NORTHERN NEVADA Public Health | Air Quality

Air Quality Management Division
Division Director Staff Report
Board Meeting Date: April 25, 2024

DATE: April 8, 2024

TO: District Board of Health

FROM: Francisco Vega, P.E., Division Director
775-784-7211; fvega@nnph.org

SUBJECT: **Air Quality Management** - EPA Issues Standards for MY2027 and Later Light-duty and Medium-duty Vehicles, EPA Finalizes Phase 3 GHG Standards for Heavy-Duty Vehicles, EPA Seeks Comment on the Review of the NO2 Standards, March 2024 EPA Small Business Newsletter, Divisional Update, Program Reports, Monitoring and Planning, Permitting and Compliance.

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1. Program Update

a. EPA Issues Standards for MY2027 and Later Light-duty and Medium-duty Vehicles

The U.S. Environmental Protection Agency (EPA) has announced a final rule, Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles, that sets new, more protective standards to further reduce air pollutant emissions from light-duty and medium-duty vehicles starting with model year 2027. The final standards will significantly reduce emissions of greenhouse gases (GHG), hydrocarbons, nitrogen oxides (NOx), and particulate matter (PM) from new passenger cars, light trucks, larger pickups, and vans. It is estimated that these standards will avoid more than 7 billion tons of carbon emissions and provide nearly $100 billion of annual net benefits to society, including $13 billion of annual public health benefits due to improved air quality, and $62 billion in reduced annual fuel costs, and maintenance and repair costs for drivers.

"The future is electric. Automakers are committed to the electric vehicle (EV) transition, investing enormous amounts of capital and building cutting edge battery electric vehicles, plug-in hybrids, traditional hybrids and fuel cell vehicles that drive efficiency and convert petroleum miles to electric miles," said **John Bozzella, President and CEO, Alliance for Automotive Innovation**. "Consumers have tons of choices. But pace matters. Moderating the pace of EV adoption in 2027, 2028, 2029 and 2030 was the right call because it prioritizes more reasonable electrification targets in the next few (very critical) years of the EV transition. These adjusted EV targets, still a stretch goal, should give the market and supply chains a chance to catch up. It buys some time for more public charging to come online, and the industrial incentives and policies of the Inflation Reduction Act to do their thing. And the big one? The rules are mindful of the importance of choice to drivers and preserves their ability to choose the vehicle that's right for them."

EPA regulates motor vehicle emissions through performance-based standards that impose fleet-wide average emissions limits, individual vehicles with higher emissions are allowable if the fleet average achieves EPA's emissions targets. The standards do not require the adoption of specific technologies. Automakers may decide which technologies to achieve the standards, such as advanced gasoline engines and transmissions, improvements to tailpipe controls, and electrification.

For further information please visit the link below.
https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-multi-pollutant-emissions-standards-model

b. EPA Finalizes Phase 3 GHG Standards for Heavy-Duty Vehicles

The U.S. Environmental Protection Agency (EPA) has announced its final rule, Greenhouse Gas Emission Standards for Heavy-Duty Vehicles – Phase 3. The final rule includes progressively more stringent performance-based CO2 emission standards for vocational vehicles (e.g., delivery trucks; refuse haulers; public utility trucks; transit, shuttle, and school buses), day cab (short-haul) tractors and sleeper cab (long-haul) tractors, to begin between Model Years 2027 and 2030, depending on the vehicle type. Similarly to the standards set for Light-Duty and Medium-Duty Vehicles, the final standards do not mandate the use of any specific technology. Instead, each manufacturer may choose what mix of emission control technologies is best suited for its fleet to meet the standards.

EPA writes in the rule, "In consideration of the opposing concerns raised by commenters, EPA believes it is critical to balance the public health and welfare need for GHG emissions reductions over the long term with the time needed for product development and manufacturing as well as infrastructure development in the near term." Therefore, EPA has finalized standards that, compared to the April 12, 2023, proposed standards, are less stringent, for all vehicle categories in Model Years 2027, 2028, 2029 and 2030 and increase in stringency at a slower pace during those years.

"Sierra Club is pleased that the EPA has finalized the federal heavy-duty vehicle standards, which will help cut emissions from large polluting trucks and buses," said **Katherine García, Director of the Sierra Club's Clean Transportation for All campaign**. "The new standards reflect Congress' long standing demand for healthy air along with its recent historic investments in getting cleaner vehicles on our roads, corridors, and ports. Together, they are a game changer. With the climate crisis underway and many of our communities facing unprecedented fires, droughts, and floods, it's crucial that truck manufacturers get into the fast lane with zero-emission trucks to deliver the climate, health, and economic benefits we deserve."

Pollution from heavy-duty vehicles contributes to climate change and can exacerbate serious health issues such as respiratory and heart ailments, especially for the 72 million

people in the United States who live close to truck freight routes and are more likely to be people of color or come from low-income households. EPA estimates that this final rule will result in the avoidance of 1 billion metric tons of GHG emissions and 53,000 tons of NOx from 2027 through 2055; $13 billion of annualized benefits through 2055; and annualized savings to the heavy-duty industry of $3.5 billion compared to annualized costs of $1.1 billion.

For further information please visit the link below.
https://www.epa.gov/newsreleases/biden-harris-administration-finalizes-strongest-ever-greenhouse-gas-standards-heavy

c. EPA Seeks Comment on the Review of the NO2 Standards

The U.S. Environmental Protection Agency (EPA) has published a notice in the Federal Register (89 Fed. Reg. 19,308) announcing the availability of Volumes 1 and 2 of the Integrated Review Plan (IRP) for the Primary Nitrogen Oxide NAAQS Review. Volume 1 of the IRP is a background document and Volume 2 addresses planning for the review and the Integrated Science Assessment (ISA). EPA's last review of the primary National Ambient Air Quality Standard (NAAQS) for oxides of nitrogen (NO2) concluded in 2018 with a decision by the EPA administrator to retain, without revision, the 1-hour limit of 100 parts per billion (ppb) set in 2010 and the annual limit of 53 ppb set in 1971. Public comments on either or both volumes of the IRP must be received by EPA on or before April 17, 2024.

Please visit the link below for additional information.
https://www.epa.gov/naaqs/nitrogen-dioxide-no2-primary-standards-planning-documents-current-review

d. March 2024 EPA Small Business Newsletter

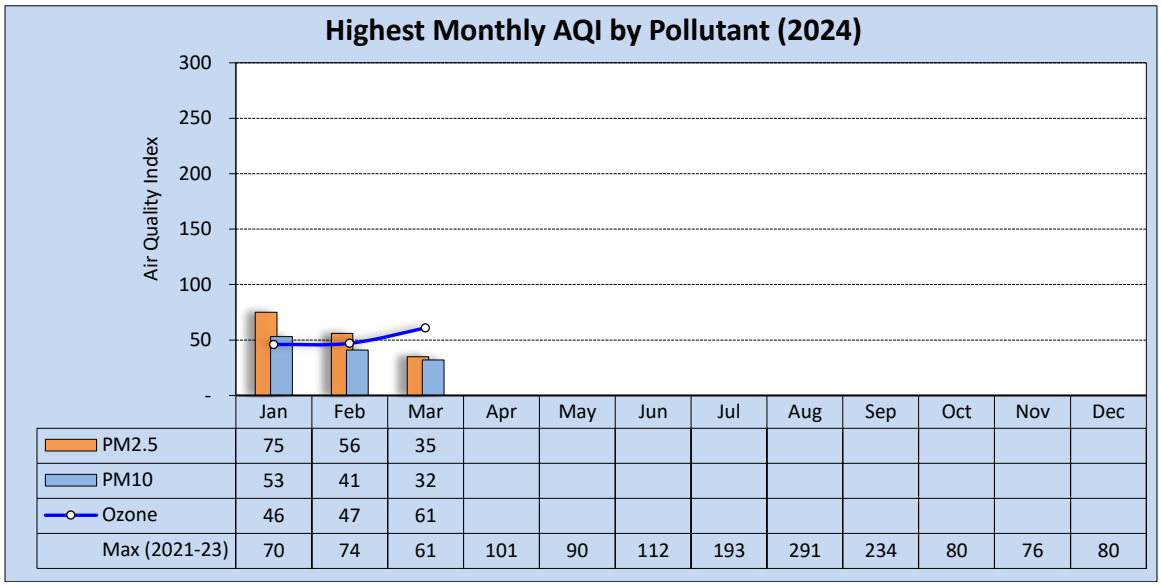
Please visit the link below to view the March 2024 EPA small business monthly newsletter which highlights environmental regulation, compliance assistance, resources, and upcoming events. Contact asbo@epa.gov to subscribe to the newsletter. For more information about small business resources and Small Business Environmental Assistance Programs (SBEAPs), visit https://www.epa.gov/resources-small-businesses.

March Newsletter
https://www.epa.gov/system/files/documents/2024-03/asbo-march-2024-smallbiz.pdf

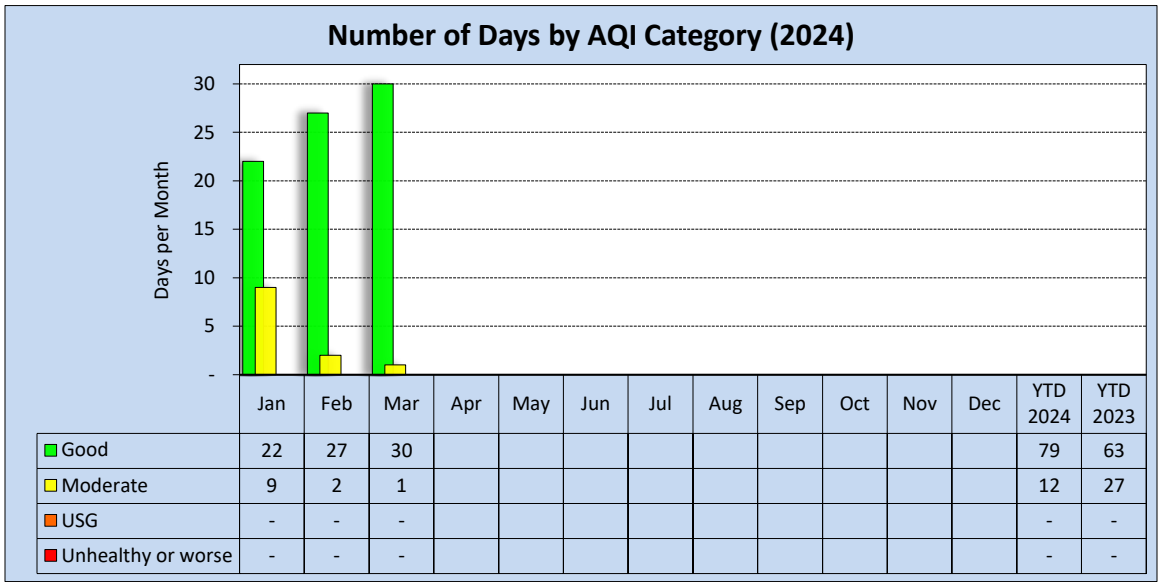
Francisco Vega, P.E., MBA
Division Director

2. Divisional Update

a. Below are two charts detailing the most recent ambient air monitoring data. The top chart indicates the highest AQI by pollutant and includes the highest AQI from the previous three (3) years in the data table, for comparison. The bottom chart indicates the number of days by AQI category and includes the previous year to date for comparison.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
PM2.5	75	56	35									
PM10	53	41	32									
Ozone	46	47	61									
Max (2021-23)	70	74	61	101	90	112	193	291	234	80	76	80



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD 2024	YTD 2023
Good	22	27	30										79	63
Moderate	9	2	1										12	27
USG	-	-	-										-	-
Unhealthy or worse	-	-	-										-	-

Ambient air monitoring data in these charts represent midnight to midnight concentrations to illustrate comparisons to the NAAQS. These data are neither fully verified nor validated and should be considered PRELIMINARY. As such, the data should not be used to formulate or support regulation, guidance, or any other governmental or public decision.

3. Program Reports

a. Monitoring and Planning

March Air Quality: There were no exceedances of the ozone, PM_{10}, and $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS). The highest ozone, $PM_{2.5}$, and PM_{10} concentrations for the month are listed in the table below.

Pollutant	Concentration	Date(s)	Site(s)	Notes
Ozone (8-hour)	0.058 ppm	3/21	Lemmon Valley	-
$PM_{2.5}$ (24-hour)	8.3 µg/m^3	3/9	Sparks	-
PM_{10} (24-hour)	34 µg/m^3	3/22	Sparks	-

Air Quality Awareness Week: Air Quality Awareness Week is May 6 through May 10, 2024. The national theme for this year is "Knowing Your Air". It will highlight resources that increase air quality awareness and encourage people to take action and incorporate air quality knowledge into their daily living. It will also provide an opportunity for people to learn about what causes poor air quality and how people can prepare for, and respond to, events and environments with poor air quality, not just during the month of May, but year-round. To celebrate, AQMD will be providing information on social media each day to empower the citizens of Washoe County on the topic of air quality. Daily topics will showcase AQMD's award-winning Keep It Clean programs.

Funding Opportunities: The AQMD received two invitations from EPA to apply for noncompetitive direct grant funding under the Inflation Reduction Act (IRA). One is to provide resources to support the sustainability of air quality monitoring networks. AQMD is currently assessing monitoring network needs and will apply for an amount between $500,000 and $1,420,000. The other is to support the deployment, integration, and operation of air quality sensors in low-income and disadvantaged communities in the amount of $20,000 to $482,000. The goal for both of these opportunities is to ensure clean and healthy air for all communities with an objective of improving air quality and reducing localized pollution and health impacts.

Craig A. Petersen
Supervisor, Monitoring and Planning

b. Permitting and Compliance

March

Staff reviewed thirty-six (36) sets of plans submitted to the Reno, Sparks, or Washoe County Building Departments to assure the activities complied with Air Quality requirements.

In March 2024, Staff conducted fifty-one (51) stationary source inspections and seven (7) initial compliance inspections. Staff were assigned sixteen (16) new asbestos abatement projects – monitoring the removal of approximately twenty-four thousand two hundred forty-seven (24,247) square feet and thirty-nine (39) linear feet of asbestos containing materials. Staff received four (4) facility demolition projects to monitor. Further, there were twelve (12) new construction/dust projects comprised of an additional one hundred seventy-eight (178) acres. Staff documented sixty-one (61) construction site inspections. During the month, enforcement staff also responded to eleven (11) complaints.

Type of Permit	2024		2023	
	March	YTD	March	Annual Total
Renewal of Existing Air Permits	94	272	90	1,079
New Authorities to Construct	4 (New and Major Modifications)	13	0 (New and Major Modifications)	42
Dust Control Permits	12 (178 acres)	46 (776 acres)	13 (127 acres)	193 (2,386 acres)
Wood Stove (WS) Certificates	18	54	10	242
WS Dealers Affidavit of Sale	9 (4 replacements)	32 (14 replacements)	7 (4 replacements)	124 (56 replacements)
WS Notice of Exemptions	607 (3 stoves removed)	1,451 (13 stoves removed)	517 (4 stoves removed)	6,495 (57 stoves removed)
Asbestos Assessments	48	153	53	731
Asbestos Demo and Removal (NESHAP)	22	42	21	196

Complaints	2024		2023	
	March	YTD	March	Annual Total
Asbestos	1	5	1	12
Diesel Idling	0	0	1	2
Dust	7	14	3	96
Nuisance Odor	0	0	1	7
Permit to Operate	0	0	0	0
Burn Code	0	1	2	4
General	3	7	5	40
TOTAL	**11**	**27**	**13**	**161**
Enforcement	**March**	**YTD**	**March**	**Annual Total**
Warnings	1	7	0	26
Notice of Violation	7	16	0	20
TOTAL	**8**	**23**	**0**	**46**

Joshua C. Restori
Supervisor, Permitting & Compliance