ARAQMD

Protecting the Air

Akron Regional Air Quality Management District

Annual Report for 2023

The mission of the Akron Regional Air Quality Management District (ARAQMD) is to protect the public from the adverse health impacts of air pollution and to educate the public about air quality issues.

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Introduction

This report is designed to give an overall picture of the Akron Regional Air Quality Management District's (ARAQMD) activities in the calendar year 2023. It describes how our agency is structured, the work performed by each section of our agency, and our agency's plans for the future.

The administrative section of this report contains information regarding staffing updates, a current version of our organizational chart, a breakdown of the fiscal status of this agency, and a description of the future plans for the agency.

The ambient air monitoring section has monitoring data summarized to explain where the region is with respect to attainment of the National Ambient Air Quality Standards (NAAQS) as well as updates on other monitoring projects and field activities undertaken by the staff.

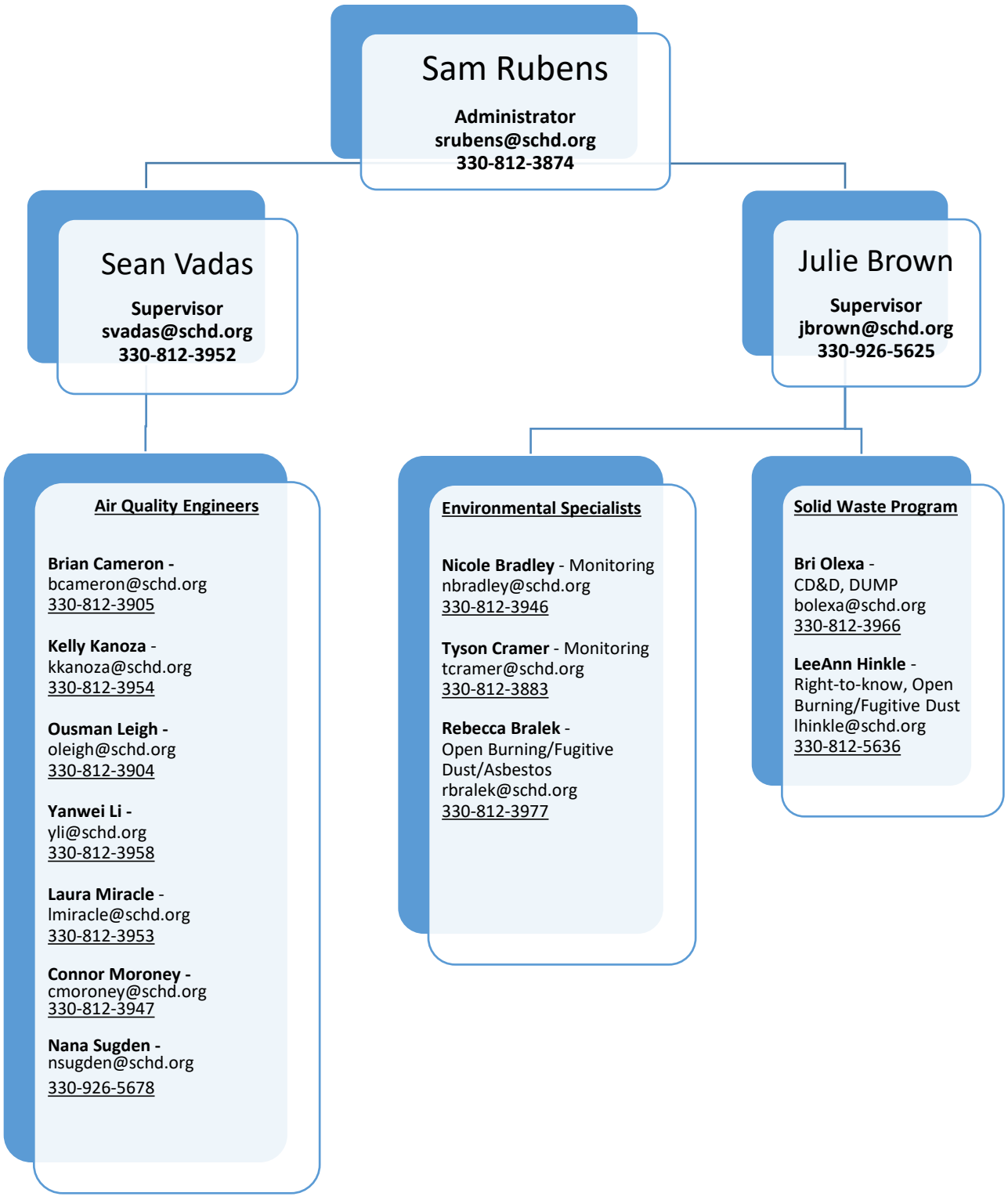
Finally, the permitting section has a summary of the activities of the permitting staff and the facility inspections performed.

Administrative Section

Staffing

The year 2023 saw several changes with respect to the organizational chart. We welcomed several new staff members to our team including Brian Cameron, Nana Sugden, and Yanwei Li. We saw a couple friends find new professional opportunities. Mingxian Ma and Ahmed Hamad both secured positions that will advance their careers in the field of air quality and environmental management. We strive to maintain a well-trained and knowledgeable staff to best assist our clientele and support our community.

Figure 1: Organizational Chart (as of 1/1/24)



The mission of the Akron Regional Air Quality Management District (ARAQMD) is to protect the public from the adverse health impacts of air pollution and to educate the public about air quality issues.

Budget

Local Fees

ARAQMD has charged annual local fees to facilities based upon the allowable emissions of emissions units with active permits in our service area since 1992. These fees are invoiced every July for the previous calendar year. The revenue generated from the local fees is shown in Table 1. These funds are used to ensure that our operations and special projects better serve the companies and residents of the ARAQMD service area.

Some of the special projects that we operated in 2023 include: the Indoor Air Quality program, which has been in place since 1993; our Air Quality Awareness week celebration, in place since 2010; the Non-High Priority Facility Inspection Program, which was started in 2018; the Managing Asthma Triggers at Home program, which also started in 2018; and the Mow Greener lawnmower replacement program which started in 2020. These last three programs will be explained further in the Special Projects update section of this report.

Table 1: Local fee revenue

	2022 (actual)	2023 (actual)	2024 (projected)
Facilities	525	525	540
Revenue	$188,122	$202,825	$199,100

Table 2: Revenue by source

	U.S. EPA Funds[1]	Ohio EPA Funds	Local Funds[2]	Enforcement	Total
FY22 (actual)	$382,234	$869,341	$188,122	$0	**$1,439,697**
FY23 (actual)	$351,877	$950,041	$202,825	$2,438	**$1,504,743**
FY24 (projected)	$381,221	$875,611	$199,100	$ 0	**$1,455,932**

[1]U.S. EPA funds include $PM_{2.5}$ funds

[2]Local funds include local facility fees

Table 3: Overall budget

	FY22 (actual)	FY23 (actual)	FY24 (projected)
Total Revenue (Local, State/Fed, PM2.5)	$1,439,697	$1,504,743	$1,455,932
Salaries	$1,045,734	$1,401,663	$1,057,755
Benefits	$372,270	$371,899	$291,791
Other Expenditures (Office costs, Equipment, etc.)	$272,354	$375,103	$191,578
Carried over funds (revenue minus expenses)	**($250,661)**	**($272,563)**	**($85,192)**

The budget runs in the negative because of the special projects; MATH and Mow Greener which use locally generated funds already in reserve.

Special Projects

In an effort to increase awareness of air quality issues, ARAQMD has instituted several new programs to assist at multiple levels, from the individual to the population. As stated in part of our mission statement, we are here to protect the public from the adverse health impacts of air pollution and to educate the public about air quality issues. Each of the following are ways in which we work to meet our mission:

Educational sessions:

> The ARAQMD staff performed many presentations for the regulated community, partner organizations, and the general public on topics such as open burning, fugitive dust, indoor air problems, and mold exposure. Training sessions with local fire departments, zoning inspectors, and construction companies have helped to foster better working relationships and awareness of air quality regulations. We have also staffed tables at public events such as Summit County Public Health events, KSU's College of Public Health Career Fairs, and Earth Day events. We will be creating presentations aimed at younger students centered on climate change and air pollution to share with our local school districts upon request.

Mow Greener:

> We celebrated Air Quality Awareness week in 2023 with the fourth year of our lawnmower replacement project, Mow Greener. The program was budgeted for 200 people across the region to make the jump from gasoline powered to electric, battery powered lawnmowers. The participants pre-registered, had to buy a battery powered lawnmower in the project's timeframe, then scrap their old gasoline powered lawnmower. Once they provided proof of the purchase and scrapping, they received a $100 gift card to help defray the difference in prices. The goals of this project were twofold; first, by replacing aging gasoline powered mowers, air emissions will be decreased. Secondly, the participants in the project were technology ambassadors. In 2022, the Ohio EPA asked other local air agencies across the state (Toledo, Cincinnati and Cleveland) to create their own versions of Mow Greener. After meeting, we decided that the Mow Greener framework would be successful in these other cities. After the 2022 season, the Ohio EPA provided each of our local air agencies $50,000 to use to operate the programs. They also allowed the use of some penalty dollars to be directed to the agencies for use in this program as well.

The Air You Breathe newsletter and Facebook:

> Our quarterly newsletter, is distributed to approximately 1300 subscribers. The newsletter is archived on the ARAQMD website as well, and the link to the newsletter is shared on our Facebook page. It contains updates on staffing, upcoming rules and regulations, air quality and inspection data, and stories about how air pollution affects public health.
>
> Direct messaging to the public also occurs via the agency's Facebook page where, in addition to our air quality index, we also post articles of interest, links and timely messages. We plan to expand the use of social media into the future to get air quality into the minds of the public.

Air Quality Index and pollen counts:

> We continue to communicate the daily Air Quality Index (AQI) and pollen count through social media, our website, and ARAQMD hotline messages daily.

Non-High Priority Facility Inspection Program (NHPFIP)

In 2018, we created a new project, the Non-High Priority Facility Inspection Program (NHPFIP), which was staffed by two engineers funded through a mix of local, enforcement, and core budget dollars. The goal of this project is to ensure that all of the facilities in the ARAQMD region have up to date permits, are in compliance with the regulations, and that the information we have for the facility, owner and any equipment at the facility is correct. We are identifying facilities that have made changes to ownership or equipment and updating Ohio EPA's database with the corrected information. In 2023, NHPFIP continued with 58 site visits or full compliance evaluations of facilities and results show that a majority of the facilities inspected had something that needed updating.

Managing Asthma Triggers at Home (MATH)

The Managing Asthma Triggers at Home (MATH) project began in 2018 and is a key collaboration with Akron Children's Hospital. We are identifying 50 children per year, between the ages of 4 and 18, in the ARAQMD service area that have high risk asthma. High risk asthma is defined as having been intubated once, hospitalized twice or been to the Emergency Room three times in the past year for asthma. These children get their asthma under control at the hospital, but when they get back home, the asthma flares back up. The societal costs for this illness are great, both to the children and their families. The two cohorts of enrollees finished up their year of participation and results are showing that there is a significant decrease in hospitalization admittance as well as an increase in self-assessment of the client's asthma incidence.

In 2022, the MATH program moved to a service provision model and has assisted almost 50 clients with the home environment side of their asthma management.

We were honored with a Model Practices award by the National Association of City and County Health Organizations (NACCHO) in 2021 for this program.

The MATH project has been an ongoing collaboration with Akron Children's Hospital, including being invited to be a member of the Asthma Steering, Team Leads and Stakeholders committees to have a public health voice at their table. Additionally, at the end of 2023, Sam Rubens was installed as a member of the Ohio Department of Health's Asthma Steering Committee.

The project has been introduced to the Medicaid payers so that the cost of the equipment may be borne by them and the home intervention piece can be performed by ARAQMD.

There has been interest from organizations in the Cleveland area and the Mahoning Valley about replicating the MATH program as well.

Leadership roles:

Many of the ARAQMD staff are being leaders in the air quality field and our community by taking leadership roles in local, state and national organizations such as local community advisory panels, regional transportation planning organizations, Ohio EPA technical workgroups, ODH advisory councils, and the National Association of Clean Air Agencies (NACAA). We are working with the newer staff to coach them about the benefits of participation in these types of groups and encouraging them to engage and network with their peers.

Air Quality Index

Every weekday, ARAQMD reports the Air Quality Index (AQI) to the public by means of the ARAQMD website at http://www.scph.org/air-quality/air-quality-index, the agency Facebook page and the Air Quality Information line at 330-375-2545. The AQI is intended to advise the public of the potential health effects of the ambient air pollution. The AQI has six categories which have AQI values assigned. The AQI categories and the values are; Good (0-50), Moderate (51-100), Unhealthy for Sensitive Groups (101-150), Unhealthy (151200), Very Unhealthy (201-300), and Hazardous (301-500). In 2023, 70% of the time the air quality was in the good range, 26% was in the moderate range, 3% was in the unhealthy for sensitive groups range, and 1% in the unhealthy range. We had several multiday events of wildfire smoke intrusion in June and July where we did experience three days (6/28, 6/29, and 7/17) where the AQI was in the unhealthy category and another ten days (4/14, 5/31, 6/1, 6/6, 6/7, 6/8, 6/17, 6/27, 7/4, and 7/5) where the AQI was in the unhealthy for sensitive groups range.

Figure 3: Daily maximum AQI for Summit County, 2023

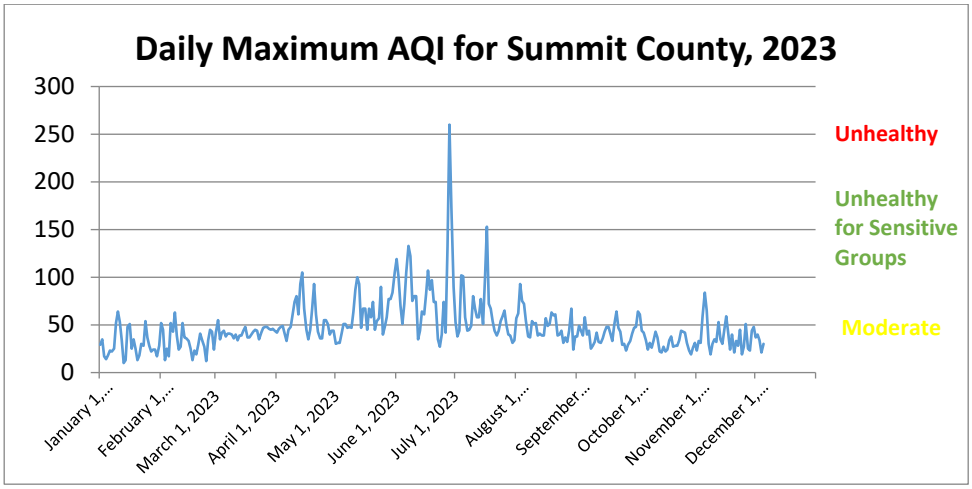
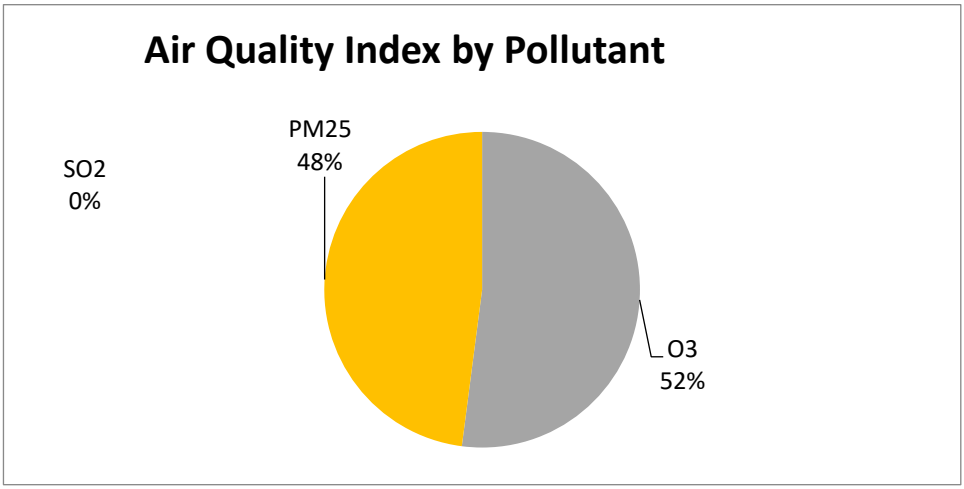


Figure 4: Air quality index by pollutant, 2023



The mission of the Akron Regional Air Quality Management District (ARAQMD) is to protect the public from the adverse health impacts of air pollution and to educate the public about air quality issues.

Air Pollutant Monitoring

National Ambient Air Quality Standards

The National Ambient Air Quality Standards (NAAQS) were devised in the 1970 Clean Air Act, which was last amended in 1990. The NAAQS are reviewed periodically and may be revised by the EPA. The review of the NAAQS begins with a rigorous scientific study done by the Clean Air Scientific Advisory Committee (CASAC), an independent group that was created to advise the EPA in scientific matters. CASAC then makes recommendations to the EPA as to what the scientific research shows that the levels of certain pollutants should be to adequately protect human health. The ARAQMD monitoring network is only required by the CFR to monitor for particulate matter, sulfur dioxide and ozone. Through previous monitoring data, our air does not have enough carbon monoxide or lead to need continued monitoring and there is not enough population in our region to necessitate monitoring for oxides of nitrogen.

Table 5: Current NAAQS

Pollutant	Level	Averaging Time
Carbon Monoxide (CO)	9 ppm	8 hour
	35 ppm	1 hour
Lead (Pb)	0.15 μg/m^3	Rolling three month average
	1.5 μg/m^3	Quarterly
Nitrogen Dioxide (NOx)	53 ppb	Annual Mean
	100 ppb	1 hour
Fine Particulate Matter ($PM_{2.5}$)	12.0 μg/m^3	Annual Mean
	35.0μg/m^3	24 hour
Ozone (O_3)	70 ppb	8 hour
Sulfur Dioxide (SO_2)	30 ppb	Annual Mean
	140 ppb	24 hour
	75 ppb	1 hour

Particulate matter with a diameter of less than 10 microns (PM_{10})

Prior to 2004, ARAQMD monitored for PM_{10} at two sites, Downtown Akron and East High. In 1997, the USEPA promulgated the PM2.5 NAAQS and in 2004, we ceased monitoring for PM10 due to our low concentrations. With the ARP funding, we were able to purchase a new monitor capable of monitoring for both PM2.5 and PM10 at the same time, so we are now obtaining PM10 data starting in 2023.

Particulate matter with a diameter of less than 2.5 microns ($PM_{2.5}$)

In 1987, the U.S. EPA made a change from total suspended particulate (TSP) to coarse particulate matter. PM_{10} is made of coarse particulates which can reach the thoracic region or upper lung area of humans. Upon review in 1997, the U.S. EPA changed focus from PM_{10} (coarse particulate matter) to $PM_{2.5}$ (fine particulate matter) in the ambient air. The $PM_{2.5}$ can be inhaled into the lower lung region and is hard to exhale. Once in the moist and warm lower regions of the lungs, chemical reactions can occur and the chemicals in the particulate matter can become dissolved and be transported across the lung membrane into the blood stream.

There are two NAAQS for $PM_{2.5}$. The first is a 12.0 µg/m^3 annual arithmetic mean, averaged over three consecutive years. The second is a 35 µg/m^3 4th high 24 hour average. This standard is attained when the 4th highest 24 hour average, averaged over 3 consecutive years, is less than 35 µg/m^3.

ARAQMD's monitoring network for $PM_{2.5}$ consists of two continuous Federal Equivalent Method (FEM) monitors located in Medina and Summit Counties, intermittent Federal Reference Method (FRM) monitors located in Summit, Portage and Medina Counties and speciation monitors located in Summit County. The intermittent monitors are used to determine if the region is in attainment with the NAAQS. The continuous monitors are used to determine the Air Quality Index (AQI) and for research projects which can help determine where particulate matter comes from, forecasting the AQI, and health effects. The speciation monitors are used for research projects, which determine the composition of the particulate matter and allow for controls to be put into place to minimize those sources.

The USEPA and Ohio EPA determined that it would be reasonable to shut down the FRM in Portage County at the end of 2022. That monitor was not the high concentration monitor for the region and was providing data that was not valuable enough to continue. The air mass that was being monitored by the Ravenna monitor was not statistically different than the air mass at East High. In that same vein, the Five Points monitoring site was disbanded in 2023, when construction on the site location occurred. The costs to reestablish that site were excessive relative to the worth of the data and the USEPA and Ohio EPA determined that it could be shut down as well. The goal is to relocate the speciation monitors to East High as soon as possible.

The ARAQMD region was combined with the Canton/Massillon metropolitan statistical area (MSA) for $PM_{2.5}$ attainment purposes. Table 6 below shows the values used to determine if the ARAQMD region is meeting the NAAQS.

Table 6: NAAQS comparison values for $PM_{2.5}$

Fine Particulate Matter ($PM_{2.5}$) Units: micrograms per cubic meter (µg/m^3)						
4th Highest 24 Hour Average – limit 35 µg/m^3						
County	Site Name	2019	2020	2021	2022	2023
Summit	East High*	21.3	17.3	22.8	18.8	28.0
Summit	5 Points	22.3	16.1	18.5	15.5	N/A
Portage	Ravenna	18.4	12.9	13.7	16.6	N/A
Medina	Chippewa*	20.2	14.7	16.9	17.7	34.4
Annual Mean – limit 12 µg/m^3						
County	Site Name	2019	2020	2021	2022	2023
Summit	East High*	8.7	8.1	8.6	7.9	9.4
Summit	5 Points	8.1	7.6	8.4	6.8	N/A
Portage	Ravenna	7.6	6.9	7.4	6.4	N/A
Medina	Chippewa*	8.1	6.8	76.9	6.3	9.2

*uses combined continuous and intermittent data

Sulfur dioxide (SO_2)

SO_2 is formed when sulfur-containing compounds are combusted. Most SO_2 in the air is caused by burning coal and smelting processes. Low-sulfur gasoline and coal are the goals for minimizing SO_2 production. SO_2 can be converted to sulfuric acid when it reacts with moisture in the air, on plants or in the lungs. Sulfuric acid is one of the most corrosive acids found in nature. If SO_2 is converted to sulfate (SO_4), it can be a lung irritant as well.

The existing standard, established in 2010, is 75 parts per billion based on the 3-year average of the 99th percentile of the yearly distribution of 1-hour daily maximum concentrations.

The monitoring network for SO_2 is comprised of one monitor located in Akron. The East High site was started to monitor emissions from a major local manufacturing site.

ARAQMD's service area is in attainment for sulfur dioxide. The ARAQMD region has seen a 76% decrease in the annual mean of SO_2 since 1977.

Table 7: NAAQS comparison values for SO_2

Sulfur Dioxide (SO_2) Units: Parts Per Billion (ppb)			
3 year average of 99th %ile of 1 hour averages – limit 75 ppb			
Site Name	2019-2021	2020-2022	2021-2023
East High	2	2	2

Ozone (O_3)

O_3 is the only criteria pollutant that is not directly emitted into the atmosphere. It is created by chemical reactions in the ambient air. When volatile organic compounds and oxides of nitrogen are in the presence of ultraviolet light, ozone is formed. The health effects of ozone have been demonstrated in various ways. Reduction in lung function in normal, healthy people during periods of moderate exercise have been shown, and irritation of the eyes, mucous membranes and respiratory system are also possible.

The NAAQS for ozone has changed radically in the past few years. Until 1997, the NAAQS was a fourth highest one hour maximum of 125 ppb each year. In 1997, the one hour standard was left in place and a new method of evaluating the pollution was put into place. The eight hour fourth highest average over three consecutive years must be less than 84 ppb to be in attainment. In 2006, the one hour standard was revoked. In 2009, a new standard was enacted and was upheld by the courts in 2012. The newest NAAQS, implemented in 2015, is a three year average of the fourth highest eight hour standard. This must be below 70 ppb for a three year period.

ARAQMD has three ozone monitoring sites, one each in Medina (Chippewa), Summit (North High) and Portage (Lake Rockwell) County.

ARAQMD's service area was designated as being in non-attainment for the 2009 NAAQS of an 8 hour maximum of 75 ppb. Although we are measuring concentrations below the NAAQS, Medina, Portage, and Summit counties are included as part of the Cleveland-Akron-Lorain MSA for ozone and, as such, are

designated as non-attainment for ozone. The ARAQMD region has seen a 44% decrease in the 1 hour maximum concentration of ozone since 1977.

Table 8: NAAQS Comparison Values for O_3

Ozone (O_3) Units: Parts Per Billion (ppb)			
3-year 4th Highest Maximum 8 Hour Average – limit 70 ppb			
Site Name	2019-2021	2020-2022	2021-2023
Summit County	69	66	69
Portage County	65	67	69
Medina County	63	65	68

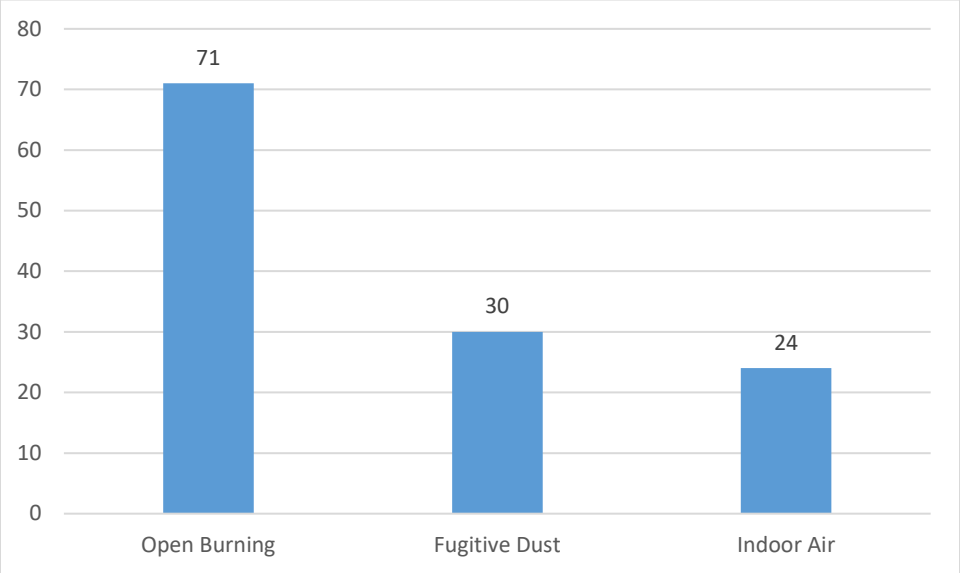
Monitoring equipment upgrades and American Rescue Plan (ARP) funding

The ambient air monitoring section had a busy 2023 upgrading the monitors in our network. ARAQMD was allocated over $100,000 in federal ARP funding to upgrade our network. The funding was used to purchase new continuous PM monitors, one of which will allow us to monitor for PM10 as well as PM2.5 and a black carbon monitor to differentiate between smoke and carbon in the air.

Field Activities

Our staff performs several activities which impact air quality, both indoors and out. Figure 7 shows the number of each of these activities performed in 2023. The categories are further described below.

Figure 7: Site Inspections, 2023



Open burning

ARAQMD staff members are responsible for responding to incidents where open burning occurs. Open burning is defined by Ohio Administrative Code (OAC) 3745-19 as "the burning of any materials wherein air

contaminants resulting from combustion are emitted directly into the air without passing through a stack or chimney." There are regulations on the location where burning may occur, what may be burned, when the burning can happen and who may conduct the burning. In many cases, notification must be made to ARAQMD to obtain a permit at least 10 working days prior to the intended burning. ARAQMD inspectors investigated 80 complaints and 4 open burning permits were issued in 2023.

Fugitive dust

Fugitive dust is regulated under OAC 3745-17-08. Fugitive dust can be generated from many sources such as spray painting booths, furnaces, traffic on roadways or parking lots, tilling farmland or digging, and construction activities. The regulations for fugitive dust require that there must be reasonably available control measures to minimize dust release when transporting, storing, or handling dust. Some control technologies are the use of water, asphalt or oil to suppress the dust, installation of hoods or fans to enclose, contain, capture, vent and control the fugitive dust. The ARAQMD staff members will inspect fugitive dust problems on a complaint-driven basis. In 2023, inspectors investigated 37 complaints about fugitive dust.

Indoor air quality

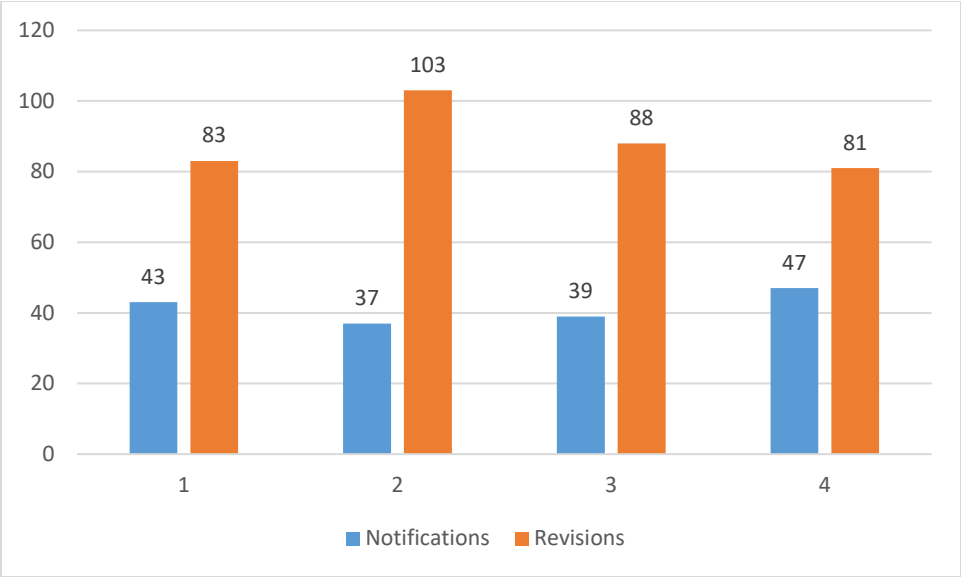
ARAQMD's Indoor Air Quality (IAQ) Program has been in place since 1993 and has assisted in over 5000 indoor air quality complaints in residential, commercial and school settings. In 2023, the program handled 15 inquiries. Some of the most common topics are mold, carbon monoxide, and formaldehyde. The indoor air staff members are educated to provide the latest information about air quality issues and health effects and how best to help the public protect their health. The IAQ program is designed to be a neutral, third-party source of information. As such, the program does not perform remediation or maintain a list of companies who do remediation work. The ARAQMD IAQ Program is available for those who work or reside in Summit, Medina or Portage Counties.

Asbestos

Asbestos is a naturally occurring mineral which was used as an insulating compound on pipes and houses until the 1950s. When properly encapsulated, asbestos is very useful. When asbestos is disturbed or is at the surface of the material it is in, the asbestos fibers can fracture and become airborne. This process is termed "friable." Studies have shown that when friable asbestos is inhaled, it can have a lengthy residence time in the lungs and cancer risk is increased significantly.

The ARAQMD staff is responsible for inspecting the abatement work being done to ensure that the remediation work is done correctly to minimize exposure to workers and accidental release to the ambient air. In 2023, ARAQMD inspectors achieved an inspection rate of 75% of received original notifications, which is above the 15% inspection rate as required in our contract with Ohio EPA.

Figure 8: Asbestos notifications and revisions received, 2023



Permitting Section

Permit Issuance

As a contractual agent of Ohio EPA, ARAQMD is responsible for administering the Division of Air Pollution Control's (DAPC) permitting program requirements for sources of air contaminants in Medina, Summit, and Portage counties. The permitting process starts with the receipt of a permit application. The application is reviewed for preliminary and technical completeness in accordance with Ohio EPA policies and environmental rules and laws. There are a different permit options available depending on the type of source, existing air quality where the source is located, operational flexibility needed by the source, whether additional voluntary restrictions are included in the permit, and the required permitting action.

Types of sources

Title V/Major Source – Facilities with potential emissions of 100 tons per year or more of any one regulated pollutant (PM_{10}, NO_X, SO_2, CO, VOC, and lead); 10 tons per year or more of any one hazardous air pollutant (HAP); or 25 tons per year or more of any two or more HAPs. These facilities usually have very complex permitting requirements (e.g., medium to large sized industrial operations, utilities, refineries, etc.).

Synthetic Minor Title V (SMTV) – Facilities with potential emissions above at least one major source permitting requirement and/or Title V threshold, which have agreed to voluntarily restrict operations and the quantity of air contaminants emitted in order to avoid major source/Title V status.

Non-Title V (NTV)/Minor – Smaller emitting facilities, with potential emissions naturally below major source/Title V thresholds. These facilities generally have less complicated permitting requirements (e.g., small industrial operations, dry cleaners, gas stations, etc.).

Exempt – Sources that qualify for a permanent permit exemption under OAC rule 3745-31-03(B) or the "de minimis" source exemption under OAC rule 3745-15-05.

Types of permits

Permit-to-Install (PTI) – A permit issued for any new or modified source that is located at a Title V facility. It is effective for the lifetime of the source, or until the next modification.

Title V Permit-to-Operate (Title V PTO) – A comprehensive, facility-wide permit that identifies all regulated operations at a Title V facility. It has a five-year effective period.

Permit-to-Install and Operate (PTIO) – This permit document is issued to NTV and SMTV facilities. It is a relatively recent permit document type. Effective June 30, 2008, Ohio EPA began issuing a single PTIO (rather than a PTI, followed by a separate PTO) in order to streamline the permitting process for air contaminant sources at non-major facilities. The PTIO has a ten-year effective period, when issued to a NTV facility.

Federally Enforceable Permit-to-Install and Operate (FEPTIO) – This is a specific type of PTIO issued with federally enforceable limitations that restrict the facility-wide potential to emit in order to avoid various restrictions. It has a five-year effective period.

Model General Permit (GP) – A general permit is the same as any PTI or PTIO except all the terms and conditions of the permit have been developed in advance. Potential applicants must meet specific qualifying criteria.

Permit by Rule (PBR) – A permit-by-rule is a specific permit provision in OAC rule 3745-31-30 that applies to certain types of low-emitting air pollution sources. A facility submits a PBR notification form for a specific source and operates the source in accordance with the terms and conditions specified in the applicable rule, but no permit document is generated. A PBR is in effect for the lifetime of the source.

Registration Status – Prior to 2008, a source could be placed on registration status rather than being issued a permit to operate provided the source was in compliance with all applicable rules and several conditions were met. Once a source was placed on registration status it would remain there until removed and did not have an expiration date.

Permitting actions

Initial Installation* – A PTI or PTIO must be obtained before any new, non-exempt, air pollution source is constructed in Ohio pursuant to OAC Chapter 3745-31.

Chapter 31 Modification* – Any physical change in, or change in the method of operation of an air contaminant source as defined under OAC rule 3745-31-01(M).

Administrative Modification – Any change to a PTI or PTIO that does not meet the definition of a Chapter 31 Modification.

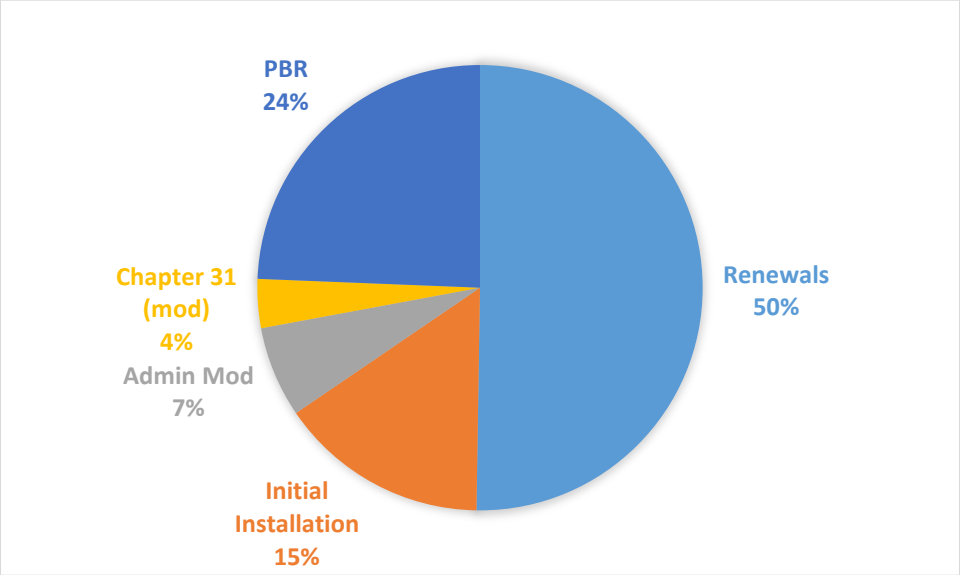
Title V Minor Permit Modification – Changes that do not trigger Title I modifications or involve significant changes to monitoring, record keeping or reporting requirements in a Title V permit.

Renewal – The process by which a permit may be reissued at the end of its term.

*Depending on the increase in emissions and current attainment status for the affected county, additional permitting requirements may be needed through Prevention of Significant Deterioration (PSD) or Nonattainment New Source Review (NNSR).

Once the preliminary and technical review of the application is complete, ARAQMD's engineering staff develops the facility-wide and emission-unit specific permit terms and conditions. The permit terms establish limits on the quantity of air contaminants emitted and requirements for the operation of regulated air contaminant sources. Permit terms can also specify emission testing, monitoring, record keeping, and reporting requirements necessary to demonstrate compliance with the established emission limits. The working copy of the permit is then submitted to Ohio EPA for final review and issuance. Some permits are issued draft and subject to a 30 day public comment period and in some instances, a public hearing may be held. During 2023, the ARAQMD staff processed 43 permit renewals and 33 initial installation permits.

Figure 9: 2023 Permit issuances by permitting action



Registration Project

ARAQMD has been working on the registration status verification project since June 2008. The goal is to contact all facilities with units on Registration Status and re-evaluate the units permit status. Some emission units such as boilers or storage tanks are now considered "Permit Exempt" due to size and are being updated accordingly; while other units may need to be moved to newer created permitting categories such as PBRs or General Permits. Over 500 permits were reviewed for adequacy. 150 permits were revoked as the company had shut down or some similar activity had occurred. 12 permits were superseded by existing permits. 280 were actually left on registration status pending other actions. Some facilities had upcoming permit renewal dates that made changes unnecessary.

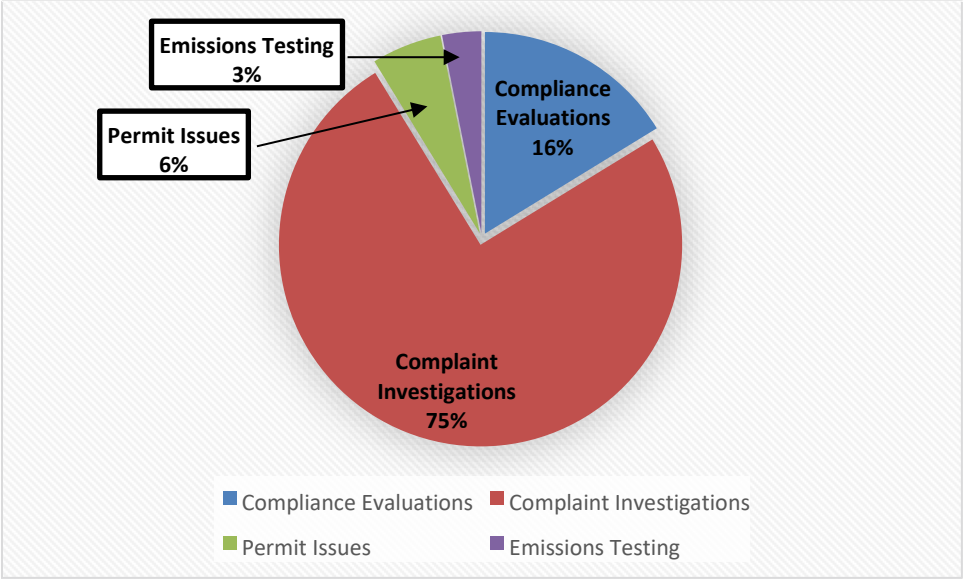
Permitted Facility Inspections & Complaint Investigations

After permit issuance, ARAQMD's staff continues to monitor the compliance status of air contaminant sources by periodically reviewing required monitoring data, records and reports. This includes witnessing a minimum of 50% of all emissions tests conducted in ARAQMD's jurisdictional area, and reviewing test

results to verify proper methodology and procedures were used to demonstrate compliance with permitted emission limitations.

A total of 32 stack tests were performed and 97% of those were witnessed by ARAQMD staff. Scheduled and unannounced facility inspections are also conducted to ensure air contaminant sources are in compliance with applicable permit terms and state and federal regulations. Under contract with Ohio EPA, ARAQMD is required to conduct full compliance evaluations for at least 50% of all Title V sources and 20% of all SMTV facilities each year. As of 2023, there are a total of 17 Title V facilities, 69 SMTV facilities, and 1316 NTV facilities located in ARAQMD's 3-county service area. A total of 30 visits were made to the TV facilities, 29 visits were made to the SMTV facilities, 140 visits to NTV facilities, and 58 NHPFIP inspections were done in 2023.

Figure 10: Reason for site visits



Annual Enforcement Summary

In 2023, ARAQMD sent out 3 warning letters, issued 22 NOVs, and referred one facility to Ohio EPA for escalated enforcement.

Conclusion

In 2023, ARAQMD saw changes and continued to progress towards meeting the goals outlined in the Strategic Plan. ARAQMD will continue its journey towards the goal of becoming a model of best practices. We will work more towards assisting small facilities in attaining compliance with the regulations and acknowledge facilities that have consistent compliance and sustainability projects. The staff of ARAQMD is looking forward to continuing the good work we have been doing and expanding the roles of the agency in protecting the public from the adverse effects from air pollution.