# ATTACHMENT E - Emission Unit Form

***Emission Unit Description***

| **Emission unit ID number:** | **Emission unit name:** | **List any control devices associated with this emission unit:** |
|---|---|---|
| 65WW | On-Site Biological Wastewater Treatment System | None – Open to atmosphere |

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**
Primary and secondary biological wastewater treatment system consisting of: inlet, bar screen, primary clarifier, lift station, aeration basin, secondary clarification, settling/thickening and filtration.

| **Manufacturer:** | **Model number:** | **Serial number:** |
|---|---|---|
| Various | NA | NA |
| **Construction date:** | **Installation date:** | **Modification date(s):** |
| 1971 - 1973 | 1971 - 1973 | Various |

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):**
9,000,000 GPD

| **Maximum Hourly Throughput:** | **Maximum Annual Throughput:** | **Maximum Operating Schedule:** |
|---|---|---|
| NA | NA | NA |

***Fuel Usage Data*** **(fill out all applicable fields)**

| **Does this emission unit combust fuel?** ___Yes _X_ No | **If yes, is it?** ___ Indirect Fired ___Direct Fired |
|---|---|
| **Maximum design heat input and/or maximum horsepower rating:** Not Applicable | **Type and Btu/hr rating of burners:** Not Applicable |

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**
Not Applicable

**Describe each fuel expected to be used during the term of the permit.**

| Fuel Type | Max. Sulfur Content | Max. Ash Content | BTU Value |
|---|---|---|---|
| Not Applicable | | | |
| | | | |
| | | | |

Page _____ of _____

***Emissions Data***

| Criteria Pollutants | Potential Emissions (After Control) | |
|---|---|---|
| | PPH | TPY |
| Carbon Monoxide (CO) | --- | --- |
| Nitrogen Oxides ($NO_X$) | --- | --- |
| Lead (Pb) | --- | --- |
| Particulate Matter ($PM_{2.5}$) | --- | --- |
| Particulate Matter ($PM_{10}$) | --- | --- |
| Total Particulate Matter (TSP) | --- | --- |
| Sulfur Dioxide ($SO_2$) | --- | --- |
| Volatile Organic Compounds (VOC) | NA | 50.63 |

| Hazardous Air Pollutants | Potential Emissions (After Control) | |
|---|---|---|
| | PPH | TPY |
| See list – page 4 of this form | | |
| | | |
| | | |
| | | |

| Regulated Pollutants other than Criteria and HAP | Potential Emissions (After Control) | |
|---|---|---|
| | PPH | TPY |
| | | |
| | | |
| | | |

**List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).**

Process modeling (EmissionMaster) and wastewater secondary emission modeling (ToxChem).

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

1. Operational limits – R30-07300003-2009-SM01(Part 3 of 4): 4.1.1; 45CSR34; 40 C.F.R. §63. 7881(c); 45CSR§30-6.5.b.2

____ Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

1. R30-07300003-2009-SM01(Part 3 of 4): 4.4.1; 45CSR34; 40 C.F.R. §63.7881(c); 45CSR§30-5.1.c.

**Are you in compliance with all applicable requirements for this emission unit?** _X_ Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Cytec Wastewater Treatment Plant – PTE HAP Species (in TPY)

| | |
|---|---|
| Acrylic Acid | **0.20** |
| Benzene | **0.25** |
| Dimethyl formamide | **0.20** |
| Ethylbenzene | **<0.01** |
| Formaldehyde | **0.07** |
| Methanol | **1.30** |
| Methyl isobutyl ketone | **22.03** |
| Toluene | **19.43** |
| Triethylamine | **0.02** |
| Xylenes (isomers and mixtures) | **<0.01** |