Cleaner Air Partnership Technical Advisory Committee

Thursday November 10th, 2022 10:00 AM - 11:30 AM

Potential Changes to National Ambient Air Quality Standards

Meeting Minutes

- **National Ambient Air Quality Standards (NAAQS) Subject Matter Experts:**
    - **Miles Keogh**, National Association of Clean Air Agencies (NACAA)
    - **Shyamala Rajan,** American Lung Association
    - **Mariela Ruacho**, American Lung Association
    - **Louis Baer**, Portland Cement Association
    - **Erik White**, Placer County Air Pollution Control District

- **National Ambient Air Quality Standards (NAAQS) 101**:
    - "The Clean Air" in the National Association of Clean Air Agencies gets its name from The Clean Air Act, which Congress passed in the 1970s and updated in the 1990s.
        - Local, state and federal agencies work together to improve air quality through many ways, with one being through ambient standards or 6 harmful criteria pollutants:
            - Carbon monoxide, lead, particulates, ozone, nitrogen dioxide and sulfur dioxide.
    - NAAQS is health based, meaning the levels are set solely based on the Primary standards for public health and welfare protection first and foremost, then on environmental health standards, as a secondary standard .
        - Standards not based on other areas of concern such as economics.

        - NAAQS is the cornerstone of the Environmental Protection Agency's work to protect public health and the environment from air pollution.
        - Huge accomplishment: Over 40 years, NAAQS have driven the decline of emissions from harmful air pollutants by 71%, while the economy grew by 182%.
        - NAAQS has saved thousands, possibly millions of lives.
    - Sections 108 and 109 of The Clean Air Act create the structure, to review the science and go through a multi-year review to ensure current NAAQS meet the scientific standards.
        - Use both literature and scientific expertise in the review process every 5 years.
        - Determine whether a standard or standards need to be tightened or need to be made more protective of public health.
        - If determination is made where the science says standards need to be made more protective or when new standards are set, members from NACAA agencies must take action on air quality policies and programs in their jurisdictions around the country (e.g. decrease emissions in areas that do not meet ambient standards)
    - Primary standards are driven by health impacts to public health and secondary standards have to do with environmental health impacts.
        - Carbon monoxide - from cars - has a primary standard where there are exposure limits for every 8 hours of exposure and per every 1 hour of exposure.
        - Lead - comes from many mobile sources - has primary and secondary standards that are on a rolling 3-month average
            - NAAQS is a big driver in why we don't have leaded gasoline anymore (although there are certain kinds of fuel that do have lead in them)
        - Nitrogen oxides - 1 hour and 1 year standards

        - Ozone - from power plants, stationary sources, vehicles, etc. - primary and secondary standards set at 8 hours.
            - The standard was tightened in 2015 from 75 parts per million (ppm) to 70 ppm.
        - Particle pollution - droplets or tiny bits of debris such as PM 10 or PM 2.5 meaning 2.5 microns in width for example.
            - PM 2.5 is a major air pollutant that causes human mortality, penetrating deep within our lungs and has shortened many lives.
            - There are primary and secondary short-term and longer-term standards for exposure to PM 2.5 and PM 10 (standards are undergoing tightening right now, as well).
        - Sulfur dioxide - mainly from coal-fired power plants- there are 1-hour and 3-hour primary and secondary standards for exposure limits.
    - Within a year of setting standards, States and Tribes have to submit recommendations to EPA on whether or not they can meet them or if they are meeting standards currently.
        - They submit ambient air quality data that they've collected over a period of time - whether their levels are below or above standards - and EPA determines through review if they are meeting standards or not.
        - EPA designates whether an area is **in attainment** (if air quality meets or is better than the standards) or is in non-attainment (if air quality does not meet the standards and is worse than standards).
        - Areas designated as in non-attainment, have to develop implementation plans outlining how they will get out of non-attainment designation, how they will attain and maintain those standards.

        - Once EPA approves the State's Implementation Plan (SIP), the control measures outlined in the plan becomes enforceable in federal court.
        - If a plan is disapproved, or if a state fails to submit one, EPA will develop a Federal Implementation Plan (FIP), where the agency implements a plan for that jurisdiction that is in non-attainment.
        - If an area goes out of attainment, there are consequences such as loss of federal funding such as highway funding and the state will face federal permitting limits and requirements, as well.
        - To get back into attainment, the state has to demonstrate that the air quality meets the standards, and do so through demonstrating that the way you have met the standards comes from real reductions of emissions.
- **American Lung Association**:
    - Criteria Air Pollutants (CAPs) and Greenhouse Gases (GHGs) are factors and focus for advocacy for the American Lung Association.
    - Nitrogen Oxides are a very powerful greenhouse gas.
    - Wildfires produce both PM and nitrogen oxides.
    - For particulate matter (PM) there is no safe level because they are so microscopic, they affect our lungs and are deadly at any level.
    - Vulnerable populations include children, people of color, people with pre-existing morbidities, pregnant women and their fetuses, people 65 and older, people with low income, as well as people who work and exercise outdoors.
    - EPA is looking at these 6 criteria pollutants for its review process and what has been proposed- changes to fine particulate matter - is waiting at the EPA's Office of Management and Budget (OMB).
        - Changes to Nitrogen Dioxide standards are being proposed by the American Lung Association and are still waiting for EPA approval.

        - Changes to Ozone are still in discussion and ALA has a meeting with the Clean Air Scientific Advisory Advisory Committee (CASAC) soon on these changes.
    - Lung association advocacy around NAAQS
        - Advocate for standards based on scientific findings that are necessary to protect lung health.
        - There is a long history of Lung Association advocacy in support of fully implementing the Clean Air Act, including advocating for stronger NAAQS.
        - Association sued over the previous administration's decision to not update the standards and petitioned EPA to reconsider.
        - Currently engaged in every part of the fine PM (PM 2.5) NAAQS reconsideration.
        - Work in coalition with public health and medical organizations.
        - Association submitted detailed technical comments, provided oral testimonies at every opportunity, recruited additional health experts and people with personal stories of health impacts to provide testimony.
        - Educate and engage the public, including with factsheets, blogs and public petitions.
        - Hold interviews with the media and conduct outreach on social media.
        - Meet with White House Office of Management and Budget.
    - Local work and statistics in California and the region:
        - "State of the Air" - 23rd Annual Report
            - California Cities continue to have the most polluted cities in the nation.
            - For Ozone: 6 California cities placed in the Top 10.
            - For 24-hour PM: 8 California cities placed in Top 10.
            - For Annual PM: 7 California cities placed in the Top 10.

            - Sacramento-Roseville metro area places in Top 10 for ozone and 24-hour PM.
            - 90% of Californians are impacted by poor air quality due to pollution.
            - Communities of color are 3x more likely to be impacted by air pollution than other communities with less people of color.
        - Ozone State Implementation Plan (SIP): Approved in September 2022
            - Some of the regulations to meet the standards and measures outlined in the SIP:
                - **Advanced Clean Fleets:** 3rd largest Nitrogen Oxides reduction - zero emission trucks, fleets and sales targets
                - **Zero-Emission Trucks Measure**: phase out old and high emitter trucks and transition to zero-emission
                - **Locomotives:** #1 largest Nitrogen Oxide reduction through clean up and transition to zero emission locomotives.
- **Portland Cement Association:**
    - Association represents the vast majority of American cement manufacturers, with 9 plants in California and 95 across the country over 33 states.
    - Industry perspective: Cement Industry
        - Association has very extensive PM standards that they comply with for hazardous air pollutants such as PM
        - Also heavily regulated for nitrogen oxides and sulfur dioxides through Title V permits.
        - Cement industry is a very well controlled industry and is extensively involved with other industrial associations in D.C. in advocating for various NAAQS that are undergoing reconsiderations.

    - In terms of the science, the association believes that the science hasn't changed to warrant the lowering of NAAQS, since the 2020 final decision by the Trump administration.
    - Industry is advocating that EPA should retain both the PM and nitrogen oxides standards.
- **NACAA:**
    - NACAA's work is to advance the protection of clean air for all and improve capability and effectiveness of the agency as they do the work of implementing the Clean Air Act.
    - NACAA's vision and views may not perfectly align with the cement association nor the American Lung Association.
- **Open Q&A:**
    - For California, how are we going about gauging the impact of wildfires on the air we breathe?
        - Wildfires are definitely impacting our air quality - 5 to 10 years ago, there were talks of the concern of undermining the impacts of wildfires on our air quality
            - There is a ton of research about the air quality impacts from wildfires that will help us get ahead of this wildfire situation.
            - It is a growing concern and something we need to get ahead on.
        - NAAQS doesn't take emissions from wildfires into account legally nor the impacts of air quality from wildfires into account either, but the American Lung Association do take this into consideration
        - There are significant impacts of wildfires on air quality and public health with recent studies that just came out that look at wildfire emissions in the context of air quality gains and emission reductions programs in California - Stanford and UCLA studies.
            - Wildfires have eroded all of the air quality gains over the past decade, as they get worse every year.

            - Greenhouse gas programs implemented by California have been negated by the greenhouse gas emissions and carbon emissions that come from wildfires.
    - Can the federal government do more prescribed burning/controlled burning in our forests?
        - Yes they can, both the federal government and the state, particularly in Placer County, where they have been advocating for this.
            - The federal government through the forest service has committed to do prescribed burning on 500,000 acres of forest each year across the state to reduce wildfire risk.
            - The state has also committed to do the same on 1 million acres, every year - this process is way behind.