Appendix 3 Public Participation Response to Comment Document

New Jersey certifies that the requirements of 40 C.F.R. §51.102(a) and (d) for public hearings and notice have been met. A public hearing on the proposed State Implementation Plan (SIP) revision was held virtually on Tuesday, February 14, 2023, at 10:00 a.m. at the NJDEP. This hearing was held in accordance with the provisions of Section 110(a)(2) of the Clean Air Act, 42 U.S.C. §7410; 40 C.F.R. §51.102(a), the Air Pollution Control Act (1954), N.J.S.A. 26:2C-1 et seq., and the Administrative Procedure Act, N.J.S.A. 52:14 B-1 et seq. Written comments relevant to the proposal were accepted until the close of business, Friday, February 17, 2023.

Notice of the proposed SIP, availability and the public hearing was published on the NJDEP's website and issued on two NJDEP air quality listservs on January 10, 2023. In addition, the United States Environmental Protection Agency (USEPA) and air quality contacts from other states were emailed the notice. These notices were issued at least 30 days prior to the public hearing and close of comment period.

Attachment 3-1 contains documentation of the public notice including:

- The public notice posted on the website announcing the availability of the proposed SIP revision and information regarding the public hearing and the public comment period;
- 2. The NJDEP website postings; and
- 3. The NJDEP listserv email.

During the comment period, comments were received on the proposed SIP revision. The following person(s) submitted comments:

- 1. Bill Wolfe, Private Citizen (BW)
- 2. Steven Fenichel, M.D., Private Citizen (SF)

No persons testified at the public hearing. The submitted comments and the State's responses are summarized below. After each comment is the name of the commenter.

National Ambient Air Quality Standards (NAAQS) Not Protective Enough

- Comment: Serious concerns have been raised regarding the adequacy of the 2006 PM2.5 24-hour 35 μg/m³ NAAQS in terms of protecting public health, "with an ample margin of safety". Additionally, science suggests serious public health risks from currently unregulated ultra-fine particulates. (BW)
- 2. Comment: There are inter-relationships between fine particulate public health and regulatory policy, with the emissions of greenhouse gases and attainment of science-based emission reductions. (BW)
- 3. Comment: It is important that the Department address the most recent available science in protecting human health and assure the public that NJ's Clean Air Act SIP is kept current and not based on 16-year-old standards and outdated science. (BW)

- 4. Comment: DEP must withdraw and strengthen the plan in light of:
 - **a.** Advances in science document more serious health effects at lower levels of exposure, particularly in EJ communities.
 - **b.** EPA's proposed revision to lower the NAAQS for PM 2.5. NJ will be further out of compliance upon adoption of that new NAAQS.
 - **c.** Advances in climate science that project more adverse impacts of PM 2.5 and ozone
 - Ongoing regulatory development to attain the aspirational goals of the Global Warming Response Act, which impact PM 2.5 attainment and involve coordinated strategies. (BW)
- 5. Comment: As a physician who has lived and practiced medicine in the state of NJ for over 40 years, I am very concerned about the inadequate clean air standards in our state. This recently proposed amendment to NJ's Clean Air Act falls short and should be much more stringent for the sake of the health of all our citizens. The federal EPA has proposed a revision, January 6, 2023, based on more recent science than used by NJDEP. EPA proposes the revision of "particulate matter" pollution standard from its present 12.0 micrograms per cubic meter (ug/m3) to within the 9.0 10.0 micrograms/cubic meter. "These are particles that can either be directly emitted into the air (primary PM) or be formed in the atmosphere from gaseous precursors such as sulfur dioxide, oxides of nitrogen, ammonia and non-methane volatile organic compounds (secondary particles"). (WHO, 2013)

These airborne particles are especially damaging to health as they are inhaled deep into the lungs, with the ultrafine ones able to get into the blood stream and circulate throughout the body. According to the American Lung Association, "Anyone who lives where particle pollution levels are high is at risk. Some people face higher risk, however. People at the greatest risk from particle pollution exposure include:

- Infants, children, and teens;1
- People with lung disease, especially asthma, but also people with chronic obstructive pulmonary disease (COPD);²
- People with cardiovascular disease;³
- People of color;⁴
- Current or former smokers;5
- People with low incomes;⁶ and
- People who are obese.⁷

This amendment is out of date, and completely inadequate given the gravity of the adverse health effects, and the present level of pollutants. The highest standard of measuring, monitoring, and mitigation of the causes of this deadly particulate matter pollution should be employed by the state. More time is needed to gather the most recent science in order for an informed decision to be made by the NJDEP. Postpone the decision until a full and comprehensive Public Hearing can take place, and the science to be employed is the most UpToDate.

It makes no sense for DEP to continue to work on, implement, and propose- and for EPA to allow NJ to continue with - this "maintenance" plan based on the old NAAQS standard, when new science has emerged, and EPA has just proposed new NAAQS that will result in a downward revision of the old existing NAAQS.

This is even more problematic in light of huge changes in policy and law, like NJ environmental justice law that regulates health "stressors" including but not limited to PM 2.5.

The "maintenance" plan concept makes no sense under these conditions. (SF)

Response to Comments 1 through 5:

This maintenance plan meets the requirements of the Clean Air Act as a second maintenance plan for the 2006 PM2.5 24-hour 35 μ g/m³ NAAQS. Measured PM2.5 concentrations in the compliance monitors have demonstrated attainment of the 24-hour PM2.5 NAAQS for at least 13 years. The 2022 monitoring data is approximately 37 percent below the 24-hour 35 μ g/m³ standard in New Jersey's northern area and approximately 34 percent below the standard in New Jersey's southern area. The historical trends demonstrate a significant decreasing trend from 2001 to 2022 of approximately 49 percent in the northern area and 60 percent in the southern area. The trends continue to show a decreasing trend from 2010 to 2021 of approximately 26 percent in the northern area and 30 percent in the southern area.

USEPA is evaluating the adequacy of the existing NAAQS for potential revision. On January 6, 2023, USEPA proposed to revise the primary (health based) annual PM2.5 standard from its current level of $12.0 \ \mu g/m^3$ to within the range of $9.0 \ to 10.0 \ \mu g/m^3$. USEPA proposed revisions to other key aspects related to the PM NAAQS, including the Air Quality Index (AQI) and monitoring requirements, with a focus on communities with environmental justice concerns. If New Jersey is designated under a revised NAAQS in the future, New Jersey will comply with any requirements based on its new designation and classification under that NAAQS.

As discussed in the SIP, New Jersey is proposing, adopting and implementing several new multi-pollutant control measures as part of its greenhouse gas initiatives that will also help in the goal to reduce PM2.5 emissions such as the Offshore Wind Economic Development Act, rejoining the Regional Greenhouse Gas Initiative (RGGI), and the Clean Energy Act. In addition, New Jersey is committed to transitioning from fossil fuel-powered to electric vehicles by signing landmark legislation that establishes goals and incentives for the increased use of plug-in electric vehicles across the state. A summary of additional measures follows.

Governor Murphy signed Executive Order Number 100 (EO 100) on January 27, 2020, that initiated a targeted regulatory reform effort that will modernize New Jersey environmental laws. EO 100 is referred to as Protecting Against Climate Threats (NJ PACT). NJ PACT will usher in systemic change, modernizing air quality and environmental land use regulations, that will enable governments, businesses, and residents to effectively respond to current climate threats and reduce future climate damages.

As a national leader in environmental protection, the NJDEP will create a regulatory roadmap to reduce emissions, build resilience, and adapt to a changing climate. This includes the enactment of new air pollution regulations that achieve critically needed reductions in carbon dioxide and short-lived climate pollutants (e.g., methane and black carbon) including technology-forcing measures that pave the way for a clean-energy economy.

Based on this EO, New Jersey adopted a rule on November 1, 2021, that requires increasing sales fractions of medium and heavy-duty trucks be zero emission vehicles (ZEVs). The requirements of this rule are identical to the California Advanced Clean Trucks rule and will be effective starting with model year 2025. New Jersey also adopted rules on December 2, 2022,

which set new Electric Generating Unit (EGU) emission limits starting June 1, 2024, and ban #4 and #6 fuel oil, with a compliance date in 2025 with a two year sell through period. On December 29, 2022, New Jersey adopted rules that require diesel mobile cargo handling equipment at ports and intermodal rail yards to meet performance standards that reflect best available control technology, with a compliance date in 2025. On April 21, 2023, New Jersey adopted rules that include a medium duty diesel inspection and maintenance program and heavy-duty new engine standards for NOx. Information on these rules can be found at the following links: <u>NJ PACT: Protecting Against Climate Threats and NJDEP | Air Quality Regulation</u>.

The final three coal fired Electric Generating Units (EGUs) in New Jersey shutdown in 2022, in part, due to several stringent State and federal regulations.

On April 17, 2020, the NJDEP, Board of Public Utilities (BPU) and Economic Development Authority (EDA) jointly released a strategic funding plan for investing the auction proceeds from the State's participation in RGGI. New Jersey plans to invest an estimated \$80 million each year in programs that reduce both greenhouse gas emissions and criteria pollutants. The majority (75%) of this investment will be used for clean and equitable transportation projects to accelerate transportation electrification in the State, focusing on reducing emissions from transportation sources in communities disproportionately impacted by the effects of pollution.

Governor Murphy signed legislation that establishes a New Jersey Fuel Cell Task Force that will recommend a plan to increase the use of fuel cells in the State.

New Jersey was also one of 15 states and the District of Columbia to sign a memorandum of understanding (MOU) which commits the signers to work collaboratively to advance and accelerate the market for electric medium- and heavy-duty vehicles.

Control Measures

6. Comment: The California Air Resource Board (CARB) has been developing science and regulatory strategies for PM2.5 and ultra-fine particulates. I request that the DEP publish and consider CARB policies and recommendations and conduct a side-by-side comparison with the DEP SIP strategies so that the public can be adequately informed. (BW)

Response:

New Jersey, as well as the Ozone Transport Commission (OTC) of which New Jersey is an active member, and USEPA, often use CARB regulations and model regulations as models for new control measures. As discussed above in the response to comments # 1 through 5, New Jersey is proposing and adopting several new multi-pollutant control measures and initiatives that will help in the goal to reduce PM2.5 emissions, several of which are based on CARB rules such as the advanced clean trucks (ACT) rule, the mobile cargo handling equipment rule, the medium duty diesel inspection and maintenance program rule and the heavy-duty new engine standards for NOx (Omnibus).

Emissions Inventory

- 7. Comment: It is not clear how emissions inventories fully capture all emissions, including consideration of emissions from projects now in the pipeline, particularly emissions generating transportation infrastructure. It is important that the Department assure the public that NJ's Clean Air Act SIP is kept current and not based on incomplete emissions inventories. (BW)
- 8. Comment: DEP must withdraw and strengthen the plan in light of recently DEP approved and pending fossil infrastructure project emissions are not included in the inventory. (BW)

Response to Comments 7 and 8:

For some SIPs, like the New Jersey 2012 PM Resignation SIP, the Department projects emissions into the future to see if future estimated emissions are expected to grow or decline. The Department includes growth in activity in the future inventories to allow for such scenarios as increased activity, resulting in increased emissions. Projected emission inventories are "grown" from the base actual emission inventory and then "controlled". Activity indicators are used to estimate growth or decline in emissions. The best indicators of growth are projection estimates provided by actual facilities, projections for fuel consumption, population, employment, vehicle miles traveled and equipment populations. To be conservative, for the point source inventory, whenever the appropriate growth indicator for a particular emission source was estimating negative growth in the future, New Jersey used zero growth in the calculations.

Once the emission inventories are grown, based on increased activity, the next step is to determine which control measures within each of the various emission sectors would be in place during or prior to that year, and include the emission reduction benefits from those control measures at that time. The combined effect of growth and controls represents the inventory projection.

For mobile sources, when New Jersey projects inventories into the future, New Jersey includes model inputs from the New Jersey Metropolitan Planning Organizations using their latest planning assumptions, including all planned future transportation infrastructure projects.

Ultimately, all of New Jersey's projection inventories have shown that emissions are expected to decrease in the future due to the numerous Federal and State control measures in place that continue to reduce air pollution in the future, especially new engine and off road equipment standards which reduce pollution with fleet turnover.

Please note, for a limited maintenance plan such as this one, future projected inventories are not required because the ambient air quality is sufficiently below the NAAQS that a violation of the NAAQS is not expected. However, although future emission projections are not required, New Jersey was required to demonstrate that it would be unreasonable to expect that the area would experience enough motor vehicle emissions growth to cause a NAAQS violation.

As discussed in the SIP, direct PM2.5 and NOx emissions from onroad sources subject to Transportation Conformity in New Jersey have steadily decreased over the past few decades and these emissions are projected to continue their significant decline into the future. The SIP discussion includes future onroad vehicle emission estimates modeled by two New Jersey Metropolitan Planning Organizations using their latest planning assumptions, including all planned future transportation infrastructure projects, from their recent Transportation Conformity determinations. A comparison of estimated VMT increases vs. estimated emission decreases is shown in the SIP. It can be seen from the data discussion that the projected annual average VMT increases are significantly smaller than the projected annual average emissions reductions expected.

Prescribed Burning

- **9. Comment:** According to a DEP press release dated February 9, 2023, this year, the Forest Fire Service intends to treat 25,000 acres of forests, grasslands and marsh with prescribed fire.
 - a. What is the quantity of emissions from these 25,000 acres of burn?
 - **b.** How are the emissions from those prescribed burns quantified, and modeled? (not just PM2.5, but all emissions, including carbon).
 - **c.** How are the emissions from those prescribed burns considered in the PM2.5 emissions inventory and subject to SIP compliance and emissions caps? (BW)
- **10. Comment:** The DEP's emissions inventory fails to reflect the DEP's current and proposed expansion of fine particulate generating prescribed burns in NJ forests. (BW)

Response to Comments 9 and 10:

For 2020, the USEPA estimated PM2.5 emissions to be 2,629 tons for New Jersey's prescribed burns. USEPA calculates state emissions using a satellite detection approach combined with fire models and state, tribal, and local submitted activity data. For more information on USEPA's emission estimation methodology see the 2020 National Emissions Inventory (NEI) Technical Support Document (TSD) Section 7 located at https://www.epa.gov/air-emissions-inventory (NEI) Technical Support Document (TSD) Section 7 located at https://www.epa.gov/air-emissions-inventory (NEI) Technical Support Document (TSD) Section 7 located at https://www.epa.gov/air-emissions-inventory-nei-technical-support-document-tsd. For New Jersey's state submitted data, New Jersey receives its activity data directly from its Forest Fire Service where they provide acres burned as well as the start and end dates for the prescribed burns and location via latitude and longitude.

As discussed above, in the response to comments 7 and 8, future projection emission inventories include growth in emissions if growth is anticipated. New Jersey anticipates including a growth factor for any anticipated growth in prescribed burning activities in the next modeling platform that will be developed.

When modeling is required, the emissions are included in the modeling. For PM2.5, a modeled attainment demonstration has not been required since the 1997 Annual Fine Particulate Matter (PM2.5) Attainment Demonstration, dated March 26, 2009, due to New Jersey's monitoring data being in compliance with the NAAQS. For the 1997 Annual and 2006 Daily Fine Particulate Matter (PM2.5) Redesignation Request and Maintenance Plan dated December 6, 2012, a decreasing historical and future projected trend in PM2.5 emissions and its precursors was demonstrated, therefore atmospheric modeling was not required. Base and future emission inventories were required in the Redesignation Request and Maintenance Plan that showed decreasing trends. Prescribed burning was included in the emission inventory base and future year inventories.

There are no SIP required emission caps for prescribed burns.

- **11. Comment:** According to a DEP press release dated February 9, 2023, this year, the Forest Fire Service intends to treat 25,000 acres of forests, grasslands and marsh with prescribed fire.
 - a. How are the emissions from those prescribed burns monitored.
 - **b.** How are the emissions from those prescribed burns subject to regulation and compliance with air quality standards?
 - **c.** How is the public provided proper notice and opportunity for comment before the burns are conducted on those burns such that control measures and avoidance of exposure is considered by DEP, BEFORE the burns are conducted? (BW)
- **12. Comment:** In the absence of reliable evidence, compliance demonstration, and opportunity for formal public notice and comment, the DEP and EPA should not authorize these burns. (BW)

Response to Comments 11 and 12:

Every year the New Jersey Forest Fire Service conducts prescribed burns to reduce the risk of future wildfires. Prescribed burning events are managed by New Jersey's Bureau of Forest Fire Service and are effective measures to reduce the danger of uncontrolled wildfires. Allowing experts to choose the intensity, timing and interval of fire across the landscape may help prevent a larger uncontrolled wildfire. There are multiple benefits to prescribed burning, which is a safe, effective and efficient means of managing the buildup of forest fuels. Prescribed burns improve habitat for plants and animals, reduce the presence of damaging insects and ticks, and recycle nutrients into the soil. In addition, prescribed burning is an important part of the state's carbon defense strategy.

New Jersey regulates prescribed burning events at N.J.A.C. 7:27-2, Control and Prohibition of Open Burning which can be found at: <u>NJDEP-Air Quality Management</u>. The Forest Fire Service works closely with DEP's Air Quality Program ensuring that prescribed burns do not occur on poor air quality days.

Forest Fire Laws of Title 13, Chapter 9 New Jersey State Forest Fire Service declare that: "No person shall set fire to or cause to be set on fire in any manner whatsoever; or to start fires anywhere and permit them to spread to forests without first obtaining written permission by the department." Prescribed burning permit applications are found at: <u>NJDEP | New Jersey Forest Fire Service | Prescribed Fire.</u>

Prescribed burning is a job requiring knowledge of forest fuels, fire behavior, suppression techniques, local weather conditions, and fires effects. Consequently, a written plan must be developed well in advance of the proposed burn to allow time for review and the preparation of all necessary permits.

Planning considerations include a site map depicting the burn area, objectives and techniques; ranges of preferred weather conditions (wind, temperature, relative humidity); smoke management considerations (developed areas, highways); burning techniques, equipment and manpower needs, emergency suppression procedures, permit requirements and notification procedures. New Jersey's prescribed burning season is limited to the period between October 1 and March 31.

In the spring following the burning season, the New Jersey Forest Fire Service reviews all previous burning projects on state lands and begins formulating plans for the next year. All plans for Division of Parks and Forestry lands are reviewed by a team of natural resource specialists; this technical forest management team provides information regarding other natural resource interests. After their review has been completed, the proposals are made available for public comment. The final documents are completed in time to begin pre-burn preparations.

For prescribed burning for private forestlands, the landowner, a professional forester, or his legally authorized agent must develop a plan. These plans are submitted to the New Jersey Forest Fire Service for review, approval, and permit insurance. The prescribed burns must be completed at the owner's expense. However, the New Jersey Forest Fire Service can provide specialized equipment if the landowner is willing to reimburse the Forest Fire Service for its equipment and operator's wages.

Management of smoke from prescribed burning is a critical issue. It can affect air quality, highway traffic, and nearby properties, and is subject to Federal and State air pollution laws. All adjacent smoke-sensitive areas must be identified in the burning plan. Wind direction and speed, and smoke dispersal are some of the atmospheric characteristics that should be considered before conducting a burn. Firing techniques also affect smoke emissions. Backfires produce considerably fewer emissions than other firing techniques.

To keep the public informed about prescribed burning in their communities, the Forest Fire Service launched an online tool at <u>NJDEP | New Jersey Forest Fire Service</u> that displays a map where the Forest Fire Service plans to conduct prescribed burns during the next five days. In addition to the online tool, the Forest Fire Service posts their daily prescribed burn schedule on their Facebook page at <u>New Jersey Forest Fire Service | Facebook</u>.

Transportation Conformity

13. Comment: DEP must withdraw and strengthen the plan in light of the current NJ SIP transportation conformity analysis is flawed, outdated, and fails to reflect current science on PM 2.5 and fails to fully inventory, model, or capture projected increases from major road expansions and increasing VMT and related transportation emissions. (BW)

Response:

The Department disagrees with this comment. As described in the SIP document, the monitored levels of PM2.5 have consistently remained well below the NAAQS through the first ten-year maintenance period. In addition, the air quality levels in both of the areas are currently sufficiently below the NAAQS such that the areas qualify for a limited maintenance plan for the upcoming second ten-year maintenance period. For a limited maintenance plan such as this one, future projected inventories and Transportation Conformity Budgets are not required because the ambient air quality is sufficiently below the NAAQS that a violation of the NAAQS is not expected. As discussed above in the response to comment # 7 and 8, the SIP discussion includes future on road vehicle emission estimates modeled by two New Jersey Metropolitan Planning Organizations using their latest planning assumptions, including all planned future transportation infrastructure projects, from their recent Transportation Conformity determinations. A comparison of estimated VMT increases vs. estimated emission decreases is shown in the SIP. It can be seen from the data discussion, that the projected annual average VMT increases are significantly smaller than the projected annual average emissions reductions expected.

Monitoring Network/ EJ Communities

14. Comment: DEP must withdraw and strengthen the plan in light of failure of the current DEP ambient air quality monitoring network to assess ambient conditions in the locations where people are actually exposed to pollution (e.g. at 5 feet elevation, street exposure) and failure to adequately monitor EJ communities. DEP SIP fails to make enforceable commitments to upgrade the current monitoring network in these important regards. (BW)

Response:

New Jersey's monitoring network meets all federal requirements in accordance with the Code of Federal Regulations, 40 CFR Part 58 – Ambient Air Quality Surveillance.

The number of air monitors, their locations, and the heights for monitor probes at the air monitoring stations in the NJDEP air monitoring network need to meet USEPA requirements, and they need to be approved by USEPA. The Region 2 office of USEPA reviews the NJDEP air monitoring network every year to make sure that every monitor and every monitoring station meets its requirements. Regarding air monitoring siting criteria, the USEPA requires monitoring probe heights to be between 2 – 15 meters depending on the pollutant being measured, and USEPA specifies the distance of the probe from obstructions that are taller than the station. Currently, more than half of NJDEP's air monitoring stations (16 out of 29) are located in overburdened communities. On July 1 of each year, the NJDEP is required to submit to USEPA an air monitoring network plan. Before it is submitted, it is posted on the Air Monitoring website for review by and comment from the general public.

Miscellaneous

15. Comment: DEP must withdraw and strengthen the plan in light of DEP's current development of an "Urban Heat Island" strategy. (BW)

Response:

There is no clear reason given by the commenter on why New Jersey would have to withdraw its SIP due to any simultaneous NJDEP activities related to an "Urban Heat Island" strategy.

The maintenance plan supports reducing the impacts of the urban heat island effect because it ensures the emissions reductions from New Jersey's sources are maintained and that New Jersey continues to meet the health-based standards. As a result, New Jersey does not need to withdraw and strengthen the maintenance plan.

Urban heat islands (UHIs) occur in cities and urban areas where higher temperatures are observed than the surrounding rural and suburban areas. These higher temperatures are due to the concentration of buildings, roads, and other infrastructure that absorb and retain heat, as well as human activities such as transportation and energy consumption that generate additional heat. Strategies such as green infrastructure, cool roofs, and urban forestry can help to mitigate the effects of UHIs and create more livable cities.

NJDEP is involved in initiatives that mitigate the impacts of the Urban Heat Island Effect. In January 2023, the NJDEP awarded the New Jersey Conservation Foundation with \$1.3 million for their Throwin' Shade: Greening the Capital City grant application, which will plant 1,000 trees

throughout Trenton's streets. Trees will be planted as part of NJDEP's Natural Climate Solutions Grant Program. This project will sequester carbon, increase the urban tree canopy, and mitigate the urban heat-island effect, stormwater runoff, and poor water and air quality in Trenton.

Additionally, on March 21, 2022 NJDEP awarded 38 grants to promote the stewardship of urban and community trees and forests throughout New Jersey. The grants support Gov. Murphy's environmental justice initiatives in vulnerable neighborhoods, with 75 percent of the funds awarded to municipalities with at least one overburdened community. Municipalities receiving grants in this category use funding to increase their urban canopy, increase the ecological services of their urban and community forest, and provide a cooler place to live.

16. Comment: DEP must withdraw and strengthen the plan in light of the control strategies fail to reflect "advances in the art" as required under the NJ Air Pollution Control Act. (BW)

Response:

The New Jersey plan does include advances in the art. As shown in the SIP in Table 4-13 "New Jersey's Post 2002 Control Measures that Reduce Emissions of PM2.5 and its Precursors in New Jersey", New Jersey's permitting requirements at N.J.A.C. 7:27-8,18 and 22, which include "State-of-the-Art" or SOTA requirements, are included in the table.

"Advances in the art of air pollution control" is commonly referred to as "State-of-the-Art" or SOTA and includes performance limits that are based on air pollution control technology, pollution prevention methods, and process modifications or substitutions that will provide the greatest emission reductions that are technologically and economically feasible. As promulgated in the New Jersey Air Pollution Control Act N.J.S.A. 26:2C-9.2(c), and as set forth in the implementing regulations of the Air Pollution Control Act (N.J.A.C. 7:27-8 and N.J.A.C. 7:27-22.35), newly constructed, reconstructed, or modified equipment and control apparatus is required to incorporate advances in the art of air pollution control developed for the kind and amount of air contaminant emitted by the applicant's equipment or control apparatus. The NJDEP implements the SOTA requirements in air pollution control permits using technical manuals (available at https://dep.nj.gov/boss/state-of-the-art/) that include performance levels for several source categories with respect to air pollution controls. The Department periodically updates these technical manuals to strength the SOTA requirements.

In addition to the New Jersey Air Pollution Control Act and New Jersey Air pollution Control Permit Rules, CAA Section 173(a)(2) requires new or modified major sources to install the Lowest Achievable Emission Rate (LAER) control equipment. The CAA Section 173(c) also requires new or modified major stationary sources to obtain equal or greater emission offsets to operate in a nonattainment area. Thus, the LAER and offset provisions of the non-attainment new source review (NNSR) program provide for continual emission reductions to help improve the air quality in the nonattainment area and further downwind. The new or modified source is subject to the best available control technology (BACT) requirements pursuant to the Prevention of Significant Deterioration (PSD) regulation 40 CFR 52.21 if the source is in attainment area. The NJDEP has amended New Jersey air pollution control permit rules N.J.A.C. 7:27-8, 18 and 22 (published at 49 NJR 3511(a), November 6, 2017 New Jersey Register) to add the federal New Source Review (NSR) requirements that implement the National Ambient Air Quality Standard (NAAQS) for fine particles (PM_{2.5}).

NJDEP Initiated Changes:

- 1. The NJDEP renumbered the SIP appendices.
- 2. The NJDEP updated the air monitoring data to include certified 2022 data in Chapter 2 and Appendices 1 and 2 (formerly 2-1 and 2-2.)
- 3. The NJDEP updated certain rule proposals to rule adoptions where applicable.
- 4. The NJDEP revised nonattainment area to maintenance area where applicable.
- 4. The NJDEP corrected some minor administrative errors.