



PROFILE OF PROCESS EQUIPMENT AND AIR POLLUTION CONTROL EQUIPMENT BURNING PROCESS FUEL FOR RY22

All questions pertain to process equipment or air pollution control equipment (APCE) which burn one or more fuels.

| | Process Equipment | Control Equipment |
|---|-------------------|-------------------|
| No. of pieces which vent emissions to an identified stack | | |
| No. of pieces added since Reporting Year 2021 | | |
| No. of pieces permanently retired since Reporting Year 2021 | | |
| No. of pieces burning 1 fuel | | |
| No. of pieces burning 2 fuels | | |
| No. of pieces burning 3 fuels | | |
| Other: ___ Turbines ___ Reciprocating Engines Cogeneration " Yes " ___ No | | |

Facility Name

Address

Contact

Date

Phone

EMISSION FACTORS FOR FUEL BURNED IN EQUIPMENT (i.e., not in a boiler, turbine, etc.):

Emission Factors for process equipment, heaters and air pollution control equipment are listed below. These factors can be used to estimate your air releases. Emission Factors pertain to emissions "before" any air pollution control equipment, which would reduce your emissions according to its efficiency. The "S" beside the Emission Factor for SOx indicates that you must multiply the Emission Factor by the % sulfur in the fuel burned. Emission Factors are not readily available for other fuels such as methanol, hydrogen gas, waste oil, etc. Attach your engineering estimates. NOx emissions may now be measured by NOx monitors for a more accurate estimate. Emission Factors for internal combustion engines, cement kilns/dryers, lime kilns, coke ovens, and blast ovens differ from those listed below. Call RIDEM for them if needed.

| Fuel/Process Name | SCC Code | Particulates | SOx | NOx | VOC | CO | Units ("pounds per") |
|--|-------------|--------------|---------|-----|------|-----|-------------------------------------|
| Residual Oil General | 3-90-004-89 | 12.0 S | 158.6 S | 55 | 0.28 | 5 | 1000 gallons burned |
| Distillate Oil General | 3-90-005-89 | 2.0 | 143.6 S | 20 | 0.2 | 5 | 1000 gallons burned |
| Natural Gas General | 3-90-006-89 | 7.6 | 0.6 | 100 | 5.5 | 84 | Million Cubic Feet (MMCF) burned |
| Liquified Petroleum Gas (LPG) General | 3-90-010-89 | 0.7 | .016 | 13 | 1 | 7.5 | 1000 gallons burned |

Return To: Air Pollution Inventory, Office of Air Resources
 235 Promenade Street, Providence, RI 02908-5767
 DEM.AirInventory@dem.ri.gov

STACK INFORMATION FOR EQUIPMENT and/or ENGINES BURNING FUEL

Facility Name

Contact Name

Phone

This form has enough space to record data for up to 2 stacks from 2 pieces of fuel burning process equipment, engines or air pollution control equipment with up to 3 fuels apiece. You may photocopy this page to report additional equipment.

If the information on this form has not changed from the previous year, 2021 Form F3, page 2 may be copied and submitted for 2022. If one stack handles emissions from multiple pieces of process or control equipment or engines, report stack data only once. Show clearly which pieces of process or air pollution control equipment are associated with each stack. Necessary elements are checked. Others are helpful, if available.

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| | | | | | | |
|--|-------|-------------|-----|-------|-------------|-----|
| Stack number | | | | | | |
| Stack height (ft.) | | | | | | |
| Stack diameter (ft.) | | | | | | |
| Stack exit temp (F) | | | | | | |
| Stack exhaust gas flow rate (acfm) | | | | | | |
| NOx CEM? | " Yes | " No | | " Yes | " No | |
| Specify Air Pollution Control Equipment if any | | | | | | |
| RI DEM Approval No. | | | | | | |
| Installation date (year) | | | | | | |
| VOCs removed? | " Yes | " No | | " Yes | " No | |
| Fuel type | | natural gas | LPG | | natural gas | LPG |
| Normal firing rate | | | | | | |
| Process equipment name or engine | | | | | | |
| RI DEM Approval No. | | | | | | |
| Installation date (year) | | | | | | |
| Fuel type | | natural gas | LPG | | natural gas | LPG |
| Normal firing rate | | | | | | |

For equipment burning oil, include grade of oil (e.g., #2) and the sulfur limit (%): # _____ %S

Facility Name _____

Contact Name _____

Phone _____

<<<<<<<< REPORT ONLY ONE FUEL PER COLUMN >>>>>>>>

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|-------|-------------|-------|-------------|---|--|--|--|--|--|-------------|--|--|--|--|--|----------------|--|--|--|--|--|--------|--|--|--|--|--|--------|--|--|--|--|--|
| Process, Engine or Air Pollution Control Equipment burning fuel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RIDEM Approval No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Process Fuel Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Units (gal, cubic ft.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Month | Fuel burned | | Fuel burned | | Fuel burned | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jan 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Feb 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| March 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| April 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| May 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quarterly Total | | % | | % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | No. of days | | No. of days | | No. of days | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jun 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jul 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aug 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quarterly Total | | % | | % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sep 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oct 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nov 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quarterly Total | | % | | % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dec 2022 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dec+Jan+Feb (2022) | | % | | % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Annual Total | | 100 % | | 100 % | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td colspan="6">Total process fuel usage by fuel type for facility. Units (gal, MCF (thousand cu.ft.), CCF (hundred cu.ft.)</td> </tr> <tr> <td colspan="2">Natural Gas</td> <td colspan="4"></td> </tr> <tr> <td colspan="2">Liquid Propane</td> <td colspan="4"></td> </tr> <tr> <td colspan="2">Other:</td> <td colspan="4"></td> </tr> <tr> <td colspan="2">Other:</td> <td colspan="4"></td> </tr> </table> | | | | | | Total process fuel usage by fuel type for facility. Units (gal, MCF (thousand cu.ft.), CCF (hundred cu.ft.) | | | | | | Natural Gas | | | | | | Liquid Propane | | | | | | Other: | | | | | | Other: | | | | | |
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| Natural Gas | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liquid Propane | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Other: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |