	Total maximum daily loads.	Establishes the procedure for the determination of total maximum daily loads of pollutants in surface waters.	Amendment
3745-33-01	Definitions.	Contains the definitions for the Implementation of Ohio NPDES Permits chapter.	Amendment
3745-33-02	Ohio NPDES permit required.	Establishes when a discharge permit is required.	Amendment
3745-33-03	Permit applications.	Establishes application requirements for discharge permits.	Amendment
3745-33-04	Permit actions.	Details Ohio EPA's actions on applications for permits to discharge pollutants to waters of the State.	Amendment
3745-33-05	Authorized discharge limits.	Specifies the determination of authorized discharge levels of pollutants for discharge permits.	Amendment
3745-33-07	Establishing permit conditions.	Details the establishment of permit conditions for a discharge permit.	Amendment
3745-33-08	Generic permit conditions.	Contains generic permit conditions to be included in discharge permits.	Amendment
3745-33-09	Pollutant minimization programs.	Details the development of pollutant minimization programs required under OAC Chapters 3745-1, 3745-2 and 3745-33.	Amendment
3745-1-10	Grand river drainage basin.	Contains specific water quality criteria that are associated with each use designation and are the specific target conditions to be maintained in the water bodies.	Amendment
3745-1-12	Sandusky river drainage basin.	Contains specific water quality criteria that are associated with each use designation and are the specific target conditions to be maintained in the water bodies.	Amendment
3745-1-19	Huron river drainage basin.	Contains specific water quality criteria that are associated with each use designation and are the specific target conditions to be maintained in the water bodies.	Amendment
3745-1-21	Great Miami river drainage basin.	Contains specific water quality criteria that are associated with each use designation and are the specific target conditions to be maintained in the water bodies.	Amendment
3745-1-23	Portage river drainage basin.	Contains specific water quality criteria that are associated with each use designation and are the specific target conditions to be maintained in the water bodies.	Amendment
3745-1-24	Muskingum river drainage basin.	Contains specific water quality criteria that are associated with each use designation and are the specific target conditions to be maintained in the water bodies.	Amendment
3745-1-25	Mahoning river drainage basin.	Contains specific water quality criteria that are associated with each use designation and are the specific target conditions to be maintained in the water bodies.	Amendment
3745-1-30	Mill creek drainage basin.	Contains specific water quality criteria that are associated with each use designation and are the specific target conditions to be maintained in the water bodies.	Amendment
3745-18-01	Definitions and incorporation by reference.	Contains definitions used throughout the Sulfur Dioxide chapter.	Amendment
3745-18-54	Lucas county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment
3745-18-82	Stark county emission limits.	Contains the sulfur dioxide emission limits for this county.	Amendment

## Environmental Protection Agency

Rule Number	Rule Title	Brief Summary of the Content	Type
3745-34-11	Class V wells.	Contains the requirements for Class V wells.	Amendment
3745-72-02	Definitions.	Contains the definitions for the Low Reid Vapor Pressure Fuel chapter.	Amendment
3745-72-05	Liability.	Contains the liability requirements for the Low Reid Vapor Pressure Fuel chapter.	Amendment
3745-72-06	Defenses.	Establishes the violations for when gasoline does not meet the requirements of paragraph (A) of rule 3745-72-03 of the Administrative Code.	Amendment
3745-82-01	Definitions.	Contains the definitions for the Secondary Contaminant Standards chapter.	No change
3745-82-03	Monitoring for compliance with secondary maximum containment levels.	Establishes monitoring requirements and compliance determination for parameters with secondary maximum contaminant levels.	No change
3745-85-01	Contingency plans.	Requires each community water system to maintain a written contingency plan for providing safe drinking water to its service area during emergency conditions.	No change
3745-86-01	Emergency loans.	Describes the application process and terms under which a public water system may apply for an emergency loan for the purpose of remediating a threat of contamination to that system.	No change
3745-91-01	Definitions.	Contains the definitions for the Plan Approval chapter.	No change
3745-91-04	Requirements for specifications.	Establishes requirements for specifications that accompany plans for construction or installation of new public water systems or substantial modifications to existing public water systems.	No change
3745-91-05	Requirements for data sheet.	Establishes requirements for data sheets that accompany plans for construction or installation of new public water systems or substantial modifications to existing public water systems.	No change
3745-91-07	Requirements for submittal letter.	Establishes requirements for submittal letters to accompany plan drawings for construction or installation of new public water systems or substantial modifications to existing water systems.	No change
3745-91-09	Iron and manganese treatment.	Describes circumstances under which community public water systems are required to provide treatment for removal of iron and manganese.	No change
3745-92-01	Definitions.	Contains the definitions for the Escrow chapter.	No change
3745-92-02	Escrow deposit required.	Describes the types of public water systems required by ORC 6109.08 to establish and maintain an escrow deposit and submit evidence to the Agency that it has deposited the required dollar amount in escrow.	No change
3745-92-03	Amount of deposit.	Describes in detail the amount of escrow required by ORC 6109.08 to be deposited by affected public water systems.	No change
3745-92-04	Release of escrow.	Establishes circumstances under which the escrow required by ORC 6109.08 and rule 3745-92-02 is no longer required and may be released to the owner of the water system.	No change
3745-92-05	Orders of the director, notice to owner.	Describes how the Director of Ohio EPA may order an owner or operator of a water system to correct deficiencies in a water system and how the Director would authorize use of funds in escrow to enable compliance with such an order.	No change
3745-92-06	Fee for escrow deposit.	Clarifies that this chapter does not prohibit a bank from charging a service fee for holding an escrow deposit.	No change
3745-2-01	Purpose and applicability.	Identifies the purpose and applicability of the Implementation of Water Quality Standards chapter.	No change
3745-2-11	Dissolved oxygen modeling.	Identifies procedures to determine the loading capacity of streams and rivers for dissolved oxygen.	No change
3745-33-06	Treatment and disposal standards and permit limits.	Establishes technology-based requirements for permittees discharging phosphorus to waters of the state.	No change
3745-33-10	Applicability of rules of procedure.	References the provisions that are used when acting on or challenging Ohio NPDES permit applications.	No change



## Environmental Protection Agency

Rule Number	Rule Title	Brief Summary of the Content	Type
3745-4-01	Purpose and applicability.	Identifies the purpose and applicability of the Credible Data Program.	Amendment
3745-4-02	Definitions.	Contains the definitions for terms for the Credible Data Program.	Amendment
3745-4-03	Qualified data collectors.	Contains the requirements and process to become a qualified data collector (QDC).	Amendment
3745-4-04	Level 1 data requirements and reporting.	Contains the minimum requirements for level 1 credible data.	Amendment
3745-4-05	Level 2 data requirements and reporting.	Contains the minimum requirements for level 2 credible data.	Amendment
3745-4-06	Level 3 data requirements and reporting.	Contains the minimum requirements for level 3 credible data.	Amendment

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