EMISSION CREDITS IN NEW JERSEY

CURRENT SHORTAGE AND OPTIONS

Presented by: Khawar Kalim, Division of Air Quality
**Southern Ozone Nonattainment Area (NJ-PA-DE-MD)**

<table>
<thead>
<tr>
<th>New Power Plant</th>
<th>County</th>
<th>App Received?</th>
<th>Credits Identified?</th>
<th>Credits needed by*</th>
<th>VOC TPY</th>
<th>NOx TPY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Facility #1</td>
<td>Cape May</td>
<td>Yes</td>
<td>Not needed</td>
<td>Jul 2018</td>
<td>nets out</td>
<td>nets out</td>
</tr>
<tr>
<td>Proposed Facility #2</td>
<td>Salem</td>
<td>Yes</td>
<td>Owns 154 TPY NOx</td>
<td>May 2018</td>
<td>43</td>
<td></td>
</tr>
</tbody>
</table>

**Estimate of Credits needed:**

- 43 VOC TPY
- 0 NOx TPY

**Credits currently listed in NJ registry:**

- 338 VOC TPY
- 1127 NOx TPY

**50% scenario (assuming only half of the Credits are available for sale):**

- 169 VOC TPY
- 564 NOx TPY

**Estimate of Credits needed:**

- 43 VOC TPY
- 0 NOx TPY

**Surplus/Shortfall:**

- 126 VOC TPY
- 564 NOx TPY

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**Southern Nonattainment Area**

**SURPLUS:** VOC 126 TPY, NOx 564 TPY
## Credits Needed for New Power Plants

### Northern Ozone Nonattainment Area (NJ-NY-CT)

<table>
<thead>
<tr>
<th>New Power Plant</th>
<th>County</th>
<th>App Received?</th>
<th>Credits Identified?</th>
<th>Credits Needed by*</th>
<th>VOC TPY</th>
<th>NOx TPY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Facility #1</td>
<td>Hudson</td>
<td>Yes</td>
<td>Not needed</td>
<td>Jul 2018</td>
<td>nets out</td>
<td>nets out</td>
</tr>
<tr>
<td>Proposed Facility #2</td>
<td>Bergen</td>
<td>No</td>
<td>No</td>
<td>Oct 2018</td>
<td>90</td>
<td>319</td>
</tr>
<tr>
<td>Proposed Facility #3</td>
<td>Middlesex</td>
<td>Yes</td>
<td>Owns 48 TPY VOC, 164 TPY NOx</td>
<td>Jul 2018</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Proposed Facility #4</td>
<td>Middlesex</td>
<td>Yes</td>
<td>Owns 48 TPY VOC</td>
<td>Jul 2018</td>
<td>179</td>
<td></td>
</tr>
<tr>
<td>Proposed Facility #5</td>
<td>Middlesex</td>
<td>Yes</td>
<td>No</td>
<td>Jul 2018</td>
<td>259</td>
<td>151</td>
</tr>
<tr>
<td>Proposed Facility #6</td>
<td>Middlesex</td>
<td>No</td>
<td>No</td>
<td>Oct 2018</td>
<td>39</td>
<td>151</td>
</tr>
<tr>
<td>Proposed Facility #7</td>
<td>Hunterdon</td>
<td>No</td>
<td>4,000 TPY NOx in NY</td>
<td>Dec 2018</td>
<td>130</td>
<td>390</td>
</tr>
<tr>
<td>Proposed Facility #8</td>
<td>Union</td>
<td>No</td>
<td>No</td>
<td>Dec 2018</td>
<td>105</td>
<td></td>
</tr>
</tbody>
</table>

Estimate of Credits needed: 518 VOC, 1228 NOx

Credits currently listed in NJ registry: 951 VOC, 807 NOx

50% scenario (assuming only half of the Credits are available for sale): 476 VOC, 404 NOx

500 TPY of VOC Credits may not be verifiable***: -500

Add Credits available through NJ/NY MOU****: 195

Total available: -25 VOC, 599 NOx

Estimate of Credits needed: 518 VOC, 1228 NOx

Surplus/Shortfall: -543 VOC, -629 NOx

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* Based on either expected date of operation. ** Facility provides/will provide power to NY.  
*** 500 TPY VOC credits needs confirmation from Essex Chemical. **** 155 out of 350 TPY of NY Credits have already been used. MOU ends Dec 2017.
# Reciprocity Agreements in Other States

<table>
<thead>
<tr>
<th>State Pair</th>
<th>Effective</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York and Connecticut</td>
<td>1999</td>
<td>Unlimited use and trade of emission credits in either states.</td>
</tr>
<tr>
<td>New York and Pennsylvania</td>
<td>1996</td>
<td>Unlimited use and trade of emission credits in either states.</td>
</tr>
<tr>
<td>Pennsylvania and Maryland</td>
<td>2001</td>
<td>Unlimited use and trade of emission credits in either states.</td>
</tr>
<tr>
<td>New Jersey and New York</td>
<td>2014</td>
<td>Limited to 350 TPY of NOx over 3 years. 155 out of 350 TPY already used*.</td>
</tr>
</tbody>
</table>

* A proposed facility has informed NJDEP that they intend to use the remaining 195 TPY of NOx credits available through the transfer agreement with New York. This transfer will exhaust all credits allowed under the agreement.

<table>
<thead>
<tr>
<th>State</th>
<th>NOx (TPY)</th>
<th>VOC (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York's Inventory**</td>
<td>15,136</td>
<td>2,488</td>
</tr>
<tr>
<td>New Jersey's Inventory***</td>
<td>1,934</td>
<td>1,289</td>
</tr>
</tbody>
</table>

** Fewer credits are available in Northern Nonattainment area: NOx 10,126 TPY, VOC 1,011 TPY

*** All credits listed in NJ registry, without a check of availability or discount
EMISSION CREDITS – LIFE CYCLE

Shutdown Date
Equipment Shutdown

Registration Date
Banking Application

50% Discount
5 Years from Registration Date

100% Discount
10 Years from Registration Date

REVERTED TO STATE

50%

100%

CURRENT INVENTORY OF CREDITS REVERTED TO STATE

<table>
<thead>
<tr>
<th></th>
<th>Tons per Year (TPY)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CO</td>
</tr>
<tr>
<td>Credits reverted from facilities that shutdown between 2005-2010 (50%)</td>
<td>288</td>
</tr>
<tr>
<td>Credits reverted to State from facilities that shutdown prior to 2005 (100%)</td>
<td>6,957</td>
</tr>
<tr>
<td>Total Credits reverted to State:</td>
<td>7,245</td>
</tr>
</tbody>
</table>
ACTION ITEMS TO ADDRESS CREDITS SHORTFALL

Continue towards Attainment for Ozone. While this is a long term goal, implement the following short-term measures (3-5 years):

1. Consider a Reciprocity Agreement with NY for unlimited use and trade of emission credits in the Northern Nonattainment area (preferred option).
   - Alternatively, draft a new MOU with NY for up to 600 TPY VOC and 700 TPY NOx.

2. Revise New Jersey's emission offset rule (Subchapter 18) to address the use of Reverted Credits.
   - DAG/legal determination has been requested to check if the rule allows the use of reverted credits by the State.

3. Work with New Jersey facilities to evaluate: (1) installing new controls, (2) permanently curtailing production, (3) shutting down existing equipment that is not needed, (4) adopting pollution prevention measures, and (5) implementing transportation control measures.

Section 108 of the CAA provides examples of transportation control measures including: improved public transit, traffic flow improvements and high-occupancy vehicle lanes, shared ride services, pedestrian/bicycle facilities, and flexible work schedules, programs to control extended idling of vehicles, etc.
1. Where can I find information about New Jersey’s Emission Credits Program?

All information, including lists of credits in the registry, banking and transfer application forms, link to Emission Offset rule, procedure for using credits as emission offsets, and the FAQ are posted at: http://www.nj.gov/dep/aqpp/bec.html

2. Can a facility in Southern New Jersey use credits from a facility located in Northern New Jersey?

CAA requires that a source may offset increased emissions by obtaining emission reductions of such air pollutant from the same source or other sources in the same nonattainment area, except a source may obtain emission reductions from another nonattainment area if the other area has an equal or higher nonattainment classification than the area in which the source is located.

- **NJ’s Northern Counties**
  - Classified as “Severe-17” Non-attainment Area for 1-hour Ozone
  - **YES**

- **NJ’s Southern Counties**
  - Classified as “Severe-15” Non-attainment Area for 1-hour Ozone
  - **NO**
3. How emission credits are transferred from one facility to another?

   Step 1: Submit CER02 - Identification of Creditable Emission Reductions (CERs) for Transfer. The Department will review the application, verify the amounts of CERs banked, and notify the applicant to submit a joint request for transfer.

   Step 2: Submit CER03 - Joint Request for Transfer of Creditable Emission Reductions. The Department will review the joint request for transfer and issue a letter confirming the transfer.

4. Can a third party own emission credits in New Jersey?

   No. The Emission Offset Rule applies to facilities that have (or have applied for) permits pursuant to N.J.A.C. 7:27-8 or N.J.A.C. 7:27-22. Hence, credits can only be owned by facilities in New Jersey that have (or have applied for) Preconstruction permits or a Title V Permit.

5. When CERs become "used" and they are no longer subject to the 50% or the 100% discounting?

   CERs become used when they are proposed as emissions offsets or used in calculating the proposed net emission increase. Note that transfer of CERs is on "as is" basis (i.e. time discount and rule discount clocks do not stop during the transfer process). Discounting stops when CERs are applied to the project, not at the time of transfer.

Emission Credit Questions Contact: Khawar Kalim | Division of Air Quality | 609.292.1215 | khawar.kalim@dep.nj.gov
CREDITS NEEDED FOR NEW POWER PLANTS

New Jersey 8-Hour Ground-Level Ozone Multi-State Nonattainment Areas

Geographic Areas
- Northern NJ-NY-CT NAA
- Southern NJ-PA-DE-MD NAA