

Memorandum of Agreement
Implementation of New Jersey's NOx State Implementation Plan (SIP) Call Requirements under 40
CFR 51.121(r)(2)
Between
The New Jersey Department of Environmental Protection
and **The United States Environmental Protection Agency, Region 2**

I. General

- A.** This Memorandum of Agreement (hereinafter MoA) defines policies, responsibilities, and procedures pursuant to an alternative approach to address New Jersey's NOx SIP Call gap under 40 CFR 51.121(r)(2). This MoA outlines how the New Jersey Department of Environmental Protection (NJDEP) will comply with the NOx SIP Call, specifically for new, modified, and existing non-electric generating units (non-EGUs) of the types that were previously regulated by the New Jersey NOx Budget Program and were not included in the subsequent Federal Clean Air Interstate Rule (CAIR).
- B.** In letters dated March 7, 2024, and May 31, 2024, Francis C. Steitz, Director of the NJDEP's Division of Air Quality requested from the EPA an approach for NJDEP to address the State's NOx SIP Call gap under 40 CFR Part 51.121(r)(2). Specifically, this MoA outlines how NJDEP will address non-EGUs to comply with the "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone" final rulemaking (NOx SIP Call). This final rulemaking was issued on October 27, 1998, and required certain States, including New Jersey, to submit State Implementation Plans (SIPs) that prohibit excessive emissions of ozone precursors between May 1st and September 30th of each year (Ozone Season) by implementing statewide emission budgets. The NOx SIP Call addressed the good neighbor provision, under the Clean Air Act section 110(a)(2)(D)(i)(I), for the 1979 ozone National Ambient Air Quality Standard.
- C.** This MoA is effective upon authorized signature by both the NJDEP and the EPA (hereinafter collectively referred to as "the Parties") and shall have an effective date of the last date on which it is signed.
- D.** The Parties agree that this MoA will be approved into New Jersey's SIP and at such time it will be considered permanent and federally enforceable. This MoA may be modified only after mutual consent of both Parties for any purpose and must then be approved by EPA as a SIP revision. Any revisions or modifications to this MoA must be in writing and must be signed by both the NJDEP and the EPA.

II. Policy Statement

- A.** Each Party is responsible, as outlined below, for ensuring that its obligations under the NOx SIP Call for non-EGUs are met. Both Parties agree to maintain a high level of communication, cooperation, and coordination between their respective staffs to ensure New Jersey's successful and effective compliance with the NOx SIP Call at 40 CFR 51.121(r)(2).
- B.** The NJDEP's primary responsibilities include:

 - 1.** Ensuring compliance with the emission limits, monitoring, reporting, and recordkeeping provisions for non-EGUs under the NOx SIP call and as otherwise approved into New Jersey's SIP, as necessary to maintain compliance with 40 CFR 51.121(r).

2. Providing information to the EPA regarding annual demonstrations and supporting information that the NO_x budgets for non-EGUs will not be exceeded through this MoA.
- C. The EPA's responsibilities include:
1. Providing effective oversight of the NO_x SIP Call to ensure consistency with 40 CFR 51.121(r) and this MoA.
 2. Providing the NJDEP with ongoing technical and other assistance on the compliance with the non-EGU budget per 40 CFR 51.121(r) as requested.
 3. Informing the NJDEP as soon as practicable about any discrepancies regarding annual demonstrations and supporting information provided to the EPA.

III. Program Implementation

- A. Both Parties agree to do the following:
1. Maintain a contact list between Parties to ensure implementation of the MoA.
 2. Participate in meetings to discuss program implementation and specific issues that need resolution.
- B. The NJDEP agrees to do the following:
1. NJDEP will ensure that the new, modified, and existing non-EGUs in the State meeting the applicability criteria of the New Jersey NO_x Budget Program (N.J.A.C. 7:27-31) as in effect as of September 30, 2008 (referred to as the NO_x Budget Program), adhere to emission limits, monitoring, and reporting requirements as outlined in the relevant provisions of New Jersey's SIP.
 - (1) New Jersey's RACT Provisions under N.J.A.C. 7:27-19, "Control and Prohibition of Air Pollution from Oxides of Nitrogen," outline certain Federally-approved NO_x emission limits, monitoring, and recordkeeping requirements for new, modified, and existing non-EGUs, such as industrial boilers and combustion turbines with a rated heat input greater than 250 million British thermal units per hour (MMBtu/hr). Therefore, the NJDEP agrees to administer and oversee its Federally-approved RACT provisions to ensure compliance for new, modified, and existing non-EGUs with the general requirements under 40 CFR 51.121(f)(2) of the NO_x SIP Call. Specifically for two facilities with applicable sources, the non-EGU equipment are covered by N.J.A.C. 7:27-19.1, Definitions, 19.7, Industrial/commercial/institutional boilers and other indirect heat exchangers, 19.15, Procedures and deadlines for demonstrating compliance, and 19.16, Adjusting combustion processes.
 - (2) New Jersey's Emission Statement Program under N.J.A.C. 7:27-21, "Emission Statements," requires non-EGUs to submit emission statements annually that include actual emissions of air contaminants released from the facility directly or indirectly into the outdoor atmosphere during the reporting year. Pursuant to N.J.A.C. 7:27-21.5(f)(1)(i), "Required contents of an Emission Statement," the emission statement shall include actual emissions of VOC and NO_x in tons

during the Ozone Season and in pounds per day during the peak ozone season (June 1st – August 31st). As required under N.J.A.C. 7:27-21.5(f)(1)(ii), facilities that contain non-EGUs that are applicable to New Jersey’s Emission Statement Program are required to include the average actual rate of emissions of VOC or NOx in pounds per day of operation during the peak ozone season (June 1st – August 31st). Therefore, the NJDEP agrees to compare the actual emissions of NOx during the Ozone Season collected from applicable new, modified, and existing non-EGUs in the State with the NOx budgets set under the State’s NOx Budget Program.

- (3) Administer and oversee testing and monitoring requirements applicable to non-EGUs through the State’s RACT regulation under N.J.A.C. 7:27-19 to comply with the monitoring requirements of the NOx SIP call under 40 CFR 51.121(i)(1).
 - (4) Administer and oversee reporting and recordkeeping requirements applicable to non-EGUs through the State’s RACT regulation under N.J.A.C. 7:27-19 and the State’s Emission Statement Program under N.J.A.C 7:27-21, to comply with the NOx SIP call general and monitoring requirements of 40 CFR 51.121(f)(1) and 40 CFR 51.121(i)(1).
2. After each ozone season, NJDEP will submit to EPA an annual report of NOx emissions from non-EGUs. New Jersey’s non-EGU NOx budget for compliance demonstration purposes is 745 tons of NOx per Ozone Season. This limit corresponds to the portion of the State’s trading budget assigned to non-EGUs of the types previously regulated under the New Jersey NOx Budget Program. The report will verify that the non-EGU budget for that ozone season was not exceeded.

As shown in TABLE 1, the total permitted NOx for the Ozone Season is about half of the 745 tons New Jersey is limited to for non-EGUs.

TABLE 1: Permitted NOx Emission Limits for NJ Non-EGUs

Facility Name	EPA Facility ID	EPA Unit ID	NJEMS PI	NJEMS UNJID	NJEMS OS	NJEMS ENJID	Permitted Annual NOx PTE (TPY)	Permitted Ozone NOx PTE (Tons/OS)
Phillips 66	880016	10002	41805	U3	OS9	E251	218.12	90.89
Phillips 66	880016	10001	41805	U3	OS14	E257	167.535	69.81
Phillips 66	880016	10003	41805	U3	OS15	E258		
Paulsboro Refining	50628	748001	55829	U20	OS1	E36	418.85	174.52
Paulsboro Refining	50628	751001	55829	U20	OS2	E37		
Paulsboro Refining	50628	752001	55829	U20	OS3	E38		
Paulsboro Refining	50628	749001	55829	U20	OS4	E39		
Paulsboro Refining	50628	780001	55829	U780	ALL	E1200	33.3	13.88
							837.81	349.09

3. In the event of an exceedance, New Jersey commits to submitting a revised SIP to the EPA. This revised SIP will address any budget shortfall resulting from the exceedance and ensure that the State’s budget remains in compliance in future years. NJDEP will submit the SIP revision within one year of determining the exceedance.

C. The EPA agrees to do the following:

1. Provide technical support and assistance for compliance with the NOx SIP Call.
2. Make reasonable efforts to communicate to the NJDEP regarding implementation of the NOx SIP Call and this MoA.

IV. Responsibilities of the Parties under this Memorandum of Agreement

A. The NJDEP agrees to do the following:

1. Two non-EGU facilities are still in operation [Bayway Refinery (Phillips 66 Co.) and Paulsboro Refining Co.] and are required to report their annual emission statements to the NJDEP pursuant to N.J.A.C. 7:27-21. This requirement is also stipulated in their Title V permit. As part of the emission statement, the facilities are required to include Ozone Season tons for each year for all sources at the facility. In accordance with N.J.A.C. 7:27-21.6 and as required by their respective permits, Phillips 66 and Paulsboro Refining quantify and report their actual emissions by using Continuous Emissions Monitoring and Source Emission Testing. The emission statements are certified by the facilities’ officials pursuant to N.J.A.C. 7:27-21.8.

TABLE 2 lists the requirements in the permits for Phillips 66 and Paulsboro Refining regarding Continuous Emissions Monitoring and Source Emission Testing.

TABLE 2: Permit Requirements for Continuous Emissions Monitoring and/or Source Emission Testing

Facility Name	EPA Facility ID	EPA Unit ID	NJEMS PI	NJEMS UNJID	NJEMS OS	NJEMS ENJID	Permit - Stack Test	Permit - CEMS	CEMS conform to
Phillips 66	880016	10002	41805	U3	OS9	E251	N.J.A.C. 7:27-22.16(o)		
Phillips 66	880016	10001	41805	U3	OS14	E257		N.J.A.C. 7:27-22.16(o)	40 CFR 60 App B and F and 40 CFR 75, as applicable
Phillips 66	880016	10003	41805	U3	OS15	E258		N.J.A.C. 7:27-22.16(o)	40 CFR 60 App B and F and

										40 CFR 75, as applicable
Paulsboro Refining	50628	748001	55829	U20	OS1	E36	N.J.A.C. 7:27-22.16(o)	N.J.A.C. 7:27-22.16(o)		40 CFR 60 App B
Paulsboro Refining	50628	751001	55829	U20	OS2	E37	N.J.A.C. 7:27-22.16(o)	N.J.A.C. 7:27-22.16(o)		40 CFR 60 App B
Paulsboro Refining	50628	752001	55829	U20	OS3	E38	N.J.A.C. 7:27-22.16(o)	N.J.A.C. 7:27-22.16(o)		40 CFR 60 App B
Paulsboro Refining	50628	749001	55829	U20	OS4	E39	N.J.A.C. 7:27-22.16(o)	N.J.A.C. 7:27-22.16(o)		40 CFR 60 App B
Paulsboro Refining	50628	780001	55829	U780	ALL	E1200	N.J.A.C. 7:27-22.16(o)	N.J.A.C. 7:27-22.16(o)		40 CFR 60 App B

Pursuant to N.J.A.C. 7:27-21.4(c), the annual emission statements are due to NJDEP by May 15th of the year after the reporting year. A facility can request a 1-month extension pursuant to N.J.A.C. 7:27-21.9. Therefore, NJDEP will commit to emailing an annual report similar to TABLES 3 and 4 below to EPA Region 2 by July 1st of the year after the reporting year.

TABLE 3: Actual Emissions (Tons/Season) for Each Ozone Season from the Emission Statement Program

Facility Name	EPA Facility ID	EPA Unit ID	NJEMS PI	NJEMS UNJID	NJEMS OS	NJEMS ENJID	2019	2020	2021	2022	2023	Calc Method
Phillips 66	880016	10002	41805	U3	OS9	E251	16.17	20.68	18.4	17.05	20.7	Stack Test
Phillips 66	880016	10001	41805	U3	OS14	E257	10.48	4.87	7.73	6.65	12.23	CEMS
Phillips 66	880016	10003	41805	U3	OS15	E258	41.44	35.16	38.98	40.28	33.95	CEMS
Paulsboro Refining	50628	748001	55829	U20	OS1	E36	18.7	15.44	7.85	8.52	8.87	CEMS
Paulsboro Refining	50628	751001	55829	U20	OS2	E37	18.78	14.42	7.59	9.34	4.87	CEMS
Paulsboro Refining	50628	752001	55829	U20	OS3	E38	20.16	10.45	11.17	12.42	14.34	CEMS
Paulsboro Refining	50628	749001	55829	U20	OS4	E39	68.11	67.94	40.13	36.25	76.5	CEMS
Paulsboro Refining	50628	780001	55829	U780	ALL	E1200	8.6	5.21	0	6.66	17.8	CEMS
							202.44	174.17	131.85	137.17	189.26	

TABLE 4: Actual Emissions (Tons/Year) for Each Year from the Emission Statement Program

Facility Name	EPA Facility ID	EPA Unit ID	NJEMS PI	NJEMS UNJID	NJEMS OS	NJEMS ENJID	2019	2020	2021	2022	2023	Calc Method
Phillips 66	880016	10002	41805	U3	OS9	E251	38.4	46.29	43.32	48.91	51.16	Stack Test
Phillips 66	880016	10001	41805	U3	OS14	E257	22.38	15.71	17.61	19.16	28.55	CEMS
Phillips 66	880016	10003	41805	U3	OS15	E258	93.23	78.03	94.68	95.34	83.36	CEMS
Paulsboro Refining	50628	748001	55829	U20	OS1	E36	48.85	40.38	20.55	17.49	33.42	CEMS
Paulsboro Refining	50628	751001	55829	U20	OS2	E37	49.32	38.91	22.91	25.9	13.23	CEMS
Paulsboro Refining	50628	752001	55829	U20	OS3	E38	53.41	37.52	24.41	33.33	28.59	CEMS
Paulsboro Refining	50628	749001	55829	U20	OS4	E39	201.42	169.63	126.1	152.94	173.77	CEMS
Paulsboro Refining	50628	780001	55829	U780	ALL	E1200	20.2	13.07	0	12.35	17.19	CEMS
							527.21	439.54	349.58	405.42	429.27	

2. Review and maintain emission statement reports from non-EGUs that specify NOx tonnage during the ozone season as required under New Jersey’s Emission Statement Program, N.J.A.C. 7:27-21.
3. Maintain NOx emission standards that apply to non-EGUs as required under New Jersey’s RACT regulation N.J.A.C. 7:27-19.
4. Review and maintain stack testing results from applicable non-EGUs as required under New Jersey’s RACT regulation N.J.A.C. 7:27-19.17, “Source Emission Testing.”
5. In the unlikely event that any of the two facilities exceeds its NOx permit limit, which may then impact the NOx Budget Program level for non-EGU sources, then NJDEP’s Division of Air Enforcement will take appropriate action based on the approved permits and State and Federal regulations.

B. The EPA agrees to do the following:

1. Take final action to approve this MoA into New Jersey’s SIP within one year of the conditional approval of the New Jersey’s SIP revision – removal of CAIR and NOx Budget Programs, submitted on August 23, 2018.
2. Review and respond, as appropriate, to requests for information or assistance by the NJDEP, in connection with its implementation and compliance of the NOx SIP call at 40 CFR 51.121(r)(2).

V. List of EPA contacts

- A. Kenneth Fradkin, Air Programs Branch -Air Planning Section: (212) 637-3702 and Fradkin.Kenneth@epa.gov
- B. Fausto Taveras, Air Programs Branch -Air Planning Section: (212) 637-3378 and Taveras.Fausto@epa.gov
- C. Kirk Wieber, Air Programs Branch – Manager: (212) 637-3381 and Wieber.Kirk@epa.gov
- D. Robert DeLay, Office of Regional Counsel – Air Branch: (212) 637-3214 and delay.robert@epa.gov

VI. List of NJDEP contacts

- A. Danny Wong, Division of Air Quality & Radiation Protection – Bureau of Stationary Sources (Chief): (609) 292-6722 and danny.wong@dep.nj.gov
- B. Sharon Davis, Division of Air Quality & Radiation Protection – Bureau of Evaluation & Planning (Chief): (609) 292-6722 and sharon.davis@dep.nj.gov
- C. Kenneth Ratzman, Division of Air Quality & Radiation Protection – Air Quality, Regulation, Planning, and Release Prevention (Assistant Director): (609) 292-0834 and kenneth.ratzman@dep.nj.gov
- D. Francis C. Steitz, Division of Air Quality & Radiation Protection (Director): (609) 940-5707 and francis.steitz@dep.nj.gov

VII. Signatures

For the United States,
The United States Environmental Protection Agency, Region 2

By: _____
Lisa Garcia,
Regional Administrator

For the State of New Jersey,
The New Jersey Department of Environmental Protection

By: _____
Shawn M. LaTourette,
Commissioner