

October 14, 2011

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Mr. Donald Dahl Air Permits, Toxic and Indoor Air Program Unit U.S. EPA Region 1 – New England 5 Post Office Square Mail Code: OEP05-2 Boston, Massachusetts 02109-3912

Re: Pioneer Valley Energy Center, Westfield, Massachusetts Prevention of Significant Deterioration Air Permit Application Supplemental Information - 1 hour NO₂ Impact Analysis ESS Project Number E402-007.01

Dear Mr. Dahl:

On behalf of Pioneer Valley Energy Center, LLC (PVEC), ESS Group Inc. (ESS) is providing the following supplemental information to the U.S. Environmental Protection Agency (EPA) regarding the above referenced application in response to your recent information request.

<u>1-HOUR NO₂ AIR QUALITY IMPACT ANALYSIS</u>

At the request of the EPA, ESS conducted an additional air quality impact analysis for the PVEC project in regard to the newly promulgated 1-hour nitrogen dioxide (NO_2) National Ambient Air Quality Standard (NAAQS). The results of the analysis, which have been previously provided to the EPA, demonstrated that the modeled maximum ambient air impacts from the PVEC project, as determined in accordance with the most recent EPA 1-hour NO_2 modeling guidance, will not cause or contribute to an exceedance of the 1-hour NO_2 NAAQS.

CUMULATIVE IMPACT ASSESSMENT

The results of the 1-hour NO_2 air quality impact analysis conducted for PVEC determined that the maximum predicted 1-hour NO_2 impacts from the facility would exceed the 1-hour NO_2 Significant Impact Level (SIL) established by the EPA (7.5 µg/m³). The Prevention of Significant Deterioration (PSD) Rules (40 CFR 52.21) require that a cumulative impact analysis be conducted for a proposed source for any pollutant for which the maximum predicted impact from the source exceeds the corresponding SIL. The purpose of the cumulative (multi-source) modeling analysis is to demonstrate that the impacts from the proposed source, in combination with the impacts from other existing sources in the area, will not cause an exceedance of the NAAQS.

40 CFR 51, Appendix W, Section 8.2.3, provides general guidance on determining which sources to include in such a cumulative modeling impact assessment. The EPA published technical memos to provide guidance pertaining specifically to 1-hour NO₂ cumulative impact assessments on June 1, 2010, "Guidance Concerning the Implementation of the 1-hour NO₂ NAAQS for the Prevention of Significant Deterioration Program" and on March 1, 2011, "Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO₂ National Ambient Air Quality Standard".





The guiding principle for the scope of cumulative impact assessments established in 40 CFR 51, Appendix W, and reinforced in the EPA guidance memos is the importance of professional judgment by the reviewing authority in the identification of the sources to be included in the analysis. According to the March 1, 2011 EPA guidance memo, the factors to be considered in such a determination are very case-specific in nature, and should include the characteristics of the source being permitted, and the local meteorological and topographical factors that determine the spatial and temporal patterns of the source's ambient impacts.

The March 1, 2011 EPA memo also provides additional guidance on how to best combine monitored and modeled contributions to estimate existing background concentrations. It notes that it is important to find the right balance so that the impacts of existing sources are not double counted in the analysis. For example, if several existing sources are located in close proximity to an ambient monitoring station, their combined contribution to the existing background concentration in that area is already being accounted for in the concentrations measured at that monitoring station. If the impacts from those sources were also quantified as part of the cumulative modeling analysis, they would in effect be double counted, thus predicting a cumulative impact concentration which is overly conservative.

The March 1, 2011 EPA memo concluded that the use of a uniform monitored background concentration from a representative monitor represents a level of conservatism that would obviate the need to include any background sources in the cumulative impact modeling analysis if the number of nearby sources which could contribute to the cumulative impact is few and the available ambient monitor would be expected to reflect their cumulative impacts reasonably well or conservatively in relation to the modeled design value and the project emissions. The recommended background concentration to be used for the cumulative impact assessment is the monitored NO₂ design value, or the 98th percentile of the annual distribution of daily maximum 1-hour values averaged across the most recent three years of monitored data.

The attached Figures 1 and 2 depict the PVEC facility and the surrounding area, including the locations of the Barnes Airport meteorological data monitoring station, and the ambient NO_2 monitoring stations located in Chicopee and Springfield. It also depicts the locations of all stationary NO_x emission sources in Hampden County, as identified using the EPA's National Emissions Inventory (NEI) database. The attached Table 1 provides additional information from the NEI database on each emissions source identified on Figures 1 and 2.

Figures 1 and 2 also depict the wind rose for Barnes Airport, which is located approximately 1 mile east of the PVEC site, for the period from 2006 through 2010. As shown on Figures 1 and 2, the predominant wind directions during that time period at Barnes Airport were from the north, south, northeast, northwest, and southwest. Winds from the east or west were uncommon during that time period, with winds from the east occurring less than 2% of the hours during that time period. The average wind speed was approximately 6.7 knots with calm winds measured approximately 6.2% of the time during that time period.





Figure 1 depicts the 1-hour NO₂ Significant Impact Area (SIA) from the PVEC facility during normal operation (no testing of the emergency generator or fire pump), as determined through dispersion modeling. Note that the 1-hour NO₂ SIA depicted on Figure 1 represents the worst-case SIA during normal operation, as it represents the SIA during the combustion turbine operating scenario (ULSD firing) which resulted in the highest 1-hour NO₂ impacts. The SIA will be even more limited during natural gas firing, which will be the normal operating scenario for the facility throughout most of the operating year. Using the ULSD firing operating scenario for this analysis provides an additional level of conservatism and confidence in the conclusions resulting from the analysis.

Figure 2 depicts the PVEC 1-hour NO_2 SIA during the same normal operating scenario depicted on Figure 1 along with the additional emissions from the emergency generator or fire pump during readiness testing, limited to the period between the hours of 12 PM and 3 PM. PVEC will accept a permit provision to limit testing of the emergency generator and fire pump to that time period. Note that the emergency generator and fire pump will each be tested for nominally one hour per week, so the SIA depicted on Figure 2 will be limited to a period of up to 104 hours per year only. The total operating hours of the emergency generator and fire pump will each be limited to 300 hours per year.

As shown on Figure 1, the 1-hour NO₂ SIA during normal facility operation is located exclusively to the west of the facility, within an area 5-10 kilometers (km) from the site. There are no stationary sources of NO_x identified in the NEI database that are located within the PVEC 1-hour NO₂ SIA during normal operation. There are a few isolated stationary NO_x sources located near the SIA. However, none of these sources are major sources of NO_x emissions (>50 tpy), and most of them have annual NO_x emissions of 1 tpy or less. The emissions from these few small sources would not reasonably be expected to interact with the emissions from PVEC or make a significant contribution to a cumulative 1-hour NO₂ impact in combination with the emissions from PVEC based on the relative magnitude of their NO_x emissions to the PVEC emissions and their locations relative to the prevailing winds and topography in the area.

As shown on Figure 2, the 1-hour NO₂ SIA during engine testing also includes much of the area within 5 km of the site, and extends to the southeast up to 10 km. There are several stationary sources of NO_x identified in the NEI database that are located within or near the PVEC 1-hour NO₂ SIA during engine testing. However, none of these sources are major sources of NO_x emissions (>50 tpy), and most of them have annual NO_x emissions of 1 tpy or less. The emissions from these few small sources would not reasonably be expected to interact with the emissions from PVEC or make a significant contribution to a cumulative 1-hour NO₂ impact in combination with the emissions from PVEC based on the relative magnitude of their NO_x emissions to the PVEC emissions and their locations relative to the prevailing winds and topography in the area.

As shown on both Figures 1 and 2, the vast majority of the stationary NO_X sources identified in the NEI database in the project area are located to the east of the PVEC site in Holyoke, Chicopee, and Springfield. None of these sources are located within the PVEC 1-hour NO_2 SIA during normal operation or during engine testing. As mentioned previously, the Barnes Airport wind rose shows that the winds in





the area rarely blow from the east or west, so it is reasonable to assume that there will be infrequent interaction between the emissions from PVEC and the emissions from the facilities to the east of the site. The fact that the PVEC 1-hour NO_2 SIA is located predominately to the west of the site indicates that the intervening topography between the site and Chicopee, Holyoke, and Springfield will also serve to limit interaction between the emissions from PVEC and the sources to the east of the site.

As mentioned previously, Figures 1 and 2 also show the locations of the NO_2 ambient monitoring stations in Chicopee and Springfield. These ambient monitoring stations are located in close proximity to the vast majority of the stationary NO_x sources in Hampden County that are identified in the NEI database. It is therefore reasonable to expect that the NO_2 ambient concentrations measured at these monitoring stations are already adequately quantifying the cumulative 1-hour NO_2 impacts from these sources, as well as mobile sources in the area. If the impacts from any of these sources located in proximity to either monitoring station were to be included in a cumulative impact assessment for PVEC, those impacts would in effect be double counted (modeling and monitoring), and would result in a cumulative impact which is overly conservative.

In summary, PVEC has demonstrated that the maximum predicted 1-hour NO_2 impacts from the facility, when combined with the monitored NO_2 design value of the most conservative background NO_2 monitor in the area (Springfield), will not cause an exceedance of the NAAQS. Although the maximum predicted 1-hour NO_2 impacts from PVEC exceed the SIL in limited areas, there are no sources located within those areas or in close proximity which could reasonably be expected to interact significantly with the PVEC emissions. Furthermore there are NO_2 monitors located within the area which already sufficiently quantify the cumulative impacts from the vast majority of the existing stationary and mobile NO_x sources in the area. Therefore, consistent with the latest EPA guidance, PVEC asserts that no further cumulative impact assessment for 1-hour NO_2 is required.

ENVIRONMENTAL JUSTICE ASSESSMENT

ESS also performed an Environmental Justice (EJ) assessment for PVEC as it pertains to 1-hour NO_2 ambient air impacts using the policy guidance and framework of the "Toolkit for Assessing Potential Allegations of Environmental Injustice" published by the U.S. EPA. The purpose of this assessment was to demonstrate that the 1-hour NO_2 impacts from PVEC will not create disproportionate adverse impacts within any EJ communities.

Consistent with EPA methods and procedures, several communities in the vicinity of the PVEC site were identified for the EJ assessment. These Affected Areas or Areas-of-Concern communities met the following criteria:

• The community's minority population percentage is above the statewide minority population percentage. As a percent of the total population, the statewide minority population is 15.5%; or





• The community's percentage of population below the poverty level exceeds the statewide average population percentage below the poverty level. As a percent of the total population, approximately 6.7% of the total population lives below the poverty level in the Commonwealth of Massachusetts.

Figures 1 and 2 (attached) show the predicted PVEC 1-hour NO_2 SIA as isopleths around the site boundary during normal operation and during standby engine testing, respectively. As shown in the figures, there are several Affected Areas or Areas-of-Concern located within 20 km of the Project site. The EJ areas close to the PVEC site include areas within Westfield, Holyoke, Chicopee, and Springfield.

As shown on Figure 1, the 1-hour NO_2 SIA from PVEC during normal operation does not include any EJ areas. In other words, the 1-hour NO_2 impacts from PVEC in all EJ areas during normal operation will be insignificant, as defined by the EPA. As a result, the 1-hour NO_2 ambient air impacts from the PVEC facility will clearly not disproportionally impact EJ areas during normal operation.

As shown on Figure 2, the 1-hour NO₂ SIA from PVEC during standby engine testing, which will be limited to the period from 12 PM – 3 PM and occur only two hours per week (one hour per engine), includes two separate EJ areas within Westfield (1.8 total square miles impacted) and a small EJ area located in West Springfield (0.1 square miles impacted). The 1-hour NO₂ impacts from PVEC in the remaining EJ communities in the area during standby engine readiness testing will be insignificant, as defined by the EPA. Approximately 2.3% of the total area of the PVEC 1-hour NO₂ SIA during standby engine testing is located within an EJ community. With nearly 98% of the PVEC 1-hour NO₂ impacts above the SIL occurring outside of EJ areas, the 1-hour NO₂ ambient air impacts from the PVEC facility will clearly not disproportionally impact EJ areas during standby engine testing.

Figures 1 and 2 graphically demonstrate that the maximum predicted 1-hour NO₂ air quality impacts from the PVEC facility will not create disproportionate adverse impacts in any EJ Affected Areas or Areas-of-Concern.

We trust that the above information is a complete response to your request for additional information. The modeling files associated with the analyses described in this submittal and the SIA isopleth shape files have been provided electronically on the enclosed CD-ROM. Please feel free to contact me by phone at (781) 419-7749 or via e-mail at <u>mfeinblatt@essgroup.com</u> if you have any questions.

Sincerely,

ESS GROUP, INC.

Michael E. Feinblatt Practice Leader Energy & Industrial Services



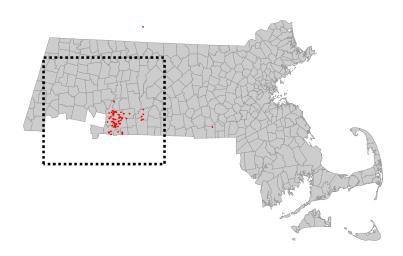


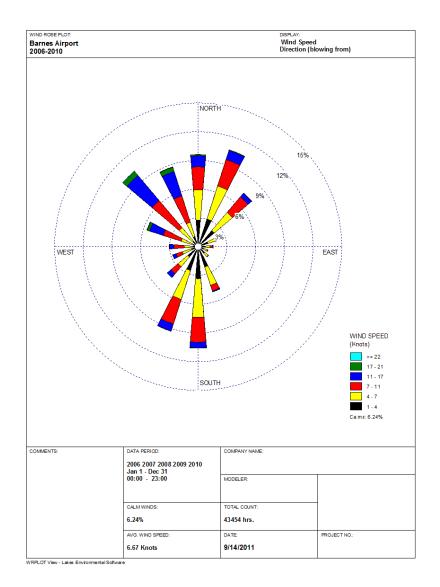
Attachments

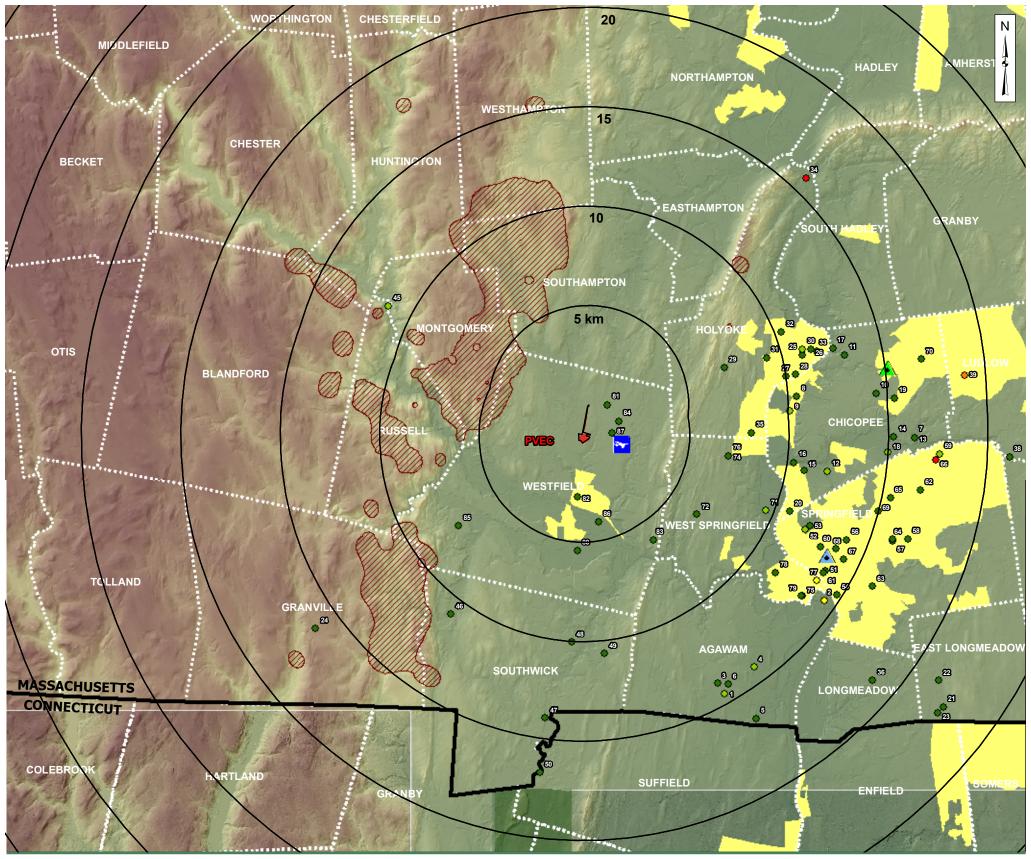
C: Matthew Palmer, PVEC Jack Arruda, PVEC



Location: G:/GIS-Projects/E402/00-mxd/Air-Mod/NOx-NormalOp-FINAL.mxd









PIONEER VALLEY ENERGY CENTER Westfield, Massachusetts

Scale: 1" = 3 Miles 3 Miles

Source: 1) MassGIS, DEM Data, 2001 2) ESS, PVEC Air Model Data, 2011 3) MassGIS, Town Boundaries, 2002 4) MassGIS, EJ Areas, 2003 5) EPA, NO2 Ambient Monitor Locations, 2011

Legend

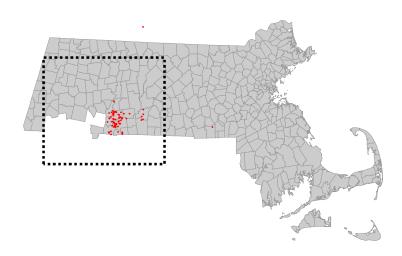
- 5km Buffer Interval from PVEC Site Boundary
- PVEC Site Boundary
- Chicopee Ambient NO₂ Monitor
- Springfield Ambient NO₂ Monitor
- Barnes Airport Meteorological Data Monitoring Station
 - PVEC Modeled 1 hour NO₂ Impact >7.5 ug/m³ (1-hour NO₂SIL) Environmental Justice Areas
 - Environmental Justice Areas derived from 2000 Census Block Group (SF3) data for Race and Income. (Minority >15.5%, Poverty < \$30,515) - EJ areas impacted by SIA is 0%

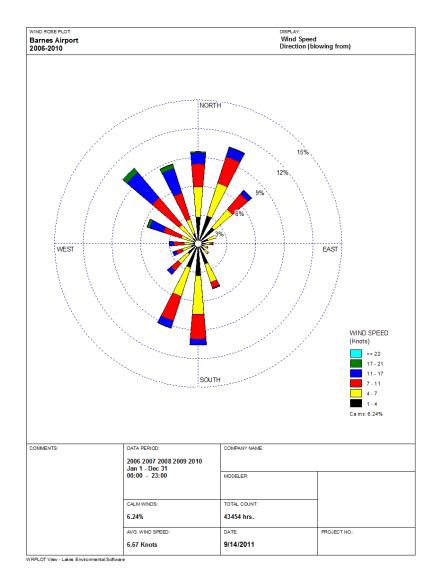
Hampden County Stationary NOx Sources NOx Total Emissions (Tons/Year)

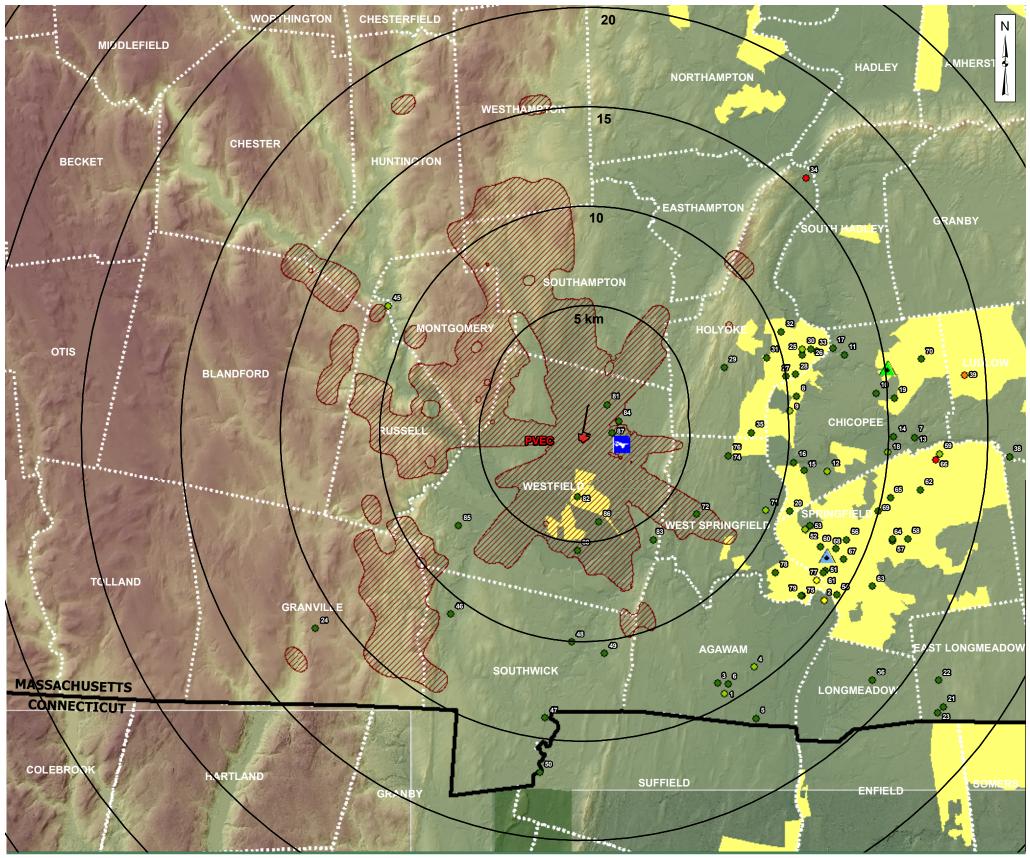
| • | 0 - 10 | 0 | 100 - 250 |
|---|----------|---|-----------|
| 0 | 10 - 50 | • | 250+ |
| 0 | 50 - 100 | | |

PVEC 1-hour NO₂ Modeled Significant Impact Area during Normal Operations (No Standby Engine Testing) Figure 1

Location: G:/GIS-Projects/E402/00-mxd/Air-Mod/NOx-Testing13-15-FINAL.mxd









PIONEER VALLEY ENERGY CENTER Westfield, Massachusetts

Scale: 1" = 3 Miles 3 Miles

Source: 1) MassGIS, DEM Data, 2001 2) ESS, PVEC Air Model Data, 2011 3) MassGIS, Town Boundaries, 2002 4) MassGIS, EJ Areas, 2003 5) EPA, NO2 Ambient Monitor Locations, 2011

Legend

- 5km Buffer Interval from PVEC Site Boundary
- PVEC Site Boundary
- Chicopee Ambient NO₂ Monitor Springfield Ambient NO₂ Monitor



- Barnes Airport Meteorological Data Monitoring Station
- PVEC Modeled 1 hour NO₂ Impact >7.5 ug/m³ (1-hour NO₂ SIL)
 - Environmental Justice Areas Environmental Justice (EJ) areas derived from 2000 Census Block Group (SF3) data for Race and Income. (Minority >15.5%, Poverty < \$30,515)

- EJ areas impacted by SIA is 2.3%
- City of Westfield EJ areas impacted by SIL is 1.8 sq. miles
- Town of West Springfield EJ areas impacted by SIL is 0.1 sq. miles

Hampden County Stationary NOx Sources NOx Total Emissions (Tons/Year)

| • | 0 - 10 | 0 | 100 - 2 |
|---|----------|---|---------|
| 0 | 10 - 50 | • | 250+ |
| 0 | 50 - 100 | | |

- 250

PVEC 1-hour NO₂ Modeled Significant Impact Area during Standby Engine Testing (Limited to noon - 3PM)

Table 1 - Hampden County Stationary NOx Sources (NEI Database)

| Site 1 BERKSHIRE POWER LLC | LOCALITY | LOCATION_ADDRESS_TEX 36 MOVI AN LN | T NAICS_Co 221112 | | Pollutant NOX | Total_Emissions Emissions_UC 48 6804 TON | M FACILITY_COMPANY_NAME BERKSHIRE POWER LLC | FAC_SITE_DESCRIPTION THE FACILITY IS A GAS FIRED GAS TURBINE COMBINED CYCLE ELECTRIC GENERATING MERCHANT PLANT. | NAICS_CD 221112 | FACILITY_SOURCE_DESCRIPTION Electricity Generation via Combustion | LATITUDE 42.045522 | LONGITUDE -72 6510 |
|--|-----------------------------|---------------------------------------|----------------------|--|------------------|---|--|--|--------------------|--|-----------------------|-----------------------|
| 2 COVANTA SPRINGFIELD LLC | AGAWAM | 200 M ST | 221112 562213 | | NOX | 48.6804 TON 62.4 TON | COVANTA SPRINGFIELD LLC | THE FACILITY IS A GAS FIRED GAS TURBINE COMBINED CYCLE ELECTRIC GENERATING MERCHANT PLANT. COMBUSTION OF MUNICIPAL SOLID WASTE (MSW) TO PRODUCE STEAM. WHICH IN TURN FEEDS A TURBINE GENERATOR | 221112 562213 | Electricity Generation via Combustion Municipal Waste Combustor | 42.045522 | -72.651 |
| 3 SPRINGFIELD WASTEWATER TREATMENT PLANT | AGAWAM | 200 MIST MIST | 221320 | | NOX | 4 1029 TON | SPRINGFIELD WATER AND SEWER | COMBOSTION OF MUNICIPAL SOLID WASTE (MSW) TO PRODUCE STEAM, WHICH IN TURN FEEDS A TURBINE GENERATOR MUNICIPAL WASTE WATER TREATMENT FACILITY | 221320 | Wastewater Treatment Facility | 42.060414 | -72.591 |
| 4 TENNESSEE GAS PIPELINE STATION 261 | AGAWAM | 1615 SUFFIELD ST | 486210 | | NOX | 13.8748 TON | TENNESSEE GAS PIPELINE | TENNESSEE GAS PIPELINE OPERATES A NATURAL GAS COMPRESSOR STATION IN AGAWAM, MA. THIS COMPRESSOR STA | 486210 | Pipeline compressor station | 42.057773 | -72.633 |
| 5 TGP | AGAWAM | Unknown | 48811 | Airport | NOX | 0.01623888 TON | TENNESSEE GAS FIFELINE | TENNESSEE ONS FIFELINE OF ENTES A NATIONE GAS COMPRESSOR STATION IN AGAINAM, WA. THIS COMPRESSOR STATION IN AGAINAM, WA. | 48811 | Airport | 42.0345 | -72.030 |
| 6 VERGNANI | AGAWAM | Unknown | 48811 | | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42 0498 | -72.6 |
| 7 AMERESCO CHICOPEE ENERGY INC | CHICOPEE | 161 NEW LOMBARD RD | 562212 | | NOX | 34.12 TON | AMERESCO CHICOPEE ENERGY LLC | THE FACILITY IS LANDFILL GAS-TO-ENERGY PLANT LOCATED ON THE CHICOPEE LANDFILL ON NEW LOMBARD ROAD IN | 562212 | | 42,162921 | -72.537 |
| 8 ASHLAND HERCULES WATER TECHNOLOGIES | CHICOPEE | 1111 GRATTAN ST | 325211 | | NOX | 1.562 TON | HERCULES INC | POLYMER PRODUCTION: CHEMICAL REACTION TO PRODUCE THE INTERMEDIATE THAT IS USED TO MAKE THE THE WET-S | 325211 | | 42.180654 | -72.609 |
| CALLAWAY GOLF BALL OPERATIONS INC | CHICOPEE | 425 MEADOW ST | 339920 | | NOX | 10.8322 TON | CALLAWAY GOLF COMPANY | GOLF BALL MANUFACTURING | 339920 | | 42,174431 | -72.613 |
| CHICOPEE | CHICOPEE | Unknown | 48811 | Airport | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.1826 | -72.5 |
| CHICOPEE CONCRETE SV | CHICOPEE | 158 NEW LOMBARD RD | 327999 | | NOX | 0.056 TON | CHICOPEE CONCRETE SERVICES INC | THIS FACILITY PRODUCES READY MIX CONCRETE BY LOADING TRANSIT MIX TRUCKS WITH SAND, STONE, CEMENT AND | 327999 | | 42.199867 | -72.58 |
| CHICOPEE ELECTRIC LIGHT CO | CHICOPEE | 725 FRONT ST | 221112 | | NOX | 13.2813 TON | CHICOPEE MUNICIPAL LIGHT PLANT | CHICOPEE ELECTRIC LIGHT COMPANY IS A MUNICIPALLY OWNED AND OPERATED UTILITY SUPPLYING POWER TO THE C | 221112 | Electricity Generation via Combustion | 42.146929 | -72.59 |
| CHICOPEE SANITARY LANDFILL | CHICOPEE | 161 NEW LOMBARD RD | 562212 | | NOX | 8.234 TON | CT VALLEY SANITARY WASTE DISPOSAL INC | FACILITY IS A SOLID WASTE LANDFILL. THE LANDFILL PRODUCES LANDFILL GAS ANAEROBICALLY CONSISTING OF M | 562212 | | 42.162921 | -72.53 |
| DOW JONES | CHICOPEE | Unknown | 48811 | | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.1629 | -72.5 |
| EASTERN ETCHING AND MANUFACTURING | | 35 LOWER GRAPE ST | 332812 | | NOX | 0.2565 TON | EASTERN ETCHING AND MANUFACTURING | THIS FACILITY PRODUCES IDENTIFICATION PRODUCTS. NO CHANGES IN PAST REPORTING YEAR. | 332812 | | 42.147233 | -72.60 |
| GAS RECOVERY SYSTEMS LLC - CHICOPEE | CHICOPEE | 855 BURNETT RD | 221119 | | NOX | 4.02 TON | GAS RECOVERY SYSTEMS, LLC | RENEWABLE POWER - LANDFILL GAS TO ENERGY FACILITY | 221119 | Electricity Generation via Combustion | 42.150959 | -72.61 |
| SOUTH HADLEY WWTP | CHICOPEE | 2 JAMES ST | 924110 | | NOX | 0.3534 TON | TOWN OF SOUTH HADLEY | POTW - SANITARY WASTEWATER TREATMENT FACILITY SERVING THE TOWN OF SOUTH HADLEY, AND SMALL PORTIONS O | 924110 | Wastewater Treatment Facility | 42.202719 | -72.58 |
| TED ONDRICK COMPANY LLC | CHICOPEE | 58 INDUSTRY RD | 324121 | | NOX | 15.8382 TON | TED ONDRICK COMPANY LLC | BATCH MIX HOT MIX ASPHALT PLANT | 324121 | Hot Mix Asphalt Plant | 42.156059 | -72.55 |
| U S TSUBAKI INC AUTOMOTIVE DIVISION | CHICOPEE | 106 LONCZAK DR | 333613 | | NOX | 0.5 TON | US TSUBAKI INC AUTOMOTIVE DIVISION | DRIVE TRAINS/POWER TRANSMISSION EQUIPMENT | 333613 | | 42.180556 | -72.55 |
| WOMENS CORRECTIONAL CENTER HASBRO GAMES | CHICOPEE EAST LONGMEADOW | 701 CENTER ST | 922140 | | NOX | 0.619 TON 1 8884 TON | WOMENS CORRECTIONAL CENTER HASBRO FLM | WOMENS CORRECTIONAL INSTITUTION PRINTING AND CONVERTING -PUZZLE AND GAME MANUFACTURER | 922140 | | 42.128487 | -72.61 |
| | | | 339932 | | | | | | 339932 | | 42.040926 | |
| | EAST LONGMEADOW | | 332213 | | NOX | 1.4434 TON | AMERICAN SAW AND MFG CO | FABRICATION OF METAL THROUGH ROLLING, GRINDING, MILLING, DRAWING, SIZING, HEAT TREATING, WELDING, CU | 332213 | | 42.052702 | -72.52 |
| SUDDEKOR LLC | EAST LONGMEADOW | | 322221 | | NOX | 2.77 TON | SUDDEKOR LLC | THE SUDDEKOR PLANT IMPREGNATES PRINTED DECORATIVE LAMINATE USED IN THE FABRICATION OF FLOORING IN NO | 322221 | | 42.037931 | -72.52 |
| MOREHAVEN | GRANVILLE | Unknown | 48811 | | NOX | 0.0027425 TON | | AIRPORT | 48811 | Airport | 42.0723 | -72. |
| ADHESIVE APPLICATIONS INC | HOLYOKE HOLYOKE | 218 RACE ST 100 WATER ST | 322222 | | NOX | 0.3913 TON 0.6849 TON | ADHESIVE APPLICATIONS - DIELECTRIC POLYMERS, INC. HAMPDEN PAPERS INC. | DIELECTRIC POLYMERS OPERATES A TWO STATION, REVERSE ROLL SUBSTRATE COATER. THE PAPER AND POLYMERIC F SPECIAL TY PAPER PRODUCTS | 322222 | | 42.1995 | -72.60 |
| HAMPDEN PAPERS INC | | 100 WATER ST 717 MAIN ST | 322221 | | | 0.6849 TON | HAMPDEN PAPERS INC HAZEN PAPER CO | SPECIALTY PAPER PRODUCTS FACILITY HAS A PERMIT TO INSTAL AN EXTRUDER/COATER. THIS MACHINE HAS NOT BEEN ISNTALLED, SO THE ON | 322221 | | | -72.6 |
| AZEN PAPER CO AZEN PAPER COMPANY | | | 322222 | | NOX | | HAZEN PAPER CO HAZEN PAPER CO | | 322222 | | 42.189804 | |
| | HOLYOKE | 240 SOUTH WATER ST | 322222 | | NOX | 2.0249 TON | | FACILITY CONSISTS OF 3 ROTOGRAVURE PRINTERS AND 4 LAMINATORS/COATERS. THE FACIITY PRODUCES PRINTED/ COMMUNITY COLLEGE | 322222 611210 | leads dead, ask ask handleds - | 42.190578 | -72.6 |
| OLYOKE COMMUNITY COLLEGE OLYOKE GAS & ELECTRIC DEPARTMENT | HOLYOKE HOLYOKE | 303 HOMESTEAD AVE 102 CABOT ST | 611210 | | NOX | 1.7081 TON 14.3 TON | HOLYOKE COMMUNITY COLLEGE HOLYOKE GAS AND ELECTRIC DEPT | COMMUNITY COLLEGE THIS FACILITY PRODUCES STEAM FOR HEATING AND INDUSTRIAL PROCESSES. THE FACILITY ACTS AS A PEAKING PL | 611210 221112 | Institutional - schools, hospitals, prisons Electricity Generation via Combustion | 42.193277 | -72.6 |
| OLYOKE GAS & ELECTRIC DEPARTMENT OLYOKE MEDICAL CENTER | | 575 BEECH ST | 6221112 | Institutional - schools, hospitals, prisons | | 14.3 TON 6 282 TON | HOLYOKE GAS AND ELECTRIC DEPT HOLYOKE MEDICAL CENTER | THIS FACILITY PRODUCES STEAM FOR HEATING AND INDUSTRIAL PROCESSES. THE FACILITY ACTS AS A PEAKING PL STEAM USAGE | 6221112 | Institutional - schools, hospitals, prisons | 42.2022 | -72.6 |
| | HOLYOKE | | 221320 | Institutional - schools, hospitals, prisons | NOX | 0.6539 TON | | | | | | |
| IOLYOKE WWT PLANT AMINATED | HOLYOKE | 1 BERKSHIRE ST | 221320 48811 | | NOX | 0.6539 TON 0.01623888 TON | HOLYOKE WASTEWATER TREATMENT PLANT | MUNICIPAL WASTWATER TREATMENT PLANT, AVERAGE FLOW 8 MGD, UTILIZES PURE OXYGEN ACTIVATED SLUDGE PROCE HFLIPORT | 221320 48811 | Wastewater Treatment Facility Airport | 42.209676 42.2015 | -72.61 |
| IT TOM GENERATING COMPANY LLC | HOLYOKE | 200 NORTHAMPTON ST | 48811 221112 | | NOX | 0.01623888 TON 591.34 TON | MT. TOM GENERATING COMPANY, LLC | MELIPOR I MT. TOM STATION GENERATES ELECTRICITY WITH A SINGLE-UNIT, PULVERIZED BITUMINOUS COAL, DRY BOTTOM BOI | 48811 221112 | Electricity Generation via Combustion | 42.2015 | -72 |
| PROVIDENCE HOSPITAL | HOLYOKE | 1233 MAIN ST | 6221112 | Institutional - schools, hospitals, prisons | | 1 4693 TON | PROVIDENCE HOSPITAL | THIS FACILITY IS A BEHAVIORAL HEALTH CLINIC. THE CLINIC OPERATES TWO DUAL FIRED BOILERS TO HEAT THE | 622110 | Institutional - schools, hospitals, prisons | 42.279637 | -72.0 |
| ONGMEADOW HIGH SCHOOL | | 95 GRASSY GUTTER RD | 611110 | | | 0.9505 TON | LONGMEADOW HIGH SCHOOL | SCHOOL BUILDING FOR GRADES 9-12 | | | 42.052656 | -72.56 |
| HFARN | LUDLOW | Unknown | 48811 | Institutional - schools, hospitals, prisons Airport | NOX | 0.01623888 TON | LONGMEADOW HIGH SCHOOL | SCHOOL BOILDING FOR GRADES 9 - 12 HELIDORT | 48811 | Institutional - schools, hospitals, prisons Airport | 42.052050 | -72.50 |
| UDLOW INDUSTRIAL REALTIES | LUDLOW | 1 STATE ST | 221330 | | NOX | 6.298 TON | LUDLOW INDUSTRIAL REALTIES | THESE BOILERS ARE USED TO HEAT OUR BUILDINGS | 221330 | Alpon | 42.1913 | -72.48 |
| TONY BROOK ENERGY CENTER | LUDLOW | MOODY ST | 221330 | | NOX | 126 4769 TON | MASS MUNICIPAL WHOLESALE ELECTRIC COMPANY | These bullers are used to heat our bulldings 530 MW (GROSS) POWER PLANT CONSISTING OF 5 530 MW (GROSS) POWER PLANT CONSISTING OF 5 COMBUSTION TURBINES. 1 STEAM TURBINE, 2 AUXILLARY BOILERS | 221330 | Electricity Generation via Combustion | 42.154462 | -72.40 |
| OLYMER INJECTION MOLDING | MONSON | 96 PALMER RD | 326199 | | NOX | 0.078 TON | POLYMER INJECTION MOLDING | DRODUCTION OF POLYMER PERMIT CONSISTING OF SCOWEDSTION TOKENVES, TSTEAM TOKENVE, 2 AGALEAKT BOILERS | 326199 | Electricity defieration via composition | 42.191087 | -72.30 |
| CHURCHILL COATINGS | PALMER | 103 WATER ST | 423310 | | NOX | 0.0875 TON | CHURCHILL COATINGS CORP | PRE-STAIN, PRIME, AND PAINT SIDING AND TRIM BOARDS OF VARIOUS BUILDING MATERIALS SUCH AS WOOD, CEMEN | 423310 | | 42.186659 | -72.33 |
| A MONSON DEVELOPMENTAL CENTER | PALMER | 175 STATE AVE | 622210 | | NOX | 49.35 TON | MA MONSON DEVELOPMENT CENTER | STEAM S PRODUCED BY BURNING FUEL UN HIGH PRESSURE BOILERS | 622210 | | 42.169005 | -72.31 |
| fetropolitan | Palmar | Unknown | 48811 | | NOX | 0.274382013 TON | MA MONJON DEVELOF MENT CENTER | STEAM IS PRODUCED, BT BORNING FOEL OIL IN HIGH PRESSURE BOILERS | 48811 | Airport | 42.22329 | -72.32 |
| RATHBONE PRECISION METALS | PALMER | 1241 PARK ST | 331221 | | NOX | 1.523 TON | RATHBONE PRECISION METALS INC | COLD ROLLING AND COLD DRAWING OF METAL SHAPES | 331221 | Aipoit | 42.148902 | -72.31 |
| FXON LISA | RUSSELL | 1190 HUNTINGTON RD | 322130 | | NOX | 19 107 TON | TEXON USA | PAPER COATING | 322130 | Pulp and Paper Plant | 42.218902 | -72.859 |
| CANNIZZARO FIELD | SOUTHWICK | Unknown | 48811 | | NOX | 0.0002925 TON | TEXON CON | AIRPORT | 48811 | Airport | 42.0798 | -72.8 |
| CONGAMOND LAKE | SOUTHWICK | Unknown | 48811 | | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.0334 | -72.7 |
| MICRON | SOUTHWICK | Unknown | 48811 | | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.0679 | -72.7 |
| SCIBELLI | SOUTHWICK | Unknown | 48811 | | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.0629 | -72.7 |
| SOUTH POND | SOUTHWICK | Unknown | 48811 | | NOX | 0.0027425 TON | | SEAPLANE BASE | 48811 | Airport | 42.0087 | -72.7 |
| ATAT SPRINGFIELD | SPRINGFIELD | 351 BRIDGE ST | 517110 | | NOX | 0.2 TON | ATT SPRINGFIELD | NOTHING IS PRODUCED. EMERGENCY POWER FOR TELECOMMUNTIONS | 517110 | | 42 101911 | -72.59 |
| BAYSTATE MEDICAL CENTER | SPRINGFIELD | 759 CHESTNUT ST | 622110 | Institutional - schools, hospitals, prisons | NOX | 15.3295 TON | BAYSTATE MEDICAL CENTER | GENERAL MEDICAL AND SURGICAL HOSPITALS | 622110 | Institutional - schools, hospitals, prisons | 42.120187 | -72.603 |
| BAYSTATE MEDICAL CTR | SPRINGFIELD | Unknown | 48811 | Airport | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.122 | -72.6 |
| BROAD STREET | SPRINGEIELD | Unknown | 48811 | Airport | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.0909 | -72. |
| CARANDO | SPRINGFIELD | 20 CARANDO DR | 311615 | | NOX | 2.8934 TON | FARMLAND FOODS - CARANDO, INC | PRODUCTION OF PROCESSED MEATS AND SAUSAGES | 311615 | | 42.837 | -72. |
| XXON MOBIL OIL CORPORATION | SPRINGFIELD | 145 ALBANY ST | 424710 | Bulk Terminals/Bulk Plants | NOX | 0.1162 TON | EXXONMOBIL OIL CORP | PETROLEUM DISTRIBUTION TERMINAL | 424710 | Bulk Terminals/Bulk Plants | 42,116054 | -72.57 |
| IASS MUTUAL INSURANCE | SPRINGFIELD | 1295 STATE ST | 524126 | | NOX | 5.5913 TON | MASS MUTUAL LIFE INSURANCE CO | STEAM FOR HEAT AND HOT WATER IN THE FACILITY. | 524126 | | 42.115464 | -72.55 |
| ASS. MUTUAL | SPRINGFIELD | Unknown | 48811 | | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.1168 | -72. |
| ASSPOWER | SPRINGFIELD | 750 WORCESTER ST | 221112 | Electricity Generation via Combustion | NOX | 35.4719 TON | MASSPOWER | MASSPOWER IS A COMBINED CYCLE COGEN POWER PLANT. NOMINAL RATING OF 240 MW. IT INCLUDES TWO 87 MW (| 221112 | Electricity Generation via Combustion | 42.155384 | -72.52 |
| ERCY MEDICAL CENTER | SPRINGFIELD | 271 CAREW ST | 622110 | Institutional - schools, hospitals, prisons | | 5.9172 TON | MERCY MEDICAL CENTER | MERCY MEDICAL IS A HOSPITAL THAT PROVIDES CARDIAC CARE, MATERNITY SERVICES, CANCER TREATMENT, EMERGE | 622110 | Institutional - schools, hospitals, prisons | 42.112786 | -72.59 |
| DNARCH PLACE | SPRINGFIELD | 1414 MAIN ST | 531120 | | NOX | 0.0005 TON | PICKNELLY FAMILY LIMITED PARTNERSHIP | 26 STORY OFFICE BUILDING AND 325 ROOM SHERATON HOTEL | 531120 | | 42.101037 | -72.59 |
| ATIONAL METAL FINISHING CORP | SPRINGFIELD | 175 PROGRESS AVE | 332813 | | NOX | 1.65 TON | NATIONAL METAL FINISHING CORP | COMPANY PROVIDES PLATING AND POLISHING SERVICES FOR METAL PRODUCTS. THE COMPANY USES ELECTROCHEMICA | 332813 | | 42.138938 | -72.5 |
| OLY METAL FINISHING | SPRINGFIELD | 1 ALLEN ST | 332813 | | NOX | 0.9457 TON | POLY-METAL FINISHING | METAL ANODIZING, INCLUDING: SULFURIC ANODIZING, COLOR ANODIZING, CHROMIC, HARDCOAT, POLYLUBE PROCESS | 332813 | | 42.095 | -72.56 |
| UTNAM VOCATIONAL HIGH SCHOOL | SPRINGFIELD | 1300 STATE ST | 611110 | | NOX | 0.8896 TON | PUTNAM VOCATIONAL TECHINICAL HIGH SCHOOL | PUBLIC HIGH SCHOOL. | 611110 | Institutional - schools, hospitals, prisons | 42.116364 | -72.55 |
| MITH & WESSON CORP | SPRINGFIELD | 2100 ROOSEVELT AVE | 332994 | | NOX | 7.2785 TON | SMITH + WESSON HOLDING COMPANY | SMALL ARMS MANUFACTURER | 332994 | | 42.135312 | -72.55 |
| DLUTIA INCORPORATED | SPRINGFIELD | 730 WORCESTER ST | 326113 | | NOX | 398.2879 TON | SOLUTIA INC | MAIN PRODUCT IS PVB PLASTIC SHEETING, FACILITY INCLUDES RESINS PRODUCTION, ADHESIVES PRODUCTION, AND | 326113 | | 42.152737 | -72.52 |
| PRINGFIELD TECHNICAL COLLEGE | SPRINGFIELD | 1 ARMORY SQ | 611210 | | NOX | 3.3 TON | SPRINGFIELD TECHNICAL COMMUNITY COLLEGE | INSTITUTION FOR HIGHER LEARNING | 611210 | Institutional - schools, hospitals, prisons | 42.107081 | -72.5 |
| PRINT COMMUNICATIONS | SPRINGFIELD | 400 TAYLOR ST | 517210 | | NOX | 0.0351 TON | SPRINT COMMUNICATIONS COMPANY | COMMUNICATIONS FACILITY - LONG DISTANCE SWITCHING OPERATION | 517210 | | 42.111683 | -72.58 |
| TEFLEX CORPORATION | | 603 HENDEE ST | 326220 | | NOX | 2.9649 TON | TITEFLEX CORP | EXTRUSION OF TEFLON HOSE | 326220 | | 42.129168 | -72.55 |
| estover Arb/Metropolit | Springfield/Chicopee | Unknown | 48811 | | NOX | 4.244649968 TON | | Na | 48811 | Airport | 42.19826 | -72.5 |
| GRI MARK INC | WEST SPRINGFIELD | 958 RIVERDALE ST | 311514 | | NOX | 13.9226 TON | AGRI MARK INC | RAW MILK IS CONVERTED INTO A FAMILY OF DAIRY PRODUCTS THROUGH A SERIES OF UNIT OPERATIONS INCLUDING | 311514 | | 42.128788 | -72.62 |
| AR HOLE | WEST SPRINGFIELD | | 48811 | | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.1265 | -72 |
| ALUME TECHNOLOGIES INC | WEST SPRINGFIELD | | 339932 | | NOX | 0.9101 TON | CYALUME TECHNOLOGIES | PRODUCTION OF CHEMILUMINESCENT DEVICES | 339932 | | 42.095397 | -71.6 |
| DUNTAIN PLATING COMPANY | WEST SPRINGFIELD | | 332813 | | NOX | 1.41 TON | FOUNTAIN PLATING CO | FOUNTAIN PLATING CO IS AN ELECTROPLATING AND METAL FINISHING FACILITY. | 332813 | | 42.153583 | -72.65 |
| ENERAL ELECTRIC INTERNATIONAL | WEST SPRINGFIELD | 1226 UNION ST | 811310 | | NOX | 0.0315 TON | GENERAL ELECTRIC CO | NO WORK WAS PERFORMED AT THE FACILITY DURING THE REPORTING YEAR 2009. THE ONLY ACTIVITY CAUSING AIR | 811310 | | 42.090491 | -72.60 |
| T POWER SOLUTIONS INC | WEST SPRINGFIELD | | 334418 | | NOX | 0.5101 TON | ITT POWER SOLUTIONS, INC. | THIS FACILITY POPULATES CIRCUIT BOARDS FOR USE AS POWER SUPPLIES. | 334418 | | 42.153583 | -72.65 |
| AEA ENERGY MASSACHUSETTS LLC | | 15 AGAWAM AVE | 221112 | | NOX | 53.6371 TON | NAEA ENERGY MASSACHUSETTS, LLC | ELECTRICITY GENERATION STATION FIRED BY NATURAL GAS, NO. 6 OIL, ULTRA LOW SULFUR DIESEL OIL AND KERO | 221112 | Electricity Generation via Combustion | 42.097513 | -72.59 |
| ILLIVAN PAPER CO INC | WEST SPRINGFIELD | | 322222 | | NOX | 1.6473 TON | SULLIVAN PAPER CO INC | MANUFACTURES SPECIALTY CONVERTED PAPER PRODUCTS USING ROTOGRAVURE AND FLEXOGRAPHIC PRINTING TECHNIQU | 322222 | | 42.100742 | -72.6 |
| S CORRUGATED INC | WEST SPRINGFIELD | | 322211 | | NOX | 0.05 TON | US CORRUGATED INC. | CORRUGATED CONTAINERS- BOXES. SHEETS ARE CONVERTED INTO CARTONS WHICH ARE PRINTED, SCORED SLOTED, AN | 322211 | | 42.090229 | -72. |
| LUMBIA MANUFACTURING INCORPORATED | WESTFIELD | 1 CYCLE ST | 337127 | | NOX | 2.09 TON | COLUMBIA MANUFACTURING INC | SCHOOL FURNITURE - STEEL TUBING, CUT, BENT, PUNCHED, AND WELDED. THEN EITHER POWDER PAINTED OR PLATE | 337127 | | 42.109484 | -72.7 |
| IGITAL | WESTFIELD | Unknown | 48811 | | NOX | 0.01623888 TON | | HELIPORT | 48811 | Airport | 42.1759 | -72 |
| EN-COAT INC | WESTFIELD | 132 NORTH ELM ST | 322221 | | NOX | 1.35 TON | JEN-COAT INC | EXTRUSION COATING, LAMINATING, METALLIZING, AND PRINTING FOR END USE IN FLEXIBLE PACKAGING, INDUSTRI | 322221 | | 42.133807 | -72.74 |
| OHN S LANE & SON INC | WESTFIELD | 311 EAST MOUNTAIN RD | 212312 | | NOX | 0.123 TON | JOHN S LANE AND SON INC | STONE QUARRYING AND CRUSHING OPERATION. THE CRUSHING EQUIPMENT INCLUDES A PRIMARY CRUSHING MILL AND | 212312 | | 42.114871 | -72.69 |
| IA ANG 104 FIGHTER WING | WESTFIELD | 175 FALCON DR | 928110 | | NOX | 3.4552 TON | MASSACHUSETTS AIR NATIONAL GUARD | NATIONAL SECURITY | 928110 | Military Base | 42.168449 | -72.717 |
| MUNDALE | WESTFIELD | Unknown | 48811 | | NOX | 0.0027425 TON | | AIRPORT | 48811 | Airport | 42.1198 | -72.8 |
| RINKER MATLS - NEW ENGLAND PIPE | WESTEIELD | 69 NECK RD | 327332 | | NOX | 0.0147 TON | RINKER MATERIALS - HYDRO CONDUIT DIV | CONCRETE PRODUCTS | 327332 | | 42,122745 | -72.729 |
| Barnes Muni | Westfield/Springfield | | 48811 | | NOX | 2.155941562 TON | | | 48811 | | 42.1631 | -72.7 |