

IV. Annual NO_x Emission Statement Form INV-N2

This form allows for NO_x control equipment reporting. If there is no NO_x control equipment, then this form need not be completed. One form should be completed for each NO_x control device.

1. Reporting Year: Four-digit number representing the calendar year for which emissions data is being submitted (e.g., 1999 for calendar year 1999 emissions)
2. Source Name: The complete facility name.
3. Device Name/Permit Number: Description of the specified device(s) and applicable permit number(s) (e.g., Boiler #1 PO-B-1234)
4. Control Equipment
 - A. Type of Control: The type of NO_x control equipment (e.g., low-NO_x Burner, selected noncatalytic reduction, selected catalytic reduction, etc.).
 - B. ID Number: Any serial number or ID number on the control device
 - C. Model Number: The model number of the control device.
 - D. Manufacturer: The control device manufacturer=s name.
 - E. Installation Date: The date the control device was commenced operation.
 - F. Devices Controlled: The name and permit numbers of the combustion devices controlled by this equipment.
5. Efficiency
 - A. Type of Capture System: The type of capture system (e.g., direct duct, permanent total enclosure, etc.).
 - B. Capture System Efficiency (%): The percentage of NO_x emissions captured and sent to the control equipment.
 - C. Method of Determination: How the capture efficiency was determined (e.g., testing, estimation, best guess, etc.).
 - D. Destruction Removal Efficiency (DRE): The percentage of NO_x emissions destroyed or removed from the exhaust stream by the NO_x control equipment.
 - E. Date Tested: The date of the most recent performance testing done to certify compliance with permit limitations.
 - F. Method of Determining DRE (if not tested): How the destruction removal efficiency was determined if not by testing. This may include mass balance,

manufacturer=s data, etc.

- G. Time on line and operating: Percentage of time the NO_x control equipment was online and operating during the year of record. If the NO_x control equipment was down for two months the percentage would be $10/12 = 0.8333$ or 83.33%.
6. Pollutant Throughput Information: The monthly and annual totals of NO_x emissions prior to entering the NO_x control equipment and after exiting the NO_x control equipment. NO_x emissions prior to controls may be omitted for certain types of control equipment (e.g., Low-NO_x burners or other combustion control techniques).
 7. Comments: Any comments relevant to the data listed. Examples include, "Outlet NO_x is from CEM system", "Control equipment was offline in November", or "Exhaust is hard ducted to control equipment, assumed 100% capture efficiency."
 8. Signature: Signature of person completing the form.
 9. Title: Title of person completing form.
 10. Date: Date form is completed.

V. Annual VOC Emissions Statement Form INV-V1

If actual annual facility VOC emissions are greater than or equal to 10 tons or if VOC RACT applies to the specified device(s) then this form is required. Form INV-V1 is for processes (i.e., coating lines, printing presses, degreasers, etc.). One form should be completed for each process

device although identical process device(s) may be listed on one form.

1. Reporting Year: Four-digit number representing the calendar year for which emissions data is being submitted (e.g., 1999 for calendar year 1999 emissions)
2. Source Name: The complete facility name.
3. Device Name/Permit Number: Description of the specified device(s) and applicable permit number(s) (e.g., Paint Booth #1 PO-BP-1234)
4. Ozone Season Operating Schedule: This is the operating schedule of the specified device(s) from June 1 thru August 31 for the year of record. (e.g., 18 hrs/day, 5 days/week, 13 weeks/season). There is a total of 13 weeks during the ozone season. If production were shut down for two weeks in July for example, then the weeks per season would be 11. The days/season are the days/week multiplied by the weeks/season (e.g., 5 days/week * 13 weeks/season yields 65 days/season).
5. VOC Bearing Material/ID Number: The common name of the VOC bearing material and the associated Product ID number or Chemical Abstract Service (CAS) number (e.g. Yellow Lacquer Product# L61XXY8998 or Trichloroethylene CAS# 79-01-6).
6. Quantity used: The actual monthly quantities of VOC bearing material utilized in the specified device(s) usually expressed in gallons or pounds.
7. Density: The density of the VOC bearing material usually expressed as weight per unit of volume (e.g., pounds/gallon).
8. Total volatiles content: The total amount of VOCs in the VOC bearing material including water and exempt VOCs usually expressed as a weight percentage.
9. Water Content: The total water content of the VOC bearing material usually expressed as a weight percentage.
10. Exempt volatiles content: The total exempt volatile content usually expressed as a weight percentage. Exempt VOC's include acetone, methylene chloride, 1,1,1-Trichloroethane. For a complete list please contact the Division.
11. Total volatiles less water and exempt VOCs: The total volatile content minus water and exempt volatiles content usually expressed as a weight percent.
12. Non-Exempt VOC (lbs): Monthly quantity (in gallons) multiplied by the density multiplied by the total volatiles less water and exempt volatiles.
13. Non-Exempt VOC (tons): Pounds per month divided by 2000. (Pounds* (1 ton/2000 pounds) = tons).

14. Total: Add the numbers in the (lbs) and (tons) columns, respectively and enter the totals here.
15. Ozone Daily VOC Emissions: The average VOC emissions on a pound per day basis. The total VOC emissions from June 1 thru August 31 in pounds divided by the actual number of days of operation during the ozone season. If this cannot be determined then the Division will perform the calculation.
16. Comments: Any comments relevant to the data listed. Examples include, AThese are the uncontrolled emissions, destruction efficiency is 98%@, ADestruction efficiency is from 07/11/99 stack test@, ACoating was reformulated in October@, ADevice was removed in February of this year@, etc.
17. Signature: Signature of person completing the form.
18. Title: Title of person completing form.
19. Date: Date form is completed.

VI. Annual VOC Emission Statement Form INV-N2

This form allows for VOC control equipment reporting. If there is no VOC control equipment, then this form need not be completed. One form should be completed for each VOC control device.

1. Reporting Year: Four-digit number representing the calendar year for which emissions

data is being submitted (e.g., 1999 for calendar year 1999 emissions)

2. Source Name: The complete facility name.
3. Device Name/Permit Number: Description of the specified device(s) and applicable permit number(s) (e.g., Paint Booth #1 PO-BP-1234)
4. Control Equipment
 - A. Type of Control: The type of VOC control equipment (e.g., thermal oxidizer, regenerative thermal oxidizer, carbon adsorption, etc.).
 - B. ID Number: Any serial number or ID number on the VOC control equipment.
 - C. Model Number: The model number of the VOC control equipment.
 - D. Manufacturer: The VOC control equipment manufacturer's name.
 - E. Installation Date: The date the VOC control equipment commenced operation.
 - F. Devices Controlled: The name and permit numbers of the device(s) controlled by this equipment.
5. Efficiency
 - A. Type of Capture System: The type of capture system (e.g., direct duct, permanent total enclosure, etc.).
 - B. Capture System Efficiency (%): The percentage of VOC emissions captured and sent to the VOC control equipment.
 - C. Method of Determination: How the capture efficiency was determined (e.g., testing, estimation, best guess, etc.).
 - D. Destruction Removal Efficiency (DRE): The percentage of VOC emissions destroyed or removed from the exhaust stream by the VOC control equipment.
 - E. Date Tested: The date of the most recent performance testing done to certify compliance with permit limitations.
5. continued
 - F. Method of Determining DRE (if not tested): How the destruction removal efficiency was calculated if not by testing. This may include mass balance, manufacturer's data, etc.
 - G. Time on line and operating: Percentage of time the VOC control equipment was online and operating during the year of record. If the VOC control equipment was

down for two months the percentage would be $10/12 = 0.8333$ or 83.33%.

6. Pollutant Throughput Information: The monthly and annual totals of emissions prior to entering the VOC control equipment and after exiting the VOC control equipment.
7. Comments: Any comments relevant to the data listed. Examples include, AOutlet VOC is from mass balance calculation@, AControl equipment was offline in November@, or AExhaust is hard ducted to control equipment, assumed 100% capture efficiency.@
8. Signature: Signature of person completing the form.
9. Title: Title of person completing form.
10. Date: Date form is completed.

VII. Annual SO₂ Emission Statement Form INV-N1

This form allows reporting for two separate programs. The first program report is the annual NO_x emissions statement. The second program report is the New Hampshire Acid Rain Deposition Act. The annual NO_x emissions statement reporting is addressed in a separate section.

SO₂ Emission Statement: If the facility is subject to the New Hampshire Acid Rain Deposition Act then this form is required. If you are subject there will be a line in the device(s) permit that

states Asubject to the New Hampshire Acid Rain Deposition Act@ or there will be a 1.6 lb SO₂/mmbtu limitation. If you are still unsure please contact the Division. One form should be completed for each combustion device although identical combustion devices may be listed on one form.

1. Reporting Year: Four-digit number representing the calendar year for which emissions data is being submitted (e.g., 1999 for calendar year 1999 emissions)
2. Source Name: The complete facility name.
3. Device Name/Permit Number: Description of the specified device(s) and applicable permit number(s) (e.g., Boiler #1 PO-BP-1234)
4. Fuel used:
 - A. Fuel Type: The type of fuel used. The SCC code or actual fuel type may be entered (e.g., for an industrial boiler burning #6 oil the entry would be 1-02-004-01 or #6 oil).
 - B. Sulfur: The sulfur content of the fuel usually expressed as a weight percentage.
 - C. Actual Fuel Used/Units: The actual monthly quantities of fuel combusted in the specified device(s) and the associated units (solid fuels are generally reported in tons, liquid fuels are generally reported in gallons or 1000 gallons, gaseous fuels are generally reported in millions of cubic feet).
 - D. MMBTUs: The total heat released by combusting the fuel. This is the quantity multiplied by the heating value of the fuel. Table One from the emission statement reporting package has default heating values for different fuels.
 - E. EMF (emission factor): The estimated rate at which SO₂ is released to the atmosphere and the associated units. If the quantity is reported in tons then the EMF should be in pounds of SO₂ per ton of fuel burned (lbs/ton), if the quantity is reported in 1000 gallons then the EMF should be in pounds of SO₂ per 1000 gallons of fuel burned (lbs/Kgal), if the quantity is reported in millions of cubic feet then the EMF should be in pounds of SO₂ per million cubic feet burned (lbs/MMcf).
 - F. SO₂: The amount of SO₂ emitted in pounds, this would be the quantity multiplied by the SO₂ emission factor.
5. Totals: The sum of the MMBTUs and SO₂ columns.
6. SO₂ lb/mmbtu: The total pounds of SO₂ divided by the total mmbtus.
7. Comments: Any comments relevant to the data listed. Examples include, ASulfur content of fuel is a weighted average@, AEmission factor is from 07/11/99 stack test@, ASwitched to natural gas in October@, or ADevice was removed in February of this

year.@" data-bbox="170 66 231 86"/>

8. Signature: Signature of person completing the form.
9. Title: Title of person completing form.
10. Date: Date form is completed.