

Emission Sources - Maximum Allowable Emission Rates

Permit Number 2035A

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|----------------------------|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| FT16001300 | Phosphoric Acid Tank | H ₃ PO ₄ | 0.01 | 0.01 |
| FT16002500 | BPA Additive Solution Tank | VOC | 0.02 | 0.01 |
| FT16021100 | TBP Tank | VOC | 0.02 | 0.01 |
| FS16056800 | HCl Tank Scrubber | HCl | 0.01 | 0.01 |
| FT16056100 | Hydrochloric Acid Tank | HCl | 0.01 | 0.04 |
| FT16056900 | H3PO4 Make-up Tank | H ₃ PO ₄ | 0.01 | 0.01 |
| FT16409500 | Line 6 Extruder Melt Pot | VOC | 0.01 | 0.01 |
| FT41070400 | Sulfuric Acid Tank | H ₂ SO ₄ | 0.02 | 0.01 |
| FI16452900 | Incinerator/Scrubber Stack | CO | 2.70 | 11.70 |
| | | HCl | 0.34 | 1.48 |
| | | NO _x | 6.20 | 27.00 |
| | | VOC | 0.03 | 0.15 |
| | | Acetone | 0.01 | 0.01 |
| | | Methylene Chloride | 0.03 | 0.12 |
| FF16027000 | Decomposition System Flare | CO | 6.06 | 26.55 |
| | | HCl | 0.12 | 0.51 |
| | | NO _x | 0.16 | 0.72 |
| | | VOC | 0.01 | 0.01 |
| | | SO ₂ | <0.01 | <0.01 |
| | | Methylene Chloride | <0.01 | 0.01 |
| FF41080100 | BPA Flare (5) | CO | 2.53 | 2.24 |
| | | NO _x | 0.30 | 0.29 |
| | | VOC | 0.01 | 0.01 |
| | | Acetone | 0.01 | 0.01 |

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| | | | | |
|-------------|------------------------------|--------------------|----------|----------|
| FCMAKCAS00 | Carbon Adsorption System (5) | VOC | 0.17 | 0.12 |
| | | Methylene Chloride | 0.13 | 0.09 |
| DIEOVEN 1-4 | Die Oven Nos. 1, 2, 3, and 4 | CO | 0.05 (6) | 0.43 (7) |
| | | NO _x | 0.03 (6) | 0.23 (7) |
| | | SO ₂ | 0.01 (6) | 0.03 (7) |
| | | VOC | 0.02 (6) | 0.15 (7) |
| | | PM | 0.01 (6) | 0.11 (7) |
| | | PM ₁₀ | 0.01 (6) | 0.11 (7) |
| | | PM _{2.5} | 0.01 (6) | 0.11 (7) |
| FV16249100 | Packaging Station Baghouse 1 | PM | 0.50 | 2.00 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| FV16280300 | Packaging Station Baghouse 2 | PM | 0.50 | 1.50 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| FV16298000 | Packaging Station Baghouse 3 | PM | 0.36 | 1.08 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| FV16213930 | North Bulk Loading Baghouse | PM | 0.58 | 2.54 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| FV16250100 | South Bulk Loading Baghouse | PM | 0.50 | 1.50 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| FV16258800 | All Polycarbonate Silo Vent | PM | 1.57 | 2.31 |
| | | PM ₁₀ | <0.01 | <0.01 |
| | | PM _{2.5} | <0.01 | <0.01 |
| FV40541112 | BPA Silo/Truck Loading Vent | PM | 0.01 | 0.01 |
| | | PM ₁₀ | <0.01 | <0.01 |

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| | | | | |
|---------------------------|-----------------------------|--------------------------------|-------|-------|
| | | PM _{2.5} | <0.01 | <0.01 |
| FV40543200 | BPA Railcar Loading Vent | PM | 0.01 | 0.01 |
| | | PM ₁₀ | <0.01 | <0.01 |
| | | PM _{2.5} | <0.01 | <0.01 |
| FV16158700 | Lines 1, 2, and 3 Baghouse | PM | 0.62 | 2.70 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| FV163434RO | Line 4 Baghouse | PM | 0.20 | 0.88 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| FV16420800 | Lines 5 and 6 Baghouse | PM | 0.60 | 2.63 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| FV16142700 | Line 3 Additive Area Filter | PM | 0.26 | 1.13 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| FUGITIVES | Fugitives (5) | Acetone | 0.53 | 2.31 |
| | | Cl ₂ | 0.02 | 0.09 |
| | | COCl ₂ | 0.01 | 0.05 |
| | | VOC | 2.98 | 13.03 |
| | | Methylene Chloride | 1.36 | 5.96 |
| | | HCl | 0.01 | 0.55 |
| | | H ₃ PO ₄ | 0.02 | 0.09 |
| FCMAKCASSOO MAK-CARBOX | Carbon Box Emissions | Monochlorobenzene | 0.07 | 0.04 |
| | | Total VOC | 0.07 | 0.04 |
| | | Methylene Chloride | 0.21 | 0.11 |
| | | PM | 0.01 | 0.01 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |

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| | | | | |
|--------------------------|------------------------------|------------------------------|------|------|
| PCS-MSSNH3 PCS-NH3 | Ammonia Reaction Test | Ammonia | 0.01 | 0.01 |
| PCS-MSSATM MAK-DEGR | Degreaser | Alcohols C9-C11, ethoxylated | 0.01 | 0.01 |
| PCS-MSSATM PCS-BAGCLR | Baghouse Clearing | PM | 0.39 | 0.01 |
| | | PM ₁₀ | 0.18 | 0.01 |
| | | PM _{2.5} | 0.03 | 0.01 |
| PCS-MSSATM PCS-FRCKT | Frac Tanks | Phenol | 0.01 | 0.01 |
| | | Monochlorobenzene | 0.33 | 0.11 |
| | | Total VOC | 0.34 | 0.12 |
| | | Methylene Chloride | 0.33 | 0.11 |
| | | Acetone | 1.99 | 0.09 |
| | | HCl | 0.01 | 0.01 |
| PCS-MSSATM PCS-VACTR | Vacuum Trucks | Phenol | 0.01 | 0.01 |
| | | Monochlorobenzene | 0.32 | 0.01 |
| | | Total VOC | 0.32 | 0.01 |
| | | Methylene Chloride | 0.33 | 0.02 |
| | | Acetone | 0.93 | 0.01 |
| PCS-MSSATM PCS-INT | Instrument Clearing | Unit Compound (9) | 0.27 | 0.01 |
| | | Total VOC | 0.27 | 0.01 |
| | | Chlorine | 0.01 | 0.01 |
| CS-MSSATM MAK-STLTOT | Batch Still Totes Loading | Phenol | 0.08 | 0.01 |
| | | Monochlorobenzene | 2.89 | 0.04 |
| | | tert-Butylphenol | 0.02 | 0.01 |
| | | Substituted Phenols | 0.01 | 0.01 |
| | | Total VOC | 3.00 | 0.07 |
| PCS-MSSATM BPA-TOT | BPA Tote Loading | Methyl Isobutyl Ketone | 0.35 | 0.01 |
| | | Total VOC | 0.35 | 0.01 |
| PCS-MSSATM BPA-REAC | BPA Reactor Catalyst Loading | Phenol | 0.56 | 0.01 |

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|--------------------------|------------------------------------|------------------------|-------|------|
| PCS-MSSATM PCS-SOL | Solids Handling | PM | 0.12 | 0.01 |
| | | PM ₁₀ | 0.06 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| PCS-MSSATM PCS-TKTR | Tank Trucks | Phenol | 0.01 | 0.01 |
| | | Methyl Isobutyl Ketone | 1.50 | 0.13 |
| | | Monochlorobenzene | 0.07 | 0.01 |
| | | Total VOC | 1.58 | 0.13 |
| | | Methylene Chloride | 1.54 | 0.04 |
| FF16027000 MAK-COPRG | CO Purging | CO | 18.24 | 0.44 |
| | | NO _x | 0.25 | 0.01 |
| FF41080100 BPA-FLR | BPA Unit Flaring | Phenol | 0.03 | 0.01 |
| | | Methyl Isobutyl Ketone | 0.01 | 0.01 |
| | | VOC-U | 0.15 | 0.08 |
| | | Total VOC | 0.18 | 0.08 |
| | | Acetone | 0.01 | 0.01 |
| | | NO _x | 0.85 | 0.43 |
| | | CO | 7.29 | 3.65 |
| PCS-MSSATM PCS-UNCONT | Uncontrolled Equipment Clearing | Phenol | 13.94 | 0.34 |
| | | Bisphenol A | 0.16 | 0.01 |
| | | Methyl Isobutyl Ketone | 7.97 | 0.04 |
| | | Diacetone Alcohol | 0.96 | 0.01 |
| | | Mercaptopropionic Acid | 0.02 | 0.01 |
| | | Monochlorobenzene | 20.69 | 1.16 |
| | | Tert-butylphenol | 1.28 | 0.01 |
| | | Ethylene Glycol | 0.03 | 0.01 |
| | | Ethyl Chloride | 0.06 | 0.01 |
| | | Total VOC | 45.11 | 1.60 |
| | | HCl | 0.43 | 0.01 |
| | | Acetone | 6.14 | 0.02 |

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| | | | | |
|------------------------|-----------------------------------|----------------------------------------------------|-------|------|
| | | Ammonia | 0.38 | 0.01 |
| | | Methylene Chloride | 22.74 | 1.30 |
| | | High boiling diphenyl carbonyl (DPC) | 0.01 | 0.01 |
| PCS-MSSCNT BPA-REAC | BPA Reactor Catalyst Loading | Phenol | 0.21 | 0.01 |
| PCS-MSSCNT PCS-CONT | Controlled Equipment Clearing (8) | Phenol | 1.08 | 0.01 |
| | | Bisphenol A | 3.17 | 0.22 |
| | | Methyl Isobutyl Ketone | 0.48 | 0.01 |
| | | Diacetone Alcohol (4-Hydroxy-4-methyl-2-pentanone) | 0.06 | 0.01 |
| | | Mercaptopropionic Acid | 0.01 | 0.01 |
| | | Monochlorobenzene | 2.31 | 0.02 |
| | | tert-Butylphenol | 0.01 | 0.01 |
| | | Ethyl Chloride | 0.01 | 0.01 |
| | | Ethylene Glycol | 0.01 | 0.01 |
| | | Total VOC | 7.14 | 0.31 |
| | | HCl | 0.01 | 0.01 |
| | | Acetone | 0.57 | 0.01 |
| | | Ammonia | 0.01 | 0.01 |
| | | Methylene Chloride | 3.99 | 0.03 |
| | | High boiling diphenyl carbonyl (DPC) | 0.01 | 0.01 |
| | | NO _x | 0.02 | 0.01 |
| | | CO | 0.18 | 0.01 |

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO₂ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
VOC-U - volatile organic compounds (unspeciated)
HCl - hydrochloric acid

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| | |
|-------------------------|-------------------|
| Cl_2 | - chlorine |
| COCl_2 | - phosgene |
| H_3PO_4 | - phosphoric acid |
| H_2SO_4 | - sulfuric acid |

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Hourly emissions from each Die Oven.
- (7) Combined emissions from all four Die Ovens.
- (8) See Attachment C, Footnote 1 in the Special Conditions for PCS-MSSCNT.
- (9) Molecular weight and density of the compound are based on the average compound information for each of the units.
The instruments can contain any combination of chemicals associated with the unit.

Date: January 31, 2017