**APPENDIX B. COMBUSTION** **TURBINE ENGINES IN OZONE TRANSPORT REGION**

**(Data as of 09/01/2016)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1. TURBINE ENGINES (>25 MW)** | **Simple Cycle** | | **Combined Cycle** | |
| **Gas-fired** | **Oil-fired** | **Gas-fired** | **Oil-fired** |
| **State** | **NOx Limit (ppmvd @15% O2)** | | | |
| **CT – Statewide** | 258 (42 - 0.9 lb/MMBtu)**a**  42 – 55**b**; 40**c** | 240 (40 - 0.9 lb/mmBtu)**a**  40 – 75**b**; 40 – 50**c** | 258 (42 - 0.9 lb/MMBtu)**a**  42**b**; 25**c** | 240 (40 - 0.9 lb/mmBtu)**a**  40 – 65**b**; 40 – 42**c** |
| **DC (If** ≥**100 mmBTU/hr)** | NA | 75 | NA | NA |
| **DE - Statewide** | 42 | 88 | 42 | 88 |
| **MA - Statewide** | 65 | 100 | 42 | 65 |
| **MD - Select Counties** | 42 | 65 | 42 | 65 |
| **ME -** |  |  |  |  |
| **NH -** |  |  |  |  |
| **NJ – Statewide (≥15 MW)** | 25 (1.00 lb/MWh) | 42 (1.60 lb/MWh) | 25 (0.75 lb/MWh) | 42 (1.20 lb/MWh) |
| **NY - Statewide** | 50 | 100 | 42 | 65 |
| **PA - Statewide** | >1,000 bhp & <6,000 bhp (150); >6000 BHP (42) | >1,000 bhp and <6,000 bhp (150); >6000 BHP (96) | 1,000 bhp and <180 MW (42); >180 MW (4) | 1,000 bhp and <180 MW (96); >180 MW (8) F42 |
| **RI - Statewide** | No RACT Sources  (new only) | No RACT Sources  (new only) | No RACT Sources  (new only) | No RACT Sources  (new only) |
| **VA - OTR jurisdiction** | 42 | 65 - 77 | 42 | 65 - 77 |
| **VT -** | NA | | | |

Notes:

* CT: **a**Existing RCSA Sec. 22a-174-22; **b**Proposed RCSA Sec. 22a-174-22e starting June 1, 2018; **c**Proposed RCSA Sec. 22a-174-22e starting June 1, 2022.
* NJ: lb/mmBtu limit converted to ppmvd @15% O2 based on Part 75 Eq-F5 and F-factors of 8710 for natural gas and 9190 for oil; lb/MWh limit converted to ppmvd@15% O2 based on New Jersey technical support document; 25 ppm ≈ 1.0 lb/MWh for simple cycle gas; 42 ppm ≈ 1.60 lbs/hr for simple cycle oil. (NJ Proposal Number: PRN 2008-260).
* NA = Not Applicable

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| **State** | **2. HEDD COMBUSTION TURBINES – RACT REGULATIONS** | **State Contacts** |
| **CT** | Revising RCSA section 22a-174-22: <http://www.ct.gov/deep/lib/deep/air/regulations/mainregs/sec22.pdf> | Merrily Gere, 860 424 3416,  [Merrily.Gere@ct.gov](mailto:Merrily.Gere@ct.gov); |
| **DC** | 20 DCMR § 805.4, RACT for Major Stationary Sources of Oxides of Nitrogen: <http://www.dcregs.dc.gov/Gateway/RuleHome.aspx?RuleNumber=20-805>; | Jessica Daniels, 202-741-0862,  jessica.daniels@dc.gov |
| **DE** | 7 DE Admin Code 1112, Control of Nitrogen Oxides Emissions: <http://regulations.delaware.gov/AdminCode/title7/1000/1100/1112.shtml>  7 DE Admin Code 1148, Control of Stationary Combustion Turbine Electric Generating Unit Emissions: <http://regulations.delaware.gov/AdminCode/title7/1000/1100/1148.shtml> |  |
| **MA** |  |  |
| **MD** | COMAR 26.11.09.08 G Greater than 15% capacity and less than 15% capacity; <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwia9K6f2ZbOAhUI2T4KHVLHDmAQFggiMAE&url=http%3A%2F%2Fwww.mde.state.md.us%2Fprograms%2FAir%2FAirQualityPlanning%2FDocuments%2FOzone_ISIP_2012.pdf&usg=AFQjCNHMy94YhR5yKcchTc-CzzC7-pPeXA> | Randy Mosier, 410 537 4488,  Randy.Mosier@maryland.gov; |
| **ME** |  |  |
| **NH** | Evaluating Potential need for changes |  |
| **NJ** | N.J.A.C. 7:27‑19.5  <http://www.state.nj.us/dep/aqm/Sub19.pdf> | Peg Gardner, 609 292 7095  Margaret.Gardner@dep.nj.gov |
| **NY** | Under Development; <https://www.federalregister.gov/articles/2013/07/12/2013-16493/approval-and-promulgation-of-implementation-plans-new-york-state-ozone-implementation-plan-revision> | John Barnes, 518 402 8396, john.barnes@dec.ny.gov; Robert Bielawa, robert.bielawa@dec.ny.gov; |
| **PA** | PA's RACT Rule covers Combustion Turbines. Additional RACT Requirements for Major Sources of NOx and VOCs. Sections 129.96 - 129.100. Control of NOx from Major Sources of NOx and VOC. Effective April 23, 2016. Federal Register –TBD; <https://www.portal.state.pa.us/portal/server.pt/document/1613671/1_ract_2_final_exec_summary_pdf> | Susan Hoyle, shoyle@pa.gov;  Randy Bordner, ranbordner@pa.gov;  Susan Foster, sufoster@pa.gov;  Sean Wenrich, sewenrich@pa.gov; |
| **RI** | Evaluating potential need for changes | Laurie Grandchamp, 401 222 2808, laurie.grandchamp@dem.ri.gov |
| **VA** | 9 VAC 5 Chapter 40 Article 51 http://www.deq.virginia.gov/Portals/0/DEQ/Air/Regulations/451.pdf | Doris McLeod  doris.mcleod@deq.virginia.gov |
| **VT** | No action to date; <http://dec.vermont.gov/air-quality/laws> | Doug Elliott, 802 377 5939, Doug.Elliott@vermont.gov; |