

**The State of New Jersey
Department of Environmental Protection**

**State Implementation Plan (SIP) Revision for the
Attainment and Maintenance of the
Ozone and Carbon Monoxide
National Ambient Air Quality Standards**

Proposal

**Meeting the Requirements of the
Regional NO_x Cap Program
and
Transportation Conformity Budgets
Related to the Attainment of the
Ozone and Carbon Monoxide
National Ambient Air Quality Standards**

**Appendix I
NO_x SIP Call Checklist
and New Jersey Responses**

September 28, 1999

USEPA NO_x SIP Call Checklist and New Jersey Responses

The following checklist was supplied by EPA to assist in reviewing and preparing SIP submissions. In this Appendix, sections in this present New Jersey SIP Revision that address each item on this EPA checklist are noted below that checklist item, in italics.

1. Budget Demonstration

- ☐ Does the SIP revision contain the baseline inventory for NO_x mass emissions from EGU, non-EGU, area, highway and non-road mobile sources in the year 2007 as specified in section 51.121(g)(2)? 40 CFR 51.121(g)(2)(I)

New Jersey has accepted the baseline inventories projected to 2007 by EPA as presented in the spreadsheets nj_ut.xls, nj_pt.xls, nj_ar.xls, nj_mb.xls, and nj_nr.xls, which were included in the file nj.zip, downloaded 5/14/99 from ftp.epa.gov/pub/scram001/modelingcenter/NOx_SIPcall/budget/May/.

- ☐ Has the State certified that it has implemented all of the control measures assumed by EPA in developing the baseline 2007 inventory? 40 CFR 51.121(g)(2)(i)

New Jersey has implemented the control measures identified in Table 2 that are within its enforcement authority. Certain measures, such as requirements that apply to internal combustion engines used in highway and non-road applications, are federal rules that are applicable in New Jersey although they are not specifically part of New Jersey's rules. New Jersey anticipates that federal enforcement will take place.

- ☐ Does the SIP revision have a 2007 projected inventory that demonstrates that the new State control measures, along with the measures assumed in the baseline 2007 inventory, will achieve the EPA assigned [see § 51.121 (e)(2)] State budget in 2007? 40 CFR 51.121(b)(1)(I), 51.121(g)(1), and 51.121(g)(2)(iii)

As discussed in this SIP Revision, the new State control measures of New Jersey's NO_x Budget Program, N.J.A.C. 7:27-31, and amendments thereto, along with the measures assumed in the 2007 baseline inventory, will achieve the EPA assigned State budget in 2007. See, especially, Table 6 of this SIP Revision.

- ☐ Does the SIP revision project the 2007 emissions expected after implementation of each control measure compared to the baseline 2007 inventory for the subject sources if the new control measure was not implemented? 40 CFR 51.121(g)(2)(iii)\

Yes. See Section IV. F. of this SIP Revision.

- ☐ Are computations, assumptions, and judgments used by the State to determine its projected 2007 NO_x mass emissions following implementation of the control measures included with the SIP revision? 40 CFR 51.121(g)(2)(iii)

Yes. See especially Sections D, E., and F of Part IV.

- ☐ Does the revision identify the sources of the data used by the State in projecting the emissions reductions achieved through implementation of each and all of the control measures? 40 CFR 51.121(g)(2)(iv)

Yes. EPA's data was used, along with AP-42 factors and data from New Jersey's Emissions Statement Program. See especially Sections D, E., and F of Part IV.

- ☐ Has the State indicated whether or not it intends to use the compliance supplement pool? 40 CFR 51.121(e)(3)

Yes. New Jersey intends to use the compliance supplement pool, as indicated in the proposed amendments to its NO_x Budget Program, attached as Appendix II to this SIP Revision. See proposed N.J.A.C. 7:27-31.22. Also see Appendix III, that contains the existing language of N.J.A.C. 7:27-31.

- ☐ Does the SIP submission provide for and describe the mechanism(s) to be used for distribution of the compliance supplement pool, if a State allows use of credits from the State's compliance supplement pool? 40 CFR 51.121(e)(3)(iv)

Yes, the mechanism is described in proposed N.J.A.C. 7:27-31.22(b); see Appendix II.

If yes,

- ☐ Do the SIP rules ensure that the State will not issue more credits than are contained within its Compliance Supplement Pool? 40 CFR 51.121(b)(2)(ii)(B) and 51.121(e)(3)(I)

Yes. See proposed N.J.A.C. 7:27-31.22(b), Appendix II.

- ☐ Are the mechanisms for distribution of the State's compliance supplement pool limited to the early reduction credit methodology and/or the direct distribution methodology described below? 40 CFR 51.121(e)(3)(iv)

If the SIP submission provides for and describes an early reduction credit methodology:

- ☐ Does the SIP rule require that the State shall complete the early reduction credit issuance process by no later than May 1, 2003? 40 CFR 51.121(e)(3)(iv)(A)(I)

Yes, the early reduction credit issuance process will be completed by May 1, 2003. See proposed N.J.A.C. 7:27-31.22(b), Appendix II.

- ☐ Does the early reduction credit methodology ensure that the reductions for which credit is given are not required by the State's SIP or otherwise required by the CAA? 40 CFR 51.121(e)(3)(iv)(A)(2)

Yes. See proposed N.J.A.C. 7:27-31.22(b), Appendix II. Pursuant to 63FR 57475, Section VII, F., New Jersey's program will be integrated with the OTC process. New Jersey will convert banked OTC NO_x budget allowances from the 1999-2002 period into the SIP NO_x Budget Program. Banked OTC NO_x budget allowances are NO_x emissions that were allowed but that were not actually emitted. These are quantifiable, and surplus, and are equivalent to early reductions.

- ☐ Does the early reduction credit methodology ensure that the reductions will be verified by the source as having actually occurred during an ozone control season between September 30, 1999 and May 1, 2003 and ensure that the reductions are quantified according to procedures set forth in the SIP revision and approved by EPA? 40 CFR 51.121(e)(3)(iv)(A)(3) and 51.121(e)(3)(iv)(A)(4)

Yes. See response to preceding item.

- ☐ Does the early reduction credit methodology ensure that the reductions implemented by sources serving electric generators with a nameplate capacity greater than 25 MW or boilers, combustion turbines or combined cycle units with a maximum design heat input greater than 250 mmBtu/hr are quantified according to 40 CFR part 75, subpart H, requirements? 40 CFR 51.121(e)(3)(iv)(A)(4)

Yes. See response to preceding item.

If the SIP submission provides for and describes a direct distribution methodology:

- ☐ Does the direct distribution methodology provide for the direct distribution credit issuance process to be initiated by the later date of September 30, 2002 or after the State completes the issuance of early reduction credits? 40 CFR 51.121(e)(3)(iv)(B)(1)

Yes, see proposed N.J.A.C. 7:27-31.22(b)4 to (b)7. New Jersey will first use an early reduction credit methodology. If credits are left over, a direct distribution process will be used.

- ☐ Does the direct distribution methodology provide for completion of the process by no later than May 1, 2003? 40 CFR 51.121(e)(3)(iv)(B)(2)

Yes. See, especially, proposed N.J.A.C. 7:27-31.22(b)1.

- ☐ Does the direct distribution methodology ensure that credit is issued only if the source demonstrates all of the following:

1. that achieving compliance would create undue risk, and
2. that early reduction credits could not be generated or acquired. 40 CFR 51.121(e)(3)(iv)(B)(3)

Yes. See, especially, proposed N.J.A.C. 7:27-31.22(b)6.

- ☐ Does the direct distribution methodology provide the public opportunity to comment, through a public hearing process, on the appropriateness of allocating compliance supplement pool credits to a source? 40 CFR 51.121(e)(3)(iv)(B)(4)

Yes. See, especially, proposed N.J.A.C. 7:27-31.22(b)7.

2. Enforceable Measures for Control

- ☐ Does the State include each of the following with respect to each of the control measures the State has elected to implement:

___ (a) the enforceable emission limit, technology requirement, or specific measure for each source;

New Jersey will use the enforceable emission limit approach. See proposed N.J.A.C. 7:27-31.3(i).

___ (b) projected activity level for each source or group of sources (not required for any category with an aggregate mass emissions cap or equivalent);

Not applicable, since New Jersey is using the enforceable emission limit approach.

___ (c) other factors necessary to calculate the effect of the control requirements;

Not applicable, since New Jersey is using the enforceable emission limit approach.

___ (d) emission rate & activity level measurement and emission estimations protocols;

___ (e) reporting protocols for emission limit, activity level, and emissions;

Yes, for (d) and (e), above. See existing N.J.A.C. 7:27-31.14 and proposed amendments thereto.

___ (f) enforcement mechanisms;

___ (g) penalties for exceeding emission limits or failing to install or operate control technologies or carry out compliance measures;

Yes, for (f) and (g), above. The NO_x allowance tracking system of N.J.A.C. 7:27-31 includes automatic enforcement mechanisms; see especially the excess emission deduction as specified in N.J.A.C. 7:27-31.19. Proposed N.J.A.C. 7:27A-3 contains general enforcement penalties; see especially N.J.A.C. 7:27A-3.10(m)31.

___ (h) provision for each control measure to be implemented by May 1, 2003? 40 CFR 51.121(b)(1), 51.121(f)(1), and 51.121(I).

Not applicable, since New Jersey is using the enforceable emission limit approach. See response to (a), above.

If the SIP submittal controls fossil fuel fired NO_x sources serving electric generators with a nameplate capacity greater than 25 MW or boilers, combustion turbines or combined cycle units with a maximum design heat input greater than 250 mmBtu/hr:

New Jersey's NO_x Budget Program controls both fossil fuel fired NO_x sources serving electric generators with a nameplate capacity greater than 15 MW and boilers, combustion turbines and combined cycle units with a maximum design heat input greater than 250 mmBtu/hr.

☐ Does the SIP submittal require one of the following for these sources:

___ (a) NO_x mass emissions cap, in tons/ozone control season;

Yes. See SIP Section IV. F. regarding New Jersey's NO_x Budget Program as well as N.J.A.C. 7:27-31.

___ (b) NO_x emissions rate limit (lbs NO_x/mm BTU) assuming maximum operating capacity (rated capacity [BTU/hr] and full seasonal operation [hours/5 month ozone control season]) for purposes of estimating NO_x mass emissions from each source; or

Not applicable, since New Jersey is using the NO_x mass emissions cap approach.

___ (c) any other regulatory requirement which the State demonstrates to EPA provides equivalent or better assurance than (a) or (b) above that the State will comply with its NO_x budget in the 2007 ozone control season? 40 CFR 51.121(f)(2)(I)

Not applicable, since New Jersey is using the NO_x mass emissions cap approach.

- ☐ Does the SIP submittal controlling these sources require and provide enforceable mechanisms to assure that collectively emissions from all such sources (including new or modified units) will not exceed the aggregate mass emissions projected by the State for 2007 for that category in any ozone control season beginning in 2003? 40 CFR 51.121(f)(2)(ii)

Yes. The SIP provides for emission reporting and data gathering, and corrective actions, if necessary. See Section IV. F.

- ☐ Does the SIP submittal controlling these sources require all such sources to comply with 40 CFR part 75, subpart H, monitoring requirements? 40 CFR 51.121(i)(4)

Yes. See discussion above regarding New Jersey's NO_x Budget Program, N.J.A.C. 7:27-31.

If the SIP revision contains any transportation control measures:

- ☐ Does the revision comply with 40 CFR 51.213? 40 CFR 51.121(i)(3)

This SIP revision does not contain any transportation control measures beyond those assumed by USEPA to apply to the mobile source category and included in the emissions projections presented by USEPA as spreadsheet nj_mb.xls as discussed in the main document of this SIP revision.

3. Legal Authority

- ☐ Does the SIP revision have fully adopted state rules/regulations adequate to prohibit NO_x emissions in excess of the State's budget with compliance dates no later than May 1, 2003? 40 CFR 51.121(b)(1) and 51.121(f)(1)

Yes. See the compliance requirements and compliance certification requirements of N.J.A.C. 7:27-31, especially N.J.A.C. 7:27-31.3 and N.J.A.C. 7:27-31.18. Also see N.J.A.C. 7:27A, and proposed amendments thereto, especially N.J.A.C. 7:27A-3.10. Absent unanticipated events or comments, adoption of these proposed amendments is targeted for September 30, 1999. New Jersey also has broad enforcement authority pursuant to N.J.S.A. 26:2C-1 et seq.

- ☐ Does the revision provide for legally enforceable procedures for requiring owners or operators of stationary sources to maintain records and to periodically report to the State (a) information on the amount of NO_x emissions from their sources and (b) other information as may be necessary to enable the State to determine whether the sources are in compliance with applicable portions of the control measures? 40 CFR 51.121(f)(1)(I) and 51.121(I)(1)

Yes. See record-keeping and reporting provisions at N.J.A.C. 7:27-31.15 and N.J.A.C. 7:27-31.16. The NO_x allowance tracking system of N.J.A.C. 7:27-31 includes automatic enforcement mechanisms; see especially the excess emission deduction as specified in N.J.A.C. 7:27-31.19. Proposed N.J.A.C. 7:27A-3 contains general enforcement penalties; see especially proposed N.J.A.C. 7:27A-3.10. New Jersey also has broad enforcement authority pursuant to N.J.S.A. 26:2C-1 et seq.

- ☐ Does the revision comply with 40 CFR 51.212 (regarding testing, inspection, enforcement, and complaints)? 40 CFR 51.121(I)(2)

Yes. See N.J.A.C. 7:27-31.14 to N.J.A.C. 7:27-31.18.

- ☐ Does the revision contain adequate procedures for handling control measure violations? 40 CFR 51.121(f)(1)(ii) and 51.121(I)(2)

Yes. See N.J.A.C. 7:27A-3.10.

- ☐ Does the revision designate agency responsibility for enforcement of implementation?
40 CFR 51.121(f)(1)(iii) and 51.121(I)(1)

Yes. See Section IV.F. of this SIP revision document. The responsibility is delegated to the DEP's Office of Compliance and Enforcement.

- ☐ Does revision show that the State has legal authority to carry out the revision, including authority to:
- ___ (a) adopt emission standards and limitations and any other measures necessary for attainment and maintenance of the State's NO_x budget;
 - ___ (b) enforce applicable laws, regulations and standards, and seek injunctive relief;
 - ___ (c) obtain information necessary to determine compliance with applicable control measures, including authority to require record keeping and to make inspections and conduct tests of air pollution sources;
 - ___ (d) require owners or operators of stationary sources to install, maintain and use emissions monitoring devices and make periodic reports to the State on the nature and amounts of emissions from such stationary sources; and
 - ___ (e) make such data available to the public as reported and as correlated with any applicable emissions standards or limitations? 40 CFR 51.121(j)

The authority necessary to accomplish measures (a) through (e), above, exists pursuant to N.J.S.A. 26:2C-1 et seq. and N.J.S.A. 13:1D-9.

- ☐ Does the SIP revision specifically identify and provide copies of the laws or regulations which the State determines provide the authorities described above (or provide citations for those laws or regulations)? 40 CFR 51.121(k)(1)

Yes. Copies of both the proposed amendments to the NO_x Budget Program, N.J.A.C. 7:27-31, and the existing language of N.J.A.C. 7:27-31, are included with this SIP Revision as Appendix II and Appendix III, respectively. New Jersey's Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and N.J.S.A. 13:1D-9 have not been included because they are readily available.

- ☐ Does the SIP revision comply with the general plan requirements of § 51.240? [*§ 51.240 requires that each State implementation plan must identify organizations that will participate in developing, implementing and enforcing the plan and the responsibilities of such organizations. The plan shall include any related agreements or memoranda of understanding among the organizations.*] 40 CFR 51.121(l)(2)

Yes. See Section IV.F.

- ☐ Does the SIP revision comply with § 51.280 (regarding resources)? 40 CFR 51.121(m)

Yes. See Section IV.F.

4. Compliance Dates and Schedules

- ☐ Does the revision contain a legally enforceable compliance schedule setting forth May 1, 2003 as the date by which all sources must be in compliance with any applicable requirement that is adopted by the State to meet its budget? 40 CFR 51.121(b)(1)(ii)

Yes. As discussed above, the controls included in this SIP Revision are those imposed on the sources subject to the NO_x Budget Program, N.J.A.C. 7:27-31. This program contains a legally enforceable compliance schedule. As of May 1, 1999, implementation of this program began, including the institution of procedures associated with emissions monitoring to ensure full compliance by all sources by May 1, 2003.

5. Monitoring, Record keeping and Emissions Reporting

- ☐ Does the SIP revision comply with the data availability requirements of § 51.116? [*§51.116 requires the State to retain all detailed data and calculations used in the preparation of the revision and make them available for public inspection and submit them to the Administrator at her request. Also, each plan must provide for public availability of emission data reported by source owners or operators or otherwise obtained by the State. Such emission data must be correlated with applicable requirements.*] 40 CFR 51.121(h)

The data and calculations used in the preparation of this SIP revision are available for public inspection and will be submitted to the Administrator at her request. NO_x emissions from New Jersey sources included in both the EGU and non-EGU point source sectors are reported to the DEP pursuant to New Jersey's Emission Statement rule, N.J.A.C. 7:27-21. These data are publicly available. Also, emission data are required to be reported and made public for the sources covered by the NO_x Budget Program, N.J.A.C. 7:27-31.

- ☐ Does the revision provide for State compliance with the reporting requirements set forth in section 51.122? This would include annual reports starting in 2003, triennial reports starting in 2002 and a 2007 report, in accordance with the requirements of section 51.122. 40 CFR 51.121(o)

NO_x emissions from New Jersey sources required to be reported and made public pursuant to New Jersey's NO_x Budget Program will be reported annually starting in 2003. Triennial reports starting in 2002 and a 2007 report, covering the requirements of 40 CFR 51.122, will be developed as part of the periodic statewide inventories as required by the Clean Air Act.

___ Does the revision include mechanisms for the State to obtain from sources the data needed for the State to report emissions information to USEPA in accordance

with section 51.122 (note that for large EGUs or non-EGUs this requirement may be satisfied by direct submission of data from the source to USEPA)? 40 CFR 51.121(f)(1)(I) and 51.121(I)(1)

Yes. Emission data are required to be reported and made public pursuant to both N.J.A.C. 7:27-21 and N.J.A.C. 7:27-31.

6. Trading Rule

If the SIP revision contains a trading rule:

- ☐ Starting with the 2004 control season, does the SIP trading rule limit the use of any banked emission reduction credits or emission allowances beyond a predetermined amount as calculated by one of the following approaches:

Yes.

___ the SIP trading rule prohibits sources from using banked emission reduction credits or allowances for compliance in excess of 10 percent of the source's allowable ozone season NO_x emissions at a rate less than 2 credits or allowances for every 1 ton of emissions; or

Sources are prohibited from using banked credits or allowances in accordance to the above conditions pursuant to N.J.A.C. 7:27-31.11(c) and (d), and proposed amendments thereto.

___ the SIP trading rule limits the use of banked emission reduction credits or emission allowances beyond a predetermined amount as calculated by the approach in section 51.121(b)(2)(ii)(E)(I)? 40 CFR 51.121(b)(2)(ii)(E)

Not applicable. See response to previous item.

If the State wants to participate in the NO_x Budget Trading Program:

- ☐ Is the State's SIP trading rule consistent with part 96 in one of the following ways:

___ Did the State adopt by reference part 96 with no changes?

No.

___ If the State did not adopt part 96 by reference, is the State's SIP trading rule substantively identical to each provision of part 96?

No.

___ Is the State's SIP trading rule substantively identical to each provision of part 96 except in the following respects (any or all of the following may be checked):

Yes. See items checked below, and associated notes.

☒ the State's SIP trading rule includes smaller electric generating units and/or smaller non-electric generating boilers, turbines and combined cycle units than the size criteria thresholds set forth in 40 CFR 96.4(a);

New Jersey's NOx Budget Program controls both fossil fuel fired NO_x sources serving electric generators with a capacity greater than 15 MW and boilers, combustion turbines and combined cycle units with a maximum design heat input greater than 250 mmBtu/hr.

___ the State's SIP trading rule includes source categories other than electric generating units and non-electric generating boilers, turbines, and combined cycle units as defined in 40 CFR 96.2;

___ If yes, are these additional source categories able to comply with all the part 96 requirements including monitoring and reporting ?

___ the State's SIP trading rule does not include the individual unit opt-in provision set forth in subpart I of 40 CFR part 96;

New Jersey's NOx Budget Program does include an opt-in provision.

☒ the State's SIP trading rule does not provide the 25 ton/season exemption set forth in 40 CFR 96.4(b);

New Jersey's NOx Budget Program does not provide this exemption.

___ the State's SIP trading rule does not allow early reduction credits;

New Jersey's NOx Budget Program does allow early reduction credits. See N.J.A.C. 7:27-31.22, and proposed adoptions thereto.

☒ the State's trading rule allows early reduction credits using an alternative methodology from that described in 40 CFR 96.55 (c) (and still satisfies the early reduction credit criteria described under the heading of Budget Demonstration and in 40 CFR 51.121(e)(3));

Pursuant to 40 CFR Part 51, Section VII. F. 4., Optional Methodology for Issuing Early Reduction Credits, 63FR 57474 & 57475, October 27, 1998, such an alternative methodology is permissible.

☒ the State's SIP trading rule describes a different methodology for allocating allowances from that set forth in subpart E of 40 CFR part 96 while still ensuring that the number of allowances issued does not exceed the State trading program budget and that new sources are required to hold allowances;

The methodology is stated in 7:27-31.7, d., e., and l., and amendments thereto.

☒ the State's SIP trading rule issues allocations for periods different from that set forth in 40 CFR 96.41 while still ensuring that allocations are issued by April 1 of each year three years prior to the relevant control season? 40 CFR 51.121(p)

New Jersey's NOx Budget Program, N.J.A.C. 7:27-31, issues allocations annually. This is in accordance with 40 CFR Part 51, Section VII. E. 1., Timing Requirements, 63FR 57467-57469.

- ☐ Does the SIP submittal contain unit allocations for the 2003 ozone control season? 40 CFR 96.41(a)

Yes. See proposed amendment to New Jersey's NOx Budget Program at N.J.A.C. 7:27-31.7(l).

- ☐ Does the SIP revision show that the State has the legal authority to adopt the trading rule and to implement its responsibilities under such regulations? 40 CFR 51.121(p)(1)(I)

New Jersey has this authority pursuant to N.J.S.A. 26:2C-1 et seq., particularly N.J.S.A. 26:2C-9.8, and the New Jersey Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq.

- ☐ Does the SIP revision accurately reflect the NO_x emissions reductions to be expected from the State's implementation of the trading rule? 40 CFR 51.121(p)(1)(ii)

As discussed in this Appendix, and in the SIP Revision itself, the Department has determined that, based on the information available, including data and projections supplied by the USEPA, implementation of the NOx Budget Program (trading rule) will accomplish the necessary NO_x emissions reductions.