# Form OP-UA58

# Treatment Process Attributes

# Texas Commission on Environmental Quality

## General:

This form is used to provide a description and data pertaining to treatment processes with potentially applicable requirements associated with a particular regulated entity number and application. Each table number, along with the possibility of a corresponding letter (i.e., Table 1a, Table 1b), corresponds to a certain state or federal rule. If the rule on the table is not potentially applicable to a treatment process, then it should be left blank and need not be submitted with the application. If the codes entered by the applicant show negative applicability to the rule or sections of the rule represented on the table, then the applicant need not complete the remainder of the table(s) that corresponds to the rule. Further instruction as to which questions should be answered and which questions should not be answered are located in the “Specific” section of the instruction text. The following is included in this form:

[Table 1:](#Table_1) Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart DD: National Emission Standards for Hazardous Air Pollutants from Off-Site waste and Recovery Operations

[Tables 2a](#Table2a) - [2c](#Table_2c): Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61), Subpart FF: National Emission Standard for Benzene Waste Operations (Treatment Processes)

[Table 3a](#Table_3a) - [3c](#Table_3c): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart G: National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry Wastewater

[Tables 4a](#Table_4a) - [4d](#Table_4d): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart CC: National Emission Standard for Hazardous Air Pollutants from Petroleum Refineries – These tables have been removed from the form. Applicability determinations on other tables in this form may be necessary. Please see instructional notes under the placeholders for Table 4 in these instructions.

[Tables 5a](#Table_5a) - [5d](#Table_5d): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart U: National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

[Tables 6a](#Table_6a) - [6d](#Table_6d): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart JJJ: National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

[Tables 7a](#Table_7a) – [7d](#Table_7d): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart FFFF: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

The application area name from Form OP-1(Site Information Summary) must appear in the header of each page for the purpose of identification for the initial submittal. The date of the initial form submittal must also be included and should be consistent throughout the application (MM/DD/YYYY). Leave the permit number blank for the initial form submittal. If this form is included as part of the permit revision process, enter the permit number assigned by the TCEQ, the area name (from Form OP-1), and the date of the revision submittal.

Unit attribute questions that do not require a response from all applicants are preceded by qualification criteria in the instructions. If the unit does not meet the qualification criteria, a response to the question is not required. Anytime a response is not required based on the qualification criteria, leave the space on the form blank.

Notwithstanding any qualification criteria in the form instructions or information provided in other TCEQ guidance, the applicant may leave an attribute question blank (or indicate “N/A” for “Not Applicable”) if the attribute is not needed for the applicable requirement determinations of a regulation for a unit.

In some situations, the applicant has the option of selecting alternate requirements, limitations, and/or practices for a unit. Note that these alternate requirements, limitations, and/or practices must have the required approval from the TCEQ Executive Director and/or the U.S. Environmental Protection Agency Administrator before the federal operating permit application is submitted. The Texas Commission on Environmental Quality (TCEQ) requires that a Core Data Form be submitted on all incoming registrations unless all of the following are met: the Regulated Entity and Customer Reference Numbers have been issued by the TCEQ and no core data information has changed. The Central Registry, a common record area of the TCEQ, maintains information about TCEQ customers and regulated activities, such as company names, addresses, and telephone numbers. This information is commonly referred as “core data.” The Central Registry provides the regulated community with a central access point within the agency to check core data and make changes when necessary. When core data about a facility is moved to the Central Registry, two new identification numbers are assigned: the Customer Reference (CN) number and the Regulated Entity (RN) number. The Core Data Form is required if facility records are not yet part of the Central Registry or if core data for a facility has changed. If this is the initial registration, permit, or license for a facility site, then the Core Data Form must be completed and submitted with application or registration forms. If amending, modifying, or otherwise updating an existing record for a facility site, the Core Data Form is not required, unless any core data information has changed. To review additional information regarding the Central Registry, go to the TCEQ website at [www.tceq.texas.gov/permitting/central\_registry](https://www.tceq.texas.gov/permitting/central_registry).

## Specific:

[Table 1:](#Tbl1" \o "Table 1) Title 40 Code of Federal Regulations Part 63 (CFR Part 63), Subpart DD: National Emission Standards for Hazardous Air Pollutants from Off‑Site waste and Recovery Operations

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.**:**

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

Removal or Destruction Method**:**

Select one of the following removal or destruction methods for the HAP contained in off-site material streams to be managed in the treatment process. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| VOHAP | Treatment process reduces volatile organic hazardous air pollutant (VOHAP) concentration of the off-site material using a means other than dilution |
| REMOV | Total quantity of HAP actually removed from the off-site material stream is equal to or greater than the required mass removal established for the off-site material stream using the procedure specified in 40 CFR § 63.694(e)  |
| REDUC | Total quantity of HAP in the off-site material stream is reduced to one of the performance levels specified in 40 CFR § 63.684(b)(3) |
| BIODEG | Biological degradation |
| INCIN | HAP contained in the off-site material stream is destroyed in an incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270  |
| INCIN-II | HAP contained in the off-site material stream is destroyed in an incinerator for which the owner or operator has certified compliance with the interim status requirements of 40 CFR part 265, Subpart O |
| BOILER | HAP contained in the off-site material stream is destroyed in a boiler or industrial furnace for which the owner or operator has been issued a final permit under 40 CFR part 270 |
| BOILER-II | HAP contained in the off-site material stream is destroyed in a boiler or industrial furnace for which the owner or operator has certified compliance with the interim status requirements of 40 CFR Part 266, Subpart H |

**Control Device ID No.**:

If applicable, enter the identification number for the control device to which emissions are routed (maximum10 characters). This number should be consistent with the control device identification number listed on Form OP-SUM. Use multiple lines if more than one control device is used. If there is no control device, then leave this column blank.

* Complete “Average VOHAP Concentration” Only if “Removal or Destruction Method” is “VOHAP.”

**Average VOHAP Concentration**:

Select one of the following options to describe the average VOHAP concentration of off‑site material streams entering the treatment process as determined at the point-of-delivery of the off‑site material streams. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| 500- | Average VOHAP concentration of off-site material streams entering treatment process is greater than 500 ppmw, but is a mixture of streams with a concentration of greater than 500 ppmw and streams with a concentration less than 500 ppmw at the point‑of‑delivery |
| 500+ | Average VOHAP concentration of every off-site material streams entering treatment process is greater than or equal to 500 ppmw at the point-of-delivery |

* Complete “VOHAP Reduction” Only if “Average VOHAP Concentration” is “500-.”

VOHAP Reduction:

Select one of the following levels of VOHAP reduction of the off-site material at the point‑of‑treatment. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| CR | VOHAP concentration of the off-site material is reduced to a level less than the VOHAP concentration limit (CR) established for the treatment process using the procedure specified in 40 CFR § 63.694(d) |
| LOW | VOHAP concentration of the off-site material is reduced to a level less than the lowest VOHAP concentration determined for each of the off-site material streams entering the treatment process as determined by the VOHAP concentration of the off-site material at the point-of-delivery |

* Complete “Stream VOHAP Concentration” Only if “Removal or Destruction Method” is “REDUC.”

Stream VOHAP Concentration:

Select one of the following options to describe the average VOHAP concentration of the off-site material stream at the point-of-delivery of the treatment process. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| 10- | Average VOHAP concentration of off-site material streams entering treatment process is less than 10,000 ppmw |
| 10+ | Average VOHAP concentration of off-site material streams entering treatment process is greater than or equal to 10,000 ppmw |

* Complete “Efficiency > 95%” Only if “Removal or Destruction Method” is “BIODEG.”

**Efficiency > 95%**:

Enter “YES” if the HAP reduction efficiency (R) for the treatment process is equal to or greater than 95 percent and the HAP biodegradation efficiency (Rbio) for the treatment process is equal to or greater than 95 percent. Otherwise, enter “NO.”

* Complete “Destruction Method” only if “Removal or Destruction Method” is “VOHAP,” “REMOV,” or “REDUC.”

**Destruction Method**:

Enter “YES” if the treatment process removes the HAP from the off-site material by thermal destruction or biological degradation. Otherwise, enter “NO.”

* Complete “Direct Measurement” Only if “Removal or Destruction Method” is “REMOV,” “REDUC,” “BIODEG,” or “VOHAP.”

**Direct Measurement**:

Enter “YES” if direct measurement is used to determine VOHAP concentration. Otherwise, enter “NO.”

[Table 2a:](#Tbl2a) Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61), Subpart FF: National Emission Standard for Benzene Waste Operations (Treatment Processes)

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

AMOC:

Enter “YES” if using an alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.348 for treatment processes. Otherwise, enter “NO.”

AMOC ID No.:

If an AMOC has been approved, then enter the corresponding AMOC unique identifier for each unit or process. If the unique identifier is unavailable, then enter the date of the AMOC approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

**▼** Continue only if “AMOC” is “NO.”

Complying with § 61.342(e):

Enter “YES” if the facility is complying with 40 CFR § 61.342(e). Otherwise, enter “NO.”

* Complete “Stream Combination” only if “Complying With § 61.342(e)” is “NO.”

Stream Combination:

Enter “YES” if the process wastewater, product tank drawdown, or landfill leachate is combined with other waste streams for the purpose of facilitating management or treatment in the wastewater treatment system. Otherwise, enter “NO.”

* Complete “Benzene Removal” only if “Complying With § 61.342(e)” is “YES” or if “Stream Combination” is “NO.”

Benzene Removal:

Select one of the following codes for the way benzene is removed or destroyed from the waste stream. Enter the code on the form.

| **Code** | **Description**  |
| --- | --- |
| 10- | Benzene is removed from the waste stream to a level of less than 10 ppmw on a flow weighted annual average basis [40 CFR § 61.348(a)(1)(i)] |
| 99+ | Benzene is removed from the waste stream by 99% or more on a mass basis [40 CFR § 61.348(a)(1)(ii)] |
| INCIN | Benzene is destroyed in the waste stream by incinerating in a combustion unit with a destruction efficiency of 99% or greater for benzene [40 CFR § 61.348(a)(1)(iii)] |

Process Or Stream Exemption:

Enter “YES” if the treatment process or waste stream is complying with 40 CFR §61.348(d). Otherwise, enter “NO.”

* Complete “Treatment Process Engineering Calculations” if “Process or Stream Exemption” is “NO.”

Treatment Process Engineering Calculations:

Enter “YES” if engineering calculations show that the treatment process or wastewater treatment system unit is proven to achieve its emission limitation. Otherwise, enter “NO.”

**▼ Continue only if “Benzene Removal” is “10-” or “99+” or “Stream Combination” is “YES.”**

[Table 2b:](#Table2b) Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61), Subpart FF: National Emission Standard for Benzene Waste Operations (Treatment Processes)

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

* Complete “Continuous Monitoring” only if “Benzene Removal” is “10-” and “Process or Stream Exemption” is “NO.”

Continuous Monitoring:

Enter “YES” if the wastewater treatment system unit process parameters are continuously monitored to indicate proper system operation. Otherwise, enter “NO.”

* Complete “Treatment Stream Unit Exempt” only if “Complying With § 61.342(e)” is “NO” and “Stream Combination” is “YES.”

Treatment Stream Unit Exempt:

Enter “YES” if there are any units in the wastewater treatment system that are exempt according to 40 CFR § 61.348(b)(2). Otherwise, enter “NO.”

Openings:

Enter “YES” if the treatment process or wastewater treatment system unit has any openings. Otherwise, enter “NO.”

Fuel Gas System:

Enter “YES” if all gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system. Otherwise, enter “NO.”

**▼** Do Not Continue if “Fuel Gas System” is “YES.”

* Complete “Less Than Atmospheric” only if “Openings” is “YES” and “Fuel Gas System” is “NO.”

Less Than Atmospheric:

Enter “YES” if a cover and closed-vent system are operated such that the treatment process or wastewater system unit is maintained at less than atmospheric pressure and complying with 40 CFR § 61.348(e)(3)(i) - (iii). Otherwise, enter “NO.”

* Complete “Closed Vent System and Control Device” if “Openings” is “NO” or if “Openings” is “YES” and “Less Than Atmospheric” is “NO.”

Closed-Vent System and Control Device:

Enter “YES” if a closed-vent system and control device is used. Otherwise, enter “NO.”

**▼** Continue if “Closed-vent System and Control Device” is “YES” or if “Openings” is “YES” and “Less Than Atmospheric” is “YES.”

AMOC:

Enter “YES” if using an alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device. Otherwise, enter “NO.”

AMOC ID No.:

If an AMOC has been approved, then enter the corresponding AMOC unique identifier for each unit or process. If the unique identifier is unavailable, then enter the date of the AMOC approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

[Table 2c:](#Table2c) Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61), Subpart FF: National Emission Standard for Benzene Waste Operations (Treatment Processes)

* Complete this table only if “AMOC” is “NO.”

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

By-Pass Line:

Enter “YES” if the closed-vent system contains any by-pass line that could divert the vent stream away from the control device. Otherwise, enter “NO.”

* Complete “By-pass Line Valve” only if “By-pass Line” is “YES.”

By-Pass Line Valve:

Enter “YES” if a car-seal or lock and key configuration is used to secure the by-pass line valve in the closed position. Otherwise, enter “NO.”

Control Device Type/Operation:

Select one of the following codes for the type of control device. Enter the code on the form.

Enclosed Combustion Devices:

| **Code** | **Description** |
| --- | --- |
| THERM95 | Thermal vapor incinerator with a reduction of organics being greater than or equal to 95 weight percent [see 40 CFR § 61.349(a)(2)(i)(A)] |
| THERM20 | Thermal vapor incinerator that achieves a total organic compound concentration of 20 ppmv on a dry basis corrected to 3% oxygen [see 40 CFR § 61.349(a)(2)(i)(B)] |
| THERMMR | Thermal vapor incinerator that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760 degrees C [see 40 CFR § 61.349(a)(2)(i)(C)] |
| CATA95 | Catalytic vapor incinerator with a reduction of organics being greater than or equal to 95 weight percent [see 40 CFR § 61.349(a)(2)(i)(A)] |
| CATA20 | Catalytic vapor incinerator that achieves a total organic compound concentration of 20 ppmv on a dry basis corrected to 3% oxygen [see 40 CFR § 61.349(a)(2)(i)(B)] |
| CATAMR | Catalytic vapor incinerator that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760 degrees C [see 40 CFR § 61.349(a)(2)(i)(C)] |
| B44-95 | Boiler or process heater having a design heat input capacity less than 44 MW and with a reduction of organics being greater than or equal to 95 weight percent [see 40 CFR § 61.349(a)(2)(i)(A)] |
| B44-20 | Boiler or process heater having a design heat input capacity less than 44 MW and that achieves a total organic compound concentration of 20 ppmv on a dry basis corrected to 3% oxygen [see 40 CFR § 61.349(a)(2)(i)(B)] |
| B44-MR | Boiler or process heater having a design heat input capacity less than 44 MW and that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760 degrees C [see 40 CFR § 61.349(a)(2)(i)(C)] |
| B44+95 | Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and with a reduction of organics being greater than or equal to 95 weight percent [see 40 CFR § 61.349(a)(2)(i)(A)] |
| B44+20 | Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and that achieves a total organic compound concentration of 20 ppmv on a dry basis corrected to 3% oxygen [see 40 CFR § 61.349(a)(2)(i)(B)] |
| B44+MR | Boiler or process heater having a design heat input capacity greater than or equal to 44 MW and that provides a minimum residence time of 0.5 seconds at a minimum temperature of 760 degrees C [see 40 CFR § 61.349(a)(2)(i)(C)] |

Vapor Recovery Systems:

| **Code** | **Description** |
| --- | --- |
| COND | Condenser without a temperature monitoring device |
| CONDWITH | Condenser with a temperature monitoring device |
| CDIRECT | Carbon adsorption system that regenerates the carbon bed directly in the control device and does not have a continuous recorder to measure exhaust concentration |
| CDIRECTW | Carbon adsorption system that regenerates the carbon bed directly in the control device and has a continuous recorder to measure exhausts concentration |
| CARADS | Carbon adsorption system that does not regenerate the carbon bed directly in the control |
| OTH-VRS | Vapor recovery system other than condenser or carbon adsorption system |

Other Control Devices:

| **Code** | **Description** |
| --- | --- |
| FLARE | Flare |
| OTHER | Alternate control device approved under § 61.349(a)(2)(iv) |

Control Device ID No:

If applicable, enter the identification number for the control device to which treatment process emissions are routed (maximum 10 characters). This number should be consistent with the identification number listed on the Form OP-SUM (Individual Unit Summary).

* Complete “Engineering Calculations” only if “Control Device Type/Operation” is NOT “OTHER,” “FLARE,” “THERMMR,” “CATAMR,” “B44-MR,” or “B44+MR.”

Engineering Calculations:

Enter “YES” if engineering calculations show that the control device is proven to achieve its emission limitation. Otherwise, enter “NO.”

* Complete “Alternate Monitoring Parameters” only if “Control Device Type/Operation” is NOT “OTHER,” “FLARE,” or “CARADS.”

Alternate Monitoring Parameters:

Enter “YES” if alternate monitoring parameters or requirements have been approved by the Administrator. Otherwise, enter “NO.”

* Complete “Carbon Replacement Interval” only if “Control Device Type/Operation” is “CARADS.”

Carbon Replacement Interval:

Enter “YES” if the carbon in the carbon adsorption system is replaced at a regular predetermined interval. Otherwise, enter “NO.”

[Table 3a](#Tbl3a): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart G: National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry Wastewater

* *Complete only for treatment processes for wastewater streams subject to 40 CFR Part 63, Subpart G.*

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM “Individual Unit Summary.”

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

Series Of Processes:

Enter “YES” if the wastewater stream is treated using a series of treatment processes. Otherwise, enter “NO.”

* Complete “Hard Piping” Only if “Series of Processes” is “YES.” If “Series of Processes” is “NO,” go to “Biological Treatment Process.”

Hard Piping:

Enter “YES” if the wastewater stream for a combination of treatment processes is conveyed by hard piping. Otherwise, enter “NO.”

* Complete “Compliance Under Title 40 CFR § 63.138(a)(7)(ii)” Only if “Hard Piping” is “YES.”

Compliance Under Title 40 CFR § 63.138(a)(7)(ii):

Enter “YES” if the owner operator elects to comply with Title 40 CFR § 63.138(a)(7)(ii). Otherwise, enter “NO.”

Series Design Evaluation:

Enter “YES” if compliance for the series of treatment processes is demonstrated using design evaluation. Otherwise, enter “NO.”

* Complete “Biological Treatment Process” Only if “Series of Processes” is “NO.” If “Series of Processes” is “YES,” go to “Vented to Control” on Table 3b.

Biological Treatment Process:

Select one of the following options that describe the treatment process. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| OPENBIO | Open biological treatment process |
| CLBIOAER | Closed aerobic biological treatment process |
| CLBIOAN | Closed anaerobic biological treatment process |
| NONBIO | Non-biological treatment process |

Wastewater Stream Designation:

Select one of the following options that describe the wastewater stream designations. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| GRP1-8 | Determined Group1 for Table 8 |
| GRP1-9 | Determined Group1 for Table 9 |
| BOTH | Determined Group1 for both Table 8 and Table 9 |
| 132E | Designated as Group 1 per 40 CFR § 63.132(e) |

Wastewater Stream Treatment:

Select one of the following options that describe the treatment of the wastewater stream(s). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| 50PPMW | 50 ppmw concentration option |
| 10PPMW | 10 ppmw concentration option |
| STEAM | Design steam stripper option |
| PERC1 | Percent mass removal/destruction option by reducing the mass flow rate by the 99 percent |
| PERC2 | Percent removal/destruction option by reducing the mass flow rate by the Fr value |
| RCRA | Resource Conservation and Recovery Act (RCRA) unit option |
| RMR | Required Mass Removal (RMR) option under § 63.138(f) |
| 95RMR | 95-percent RMR option for biological processes under § 63.138(g) |

* Do Not Complete “Treatment Process Design Evaluation” if “Biological Treatment Process” is “OPENBIO” or if “Wastewater Stream Treatment” is “STEAM” or “RCRA.”

Treatment Process Design Evaluation:

Enter “YES” if compliance for the treatment process will be demonstrated using design evaluation. Otherwise, enter “NO.”

* Complete “Performance Test Exemption” only if “Biological Treatment Process” is “OPENBIO,” or if “Biological Treatment Process” is “CLBIOAER” or “CLBIOAN” and “Design Evaluation” is “NO.”

Performance Test Exemption:

Enter “YES” if the biological treatment process is exempt from performance test requirements per 40 CFR § 63.145(h)(1)(i) - (ii). Otherwise, enter “NO.”

[Table 3b](#Tbl3b): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart G: National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry Wastewater

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

* Complete “Combustion Process” Only if “Wastewater Stream Treatment” is “PERC1” or “PERC2.”

Combustion Process:

Enter “YES” if a combustion process is used for treatment. Otherwise, enter “NO.”

* Complete “§ 63.145(e) Requirements Elected” Only if one of the following conditions is true:
1. “Biological Treatment Processes” is “OPENBIO” or “CLBIOAER” and “Wastewater Stream Treatment” is “RMR.”
2. “Biological Treatment Processes” is “CLBIOAER” and “Wastewater Stream Treatment” is “95RMR.”

§ 63.145(e) Requirements Elected:

Enter “YES” if the testing requirements of § 63.145(e) are elected. Otherwise, enter “NO.”

▼ Continue Only if “Biological Treatment Process” is NOT “OPENBIO” or if “Series of Processes” is “YES.”

Vented to Control:

Enter “YES” if emissions from the treatment process are vented to a control device. Otherwise, enter “NO.”

* Complete “Fuel Gas System” Only if “Biological Treatment Process” is “CLBIOAN” and “Vented to Control” is “NO.”

Fuel Gas System:

Enter “YES” if the closed anaerobic biological treatment process is vented through hard‑piping to a fuel gas system. Otherwise, enter “NO.”

* If “Vented to Control” is “NO”, go to Table 3c.

Closed Vent System:

Select the option that describes the operation of the closed vent system. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| SUBPTG | Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148 |
| SUBPTH | Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.172 |

By-Pass Lines:

Select the option that describes by-pass lines on the closed vent system. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| NONE | No by-pass lines |
| FLOWIND | By-pass lines are monitored by flow indicators |
| CARSEAL | By-pass line valves are secured in the closed position with a car-seal or lock-and-key configuration |

Combination of Control Devices:

Enter “YES” if the vent stream is treated using a combination of control devices. Otherwise, enter “NO.”

If the response to “Combination of Control Devices” is “YES,” complete one additional row on the form for each additional control device. Each row must have a unique SOP Index No.

Control Device Type:

Select one of the following options that describe the control device used to treat the hazardous air pollutants (HAPs) in the vent stream(s). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| FLARE | Flare |
| BPH-44+ | Boiler or process heater with a design heat input capacity greater than or equal to 44 MW |
| BPH-VNT | Boiler or process heater into which the emission stream is introduced with primary fuel |
| BPH-HAZ | Boiler or process heater burning hazardous waste |
| HAZINC | Hazardous waste incinerator |
| VAPTH | Thermal vapor incinerator |
| VAPCAT | Catalytic vapor incinerator |
| OTHBPH | Boiler or process heater not described above |
| OTHENC | Other enclosed combustion device |
| CADS | Carbon adsorber |
| COND | Condenser |
| SCRUB | Scrubber |
| OTHVRS | Other vapor recovery system |
| OTHER | Other control device |
| Code | Description |
| FLARE | Flare |

Control Device ID No.:

If applicable, enter the identification number (ID No.) for the control device to which emissions are routed (maximum 10 characters). This number should be consistent with the control device identification number listed on Form OP-SUM. If there is no control device, then leave this column blank.

[Table 3c](#Tbl3c): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart G: National Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry Wastewater

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

* Complete “Compliance with 40 CFR § 63.139(c)(1) only if “Control Device Type” is “VAPTH,” “VAPCAT,” “OTHBPH,” or “OTHENC.”

Compliance With 40 CFR § 63.139(c)(1):

Select one of the following options that describes the method of compliance specified in 40 CFR § 63.139(c)(1). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| C1I | The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i) |
| C1II | The enclosed combustion device being used meets the 20 ppmv concentration provisions specified in 40 CFR § 63.139(c)(1)(ii) |
| C1III | The enclosed combustion device being used meets the 0.5 second residence time at 760 degrees C provisions specified in 40 CFR § 63.139(c)(1)(iii) |

Alternate Monitoring Parameters:

Enter “YES” if the EPA Administrator has approved an AMP. Otherwise, enter “NO.”

AMP ID No.:

If an AMP has been approved, then enter the corresponding AMP unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the AMP approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

**▼** Continue Only if “Alternate Monitoring Parameters” is “NO.”

* Complete “Regeneration” only if “Control Devices” is “CADS.”

Regeneration:

Enter “YES” if the carbon bed is regenerated onsite. Otherwise, enter “NO.”

* Complete “Performance Test” only if “Control Device Type” is “VAPTH,” “VAPCAT,” “OTHBPH,” “CADS,” “COND.” or “SCRUB.”

Performance Tests:

Enter “YES” if performance tests are being conducted using the test methods and procedures specified in 40 CFR § 63.145(i). Otherwise, enter “NO.”

* Complete “95% Reduction Efficiency” only if “Performance Tests” is “YES.”

95% Reduction Efficiency:

Enter “YES” if the performance tests are conducted to demonstrate compliance with 95% reduction efficiency. Otherwise, enter “NO.”

* Complete “Monitoring Options” only if “Alternate Monitoring Parameters” is “NO” and “Control Device Type” is “FLARE,” “VAPTH,” “VAPCAT,” “OTHBPH,” “CADS,” “COND,” or “SCRUB.”

Monitoring Options:

Select the monitoring option that describes the monitoring parameters being used for the control device. Enter the code on the form.

For control devices other than scrubbers and non-regenerative carbon adsorbers:

| **Code** | **Description** |
| --- | --- |
| TABLE13 | Control device is using the monitoring parameters specified in Table 13 |
| ORGMON | Control device is using an organic monitoring device as allowed under § 63.143(e)(2) |

For non-regenerative carbon adsorbers:

| **Code** | **Description** |
| --- | --- |
| ORGMON | Non-regenerative carbon adsorber is using an organic monitoring device as allowed under § 63.143(e)(2) |
| REPLACE | Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval |

For scrubbers:

| **Code** | **Description** |
| --- | --- |
| ORGMON | Scrubber is using an organic monitoring device as allowed under § 63.143(e)(2) |

* Complete “Continuous Monitoring” only if “Control Device Type” is “FLARE,” “VAPTH,” “VAPCAT,” “OTHBPH,” “CADS,” “COND,” or “SCRUB” and “Monitoring Options” is “TABLE13” or “ORGMON.”

Continuous Monitoring:

Select one of the following options that describes the continuous monitoring and recordkeeping used for the unit. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| 151G | Alternative to continuous monitoring as requested and approved under § 63.151(g) |
| 152G | Alternative to continuous monitoring as allowed under§ 63.152(g) |
| NOALT | Complying with the continuous monitoring requirements of § 63.143(e)(1) or § 63.143(e)(2) in Table 13 |

Continuous Monitoring Alt ID No.:

If alternative continuous monitoring has been approved under § 63.151(g), then enter the corresponding unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

[Table 4a](#Tbl4a): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart CC: National Emission Standard for Hazardous Air Pollutants from Petroleum Refineries

This table has been removed from the form. See note below for information on submitting attributes for treatment processes subject to 40 CFR Part 63, Subpart CC.

Note: Treatment processes that receive Group 1 wastewater streams and do not receive streams subject to the provisions of 40 CFR Part 63, Subpart G and 40 CFR §§ 63.133 - 63.147 should be identified on Table 2, for 40 CFR Part 61, Subpart FF.

Treatment processes that receive Group 1 wastewater streams and do receive streams subject to the provisions of 40 CFR Part 63, Subpart G and 40 CFR §§ 63.133 - 63.147 should be addressed as follows:

If complying with §63.640(o)(2)(i), identify on Table 2, for 40 CFR Part 61, Subpart FF, and identify on Table 3, for 40 CFR Part 63, Subpart G.

If complying with §63.640(o)(2)(ii)(A), identify on Table 3, for 40 CFR Part 63, Subpart G.

Treatment processes that receive Group 2 wastewater streams and do receive streams subject to the provisions of 40 CFR Part 63, Subpart G and 40 CFR §§ 63.133 - 63.147 should also be identified on Table 3, for 40 CFR Part 63, Subpart G, as follows:

If complying with §63.640(o)(2)(i) or §63.640(o)(2)(ii)(A), comply with Group 2 requirements.

If complying with §63.640(o)(2)(ii)(B) (Group 2 wastewater whose benzene emissions are subject to control under 40 CFR Part 61, Subpart FF on or after December 31, 1992), comply with Group 1 requirements.

[Table 4b](#Tbl4b): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart CC, National Emission Standard for Hazardous Air Pollutants from Petroleum Refineries

This table has been removed from the form.

[Table 4c](#Tbl4c): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart CC, National Emission Standard for Hazardous Air Pollutants from Petroleum Refineries

This table has been removed from the form.

[Table 4d](#Tbl4d" \o "Table 4d): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63). Subpart CC, National Emission Standard for Hazardous Air Pollutants from Petroleum Refineries

This table has been removed from the form.

[Table 5a](#Tbl5a): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart U: National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

* Complete only for treatment processes for wastewater streams subject to 40 CFR Part 63, Subpart U.

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

Series of Processes:

Enter “YES” if the wastewater stream is treated using a series of treatment processes. Otherwise, enter “NO.”

* Complete “Hard Piping” Only if “Series of Processes” is “YES.” If “Series of Processes” is “NO,” go to “Biological Treatment Process.”

Hard Piping:

Enter “YES” if the wastewater stream for a combination of treatment processes is conveyed by hard piping. Otherwise, enter “NO.”

* Complete “Compliance Under Title 40 CFR § 63.138(a)(7)(ii)” Only if “Hard Piping” is “YES.”

Compliance Under Title 40 CFR § 63.138(a)(7)(ii):

Enter “YES” if the owner operator elects to comply with Title 40 CFR § 63.138(a)(7)(ii). Otherwise, enter “NO.”

Series Design Evaluation:

Enter “YES” if compliance for the series of treatment processes is demonstrated using design evaluation. Otherwise, enter “NO.”

* Complete “Biological Treatment Process” Only if “Series of Processes” is “NO.” If “Series of Processes” is “YES,” go to “Vented to Control” on Table 3b.

Biological Treatment Process:

Select one of the following options that describes the treatment process. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| OPENBIO | Open biological treatment process |
| CLBIOAER | Closed aerobic biological treatment process |
| CLBIOAN | Closed anaerobic biological treatment process |
| NONBIO | Non-biological treatment process |

Wastewater Stream Designation:

Enter “YES” if the wastewater stream is designated as Group 1 per 40 CFR § 63.132(e). Otherwise, enter “NO.”

Wastewater Stream Treatment:

Select one of the following options that describe the treatment of the wastewater stream(s). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| 50PPMW | 50 ppmw concentration option |
| STEAM | Design steam stripper option |
| PERC1 | Percent mass removal/destruction option by reducing the mass flow rate by the 99 percent per 40 CFR § 63.138(e)(1) |
| PERC2 | Percent removal/destruction option by reducing the mass flow rate by the Fr value per 40 CFR § 63.138(e)(2) |
| RCRA | Resource Conservation and Recovery Act (RCRA) unit option |
| RMR | Required Mass Removal (RMR) option under § 63.138(f) |
| 95RMR | 95-percent RMR option for biological processes under § 63.138(g) |

▼Do Not Continue if “Wastewater Stream Treatment” is “RCRA.”

[Table 5b](#Tbl5b): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart U: National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

* Complete “Steam Stripper Alternate Monitoring” only if “Wastewater Stream Treatment” is “STEAM.”

Steam Stripper Alternate Monitoring:

Enter “YES” if alternate monitoring parameters are requested and approved for the steam stripper. Otherwise, enter “NO.”

Steam Stripper AMP ID No.:

If an AMP has been approved, then enter the corresponding AMP unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the AMP approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

* Do Not Complete “Treatment Process Design Evaluation” if “Biological Treatment Process” is “OPENBIO” or if “Wastewater Stream Treatment” is “STEAM.”

Treatment Process Design Evaluation:

Enter “YES” if compliance for the treatment process will be demonstrated using design evaluation. Otherwise, enter “NO.”

* Complete “Performance Test Exemption” only if “Biological Treatment Process” is “OPENBIO,” or if “Biological Treatment Process” is “CLBIOAER” and “Design Evaluation” is “NO.”

Performance Test Exemption:

Enter “YES” if the biological treatment process is exempt from performance test requirements per 40 CFR § 63.145(h)(1)(i) - (ii). Otherwise, enter “NO.”

* Complete “Combustion Process” Only if “Wastewater Stream Treatment” is “PERC1” or “PERC2” and “Treatment Process Design Evaluation” is “NO.”

Combustion Process:

Enter “YES” if a combustion process is used for treatment. Otherwise, enter “NO.”

▼Do Not Continue if “Combustion Process” is “YES.”

* Complete “§ 63.145(e) Requirements Elected” Only if one of the following conditions is true:

1. “Biological Treatment Processes” is “OPENBIO” or “CLBIOAER,” “Wastewater Stream Treatment” is “RMR” and “Performance Test Exemption” is “NO.”

2. “Biological Treatment Processes” is “CLBIOAER,” “Wastewater Stream Treatment” is “95RMR,” and “Performance Test Exemption” is “NO.”

§ 63.145(e) Requirements Elected:

Enter “YES” if the testing requirements of § 63.145(e) are elected. Otherwise, enter “NO.”

**▼** Continue Only if “Biological Treatment Process” is NOT “OPENBIO” or if “Series of Processes” is “YES.”

[Table 5c](#Tbl5c): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart U: National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

Vented To Control:

Enter “YES” if emissions from the treatment process are vented to a control device. Otherwise, enter “NO.”

* Complete “Fuel Gas System” Only if “Biological Treatment Process” is “CLBIOAN” and “Vented to Control” is “NO.”

Fuel Gas System:

Enter “YES” if the closed anaerobic biological treatment process is vented through hard‑piping to a fuel gas system. Otherwise, enter “NO.”

**▼** Continue Only if “Vented to Control” is “YES.”

Closed Vent System:

Select the option that describes the operation of the closed vent system. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| SUBPTG | Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148 |
| SUBPTH | Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.172  |

By-pass Lines:

Select the option that describes by-pass lines on the closed vent system. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| NONE | No by-pass lines |
| FLOWIND | By-pass lines are monitored by flow indicators |
| CARSEAL | By-pass line valves are secured in the closed position with a car-seal or lock-and-key configuration |

Combination Of Control Devices:

Enter “YES” if the vent stream is treated using a combination of control devices. Otherwise, enter “NO.”

If the response to “Combination of Control Devices” is “YES,” complete one additional row on the form for each additional control device. Each row must have a unique SOP Index No.

Control Devices:

Select one of the following options that describe the control device used to treat the hazardous air pollutants (HAPs) in the vent stream(s). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| FLARE | Flare |
| BPH-44+ | Boiler or process heater with a design heat input capacity greater than or equal to 44 MW |
| BPH-VNT | Boiler or process heater into which the emission stream is introduced with primary fuel |
| BPH-HAZ | Boiler or process heater burning hazardous waste |
| HAZINC | Hazardous waste incinerator |
| VAPTH | Thermal vapor incinerator |
| VAPCAT | Catalytic vapor incinerator |
| OTHBPH | Boiler or process heater not described above |
| OTHENC | Other enclosed combustion device |
| CADS | Carbon adsorber |
| COND | Condenser |
| SCRUB | Scrubber |
| OTHVRS | Other vapor recovery system |
| OTHER | Other control device |

Control Device ID No.:

If applicable, enter the identification number (ID No.) for the control device to which emissions are routed (maximum 10 characters). This number should be consistent with the control device identification number listed on Form OP-SUM. If there is no control device, then leave this column blank.

[Table 5d](#Tbl5d" \o "Table 5d): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart U: National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-*XXXX*]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

* Complete **“Compliance with 40 CFR § 63.139(c)(1) only if “Control Device Type” is “VAPTH”, “VAPCAT”, “OTHBPH” or “OTHENC.”**

Compliance with 40 CFR § 63.139(c)(1):

Select one of the following options that describes the method of compliance specified in 40 CFR § 63.139(c)(1). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| C1I | The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i) |
| C1II | The enclosed combustion device being used meets the 20 ppmv concentration provisions specified in 40 CFR § 63.139(c)(1)(ii) |
| C1III | The enclosed combustion device being used meets the 0.5 second residence time at 760 degrees C provisions specified in 40 CFR § 63.139(c)(1)(iii) |

Alternate Monitoring Parameters:

Enter “YES” if the EPA Administrator has approved an AMP. Otherwise, enter “NO.”

AMP ID No.:

If an AMP has been approved, then enter the corresponding AMP unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the AMP approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

**▼** Continue Only if “Alternate Monitoring Parameters” is “NO.”

* Complete “Regeneration” only if “Control Devices” is “CADS.”

Regeneration:

Enter “YES” if the carbon bed is regenerated onsite. Otherwise, enter “NO.”

* Complete “Performance Test” only if “Control Device Type” is “VAPTH,” “VAPCAT,” “OTHBPH,” “CADS,” “COND” or “SCRUB”

Performance Tests:

Enter “YES” if performance tests are used to demonstrate that the control device or combination of control devices achieves the appropriate conditions. Otherwise, enter “NO.”

* Complete “95% Performance Tests” only if “Performance Tests” is “YES.”

95% Performance Tests:

Enter “YES” if the performance tests are conducted to demonstrate compliance with 95% reduction efficiency. Otherwise, enter “NO.”

* Complete “Monitoring Options” only if “Alternate Monitoring Parameters” is “NO” and “Control Device Type” is “FLARE,” “VAPTH,” “VAPCAT,” “OTHBPH,” “CADS,” “COND” or “SCRUB.”

Monitoring Options:

Select the monitoring option that describes the monitoring parameters being used for the control device. Enter the code on the form.

For control devices other than scrubbers and non-regenerative carbon adsorbers:

| **Code** | **Description** |
| --- | --- |
| TABLE13 | Control device is using the monitoring parameters specified in Table 13 |
| ORGMON | Control device is using an organic monitoring device as allowed under § 63.143(e)(2) |

For non-regenerative carbon adsorbers:

| **Code** | **Description** |
| --- | --- |
| ORGMON | Non-regenerative carbon adsorber is using an organic monitoring device as allowed under § 63.143(e)(2) |
| REPLACE | Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval |

For scrubbers:

| **Code** | **Description** |
| --- | --- |
| ORGMON | Scrubber is using an organic monitoring device as allowed under § 63.143(e)(2) |

[Table 6a](#Tbl6a): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart JJJ: National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

* Complete only for treatment processes at sources that produce a thermoplastic other than polystyrene, acrylonitrile styrene acrylate resin (ASA) or alpha methyl styrene acrylonitrile resin (AMSAN) that treat wastewater streams subject to 40 CFR Part 63, Subpart JJJ.

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-*XXXX*]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

Series of Processes:

Enter “YES” if the wastewater stream is treated using a series of treatment processes. Otherwise, enter “NO.”

* Complete “Hard Piping” Only if “Series of Processes” is “YES.” If “Series of Processes” is “NO,” go to “Biological Treatment Process.”

Hard Piping:

Enter “YES” if the wastewater stream for a combination of treatment processes is conveyed by hard piping. Otherwise, enter “NO.”

* Complete “Compliance Under Title 40 CFR § 63.138(a)(7)(ii)” Only if “Hard piping” is “YES.”

Compliance Under Title 40 CFR § 63.138(a)(7)(ii):

Enter “YES” if the owner operator elects to comply with Title 40 CFR § 63.138(a)(7)(ii). Otherwise, enter “NO.”

Series Design Evaluation:

Enter “YES” if compliance for the series of treatment processes is demonstrated using design evaluation. Otherwise, enter “NO.”

* Complete “Biological Treatment Process” Only if “Series of Processes” is “NO.” If “Series of Processes” is “YES,” go to “Vented to Control” on Table 3b.

Biological Treatment Process:

Select one of the following options that describe the treatment process. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| OPENBIO | Open biological treatment process |
| CLBIOAER | Closed aerobic biological treatment process |
| CLBIOAN | Closed anaerobic biological treatment process |
| NONBIO | Non-biological treatment process |

Wastewater Stream Designation:

Enter “YES” if the wastewater stream is designated as Group 1 per 40 CFR § 63.132(e). Otherwise, enter “NO.”

Wastewater Stream Treatment:

Select one of the following options that describe the treatment of the wastewater stream(s). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| 50PPMW | 50 ppmw concentration option |
| STEAM | Design steam stripper option |
| PERC1 | Percent mass removal/destruction option by reducing the mass flow rate by the 99 percent per 40 CFR § 63.138(e)(1) |
| PERC2 | Percent removal/destruction option by reducing the mass flow rate by the Fr value per 40 CFR § 63.138(e)(2) |
| RCRA | Resource Conservation and Recovery Act (RCRA) unit option |
| RMR | Required Mass Removal (RMR) option under § 63.138(f) |
| 95RMR | 95-percent RMR option for biological processes under § 63.138(g) |

* Do Not Continue if “Wastewater Stream Treatment” is “RCRA.”

[Table 6b](#Tbl6b" \o "Table 6b): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart JJJ: National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

* Complete “Steam Stripper Alternate Monitoring” only if “Wastewater Stream Treatment” is “STEAM.”

Steam Stripper Alternate Monitoring:

Enter “YES” if alternate monitoring parameters are requested and approved for the steam stripper. Otherwise, enter “NO.”

Steam Stripper AMP ID No.:

If an AMP has been approved, then enter the corresponding AMP unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the AMP approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

* Do Not Complete “Treatment Process Design Evaluation” if “Biological Treatment Process” is “OPENBIO” or if “Wastewater Stream Treatment” is “STEAM.”

Treatment Process Design Evaluation:

Enter “YES” if compliance for the treatment process will be demonstrated using design evaluation. Otherwise, enter “NO.”

* Complete “Performance Test Exemption” only if “Biological Treatment Process” is “OPENBIO,” or if “Biological Treatment Process” is “CLBIOAER” and “Design Evaluation” is “NO.”

Performance Test Exemption:

Enter “YES” if the biological treatment process is exempt from performance test requirements per 40 CFR § 63.145(h)(1)(i) - (ii). Otherwise, enter “NO.”

* Complete “Combustion Process” Only if “Wastewater Stream Treatment” is “PERC1” or “PERC2” and “Treatment Process Design Evaluation” is “NO.”

Combustion Process:

Enter “YES” if a combustion process is used for treatment. Otherwise, enter “NO.”

▼Do Not Continue if “Combustion Process” is “YES.”

* Complete “§ 63.145(e) Requirements Elected” Only if one of the following conditions is true:
1. “Biological Treatment Processes” is “OPENBIO” or “CLBIOAER,” “Wastewater Stream Treatment” is “RMR” and “Performance Test Exemption” is “NO.”
2. “Biological Treatment Processes” is “CLBIOAER” and “Wastewater Stream Treatment” is “95RMR” and “Performance Test Exemption” is “NO.”

§ 63.145(e) Requirements Elected:

Enter “YES” if the testing requirements of § 63.145(e) are elected. Otherwise, enter “NO.”

**▼** Continue only if “Biological Treatment Process” is NOT “OPENBIO” or if “Series of Processes” is “YES.”

[Table 6c](#Tbl6c): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart JJJ: National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

Vented To Control:

Enter “YES” if emissions from the treatment process are vented to a control device. Otherwise, enter “NO.”

* Complete “Fuel Gas System” Only if “Biological Treatment Process” is “CLBIOAN” and “Vented to Control” is “NO.”

Fuel Gas System:

Enter “YES” if the closed anaerobic biological treatment process is vented through hard‑piping to a fuel gas system. Otherwise, enter “NO.”

**▼** Continue Only if “Vented to Control” is “YES.”

Closed Vent System:

Select the option that describes the operation of the closed vent system. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| SUBPTG | Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148 |
| SUBPTH | Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.172 |

By-pass Lines:

Select the option that describes by-pass lines on the closed vent system. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| NONE | No by-pass lines |
| FLOWIND | By-pass lines are monitored by flow indicators |
| CARSEAL | By-pass line valves are secured in the closed position with a car-seal or lock-and-key configuration |

Combination Of Control Devices:

Enter “YES” if the vent stream is treated using a combination of control devices. Otherwise, enter “NO.”

If the response to “Combination of Control Devices” is “YES,” complete one additional row on the form for each additional control device. Each row must have a unique SOP Index No.

Control Devices:

Select one of the following options that describe the control device used to treat the hazardous air pollutants (HAPs) in the vent stream(s). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| FLARE | Flare |
| BPH-44+ | Boiler or process heater with a design heat input capacity greater than or equal to 44 MW |
| BPH-VNT | Boiler or process heater into which the emission stream is introduced with primary fuel |
| BPH-HAZ | Boiler or process heater burning hazardous waste |
| HAZINC | Hazardous waste incinerator |
| VAPTH | Thermal vapor incinerator |
| VAPCAT | Catalytic vapor incinerator |
| OTHBPH | Boiler or process heater not described above |
| OTHENC | Other enclosed combustion device |
| CADS | Carbon adsorber |
| COND | Condenser |
| SCRUB | Scrubber |
| OTHVRS | Other vapor recovery system |
| OTHER | Other control device |

Control Device ID No.:

If applicable, enter the identification number (ID No.) for the control device to which emissions are routed (maximum 10 characters). This number should be consistent with the control device identification number listed on Form OP-SUM. If there is no control device, then leave this column blank.

[Table 6d](#Tbl6d): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart JJJ: National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

* Complete “Compliance with 40 CFR § 63.139(c)(1) only if “Control Device Type” is “VAPTH”, “VAPCAT”, “OTHBPH” or “OTHENC.”

Compliance With 40 CFR § 63.139(c)(1):

Select one of the following options that describes the method of compliance specified in 40 CFR § 63.139(c)(1). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| C1I | The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i) |
| C1II | The enclosed combustion device being used meets the 20 ppmv concentration provisions specified in 40 CFR § 63.139(c)(1)(ii) |
| C1III | The enclosed combustion device being used meets the 0.5 second residence time at 760 degrees C provisions specified in 40 CFR § 63.139(c)(1)(iii) |

Alternate Monitoring Parameters:

Enter “YES” if the EPA Administrator has approved an AMP. Otherwise, enter “NO.”

AMP ID No.:

If an AMP has been approved, then enter the corresponding AMP unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the AMP approval letter. The unique identifier and/or the date of the approval letter is contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

**▼** Continue Only if “Alternate Monitoring Parameters” is “NO.”

* Complete “Regeneration” only if “Control Devices” is “CADS.”

Regeneration:

Enter “YES” if the carbon bed is regenerated onsite. Otherwise, enter “NO.”

* Complete “Performance Test” only if “Control Device Type” is “VAPTH,” “VAPCAT,” “OTHBPH,” “CADS,” “COND” or “SCRUB”

Performance Tests:

Enter “YES” if performance tests are used to demonstrate that the control device or combination of control devices achieves the appropriate conditions. Otherwise, enter “NO.”

* Complete “95% Performance Tests” only if “Performance Tests” is “YES.”

95% Performance Tests:

Enter “YES” if the performance tests are conducted to demonstrate compliance with 95% reduction efficiency. Otherwise, enter “NO.”

* Complete “Monitoring Options” only if “Alternate Monitoring Parameters” is “NO” and “Control Device Type” is “FLARE,” “VAPTH,” “VAPCAT,” “OTHBPH,” “CADS,” “COND” or “SCRUB.”

Monitoring Options:

Select the monitoring option that describes the monitoring parameters being used for the control device. Enter the code on the form.

For control devices other than scrubbers and non-regenerative carbon adsorbers:

| **Code** | **Description** |
| --- | --- |
| TABLE13 | Control device is using the monitoring parameters specified in Table 13 |
| ORGMON | Control device is using an organic monitoring device as allowed under § 63.143(e)(2) |

For non-regenerative carbon adsorbers:

| **Code** | **Description** |
| --- | --- |
| ORGMON | Non-regenerative carbon adsorber is using an organic monitoring device as allowed under § 63.143(e)(2) |
| REPLACE | Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval |

For scrubbers:

| **Code** | **Description** |
| --- | --- |
| ORGMON | Scrubber is using an organic monitoring device as allowed under § 63.143(e)(2) |

[Table 7a](#Tbl7a): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart FFFF: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

* Complete only for treatment processes for streams at MCPUs that meet criteria in 40 CFR § 63.2435(a)-(b) and § 63.2485 and that are not complying with the pollution prevention alternative standards §63.2495(a)(1) and (2) in lieu of the emission limitations and work practice standards contained in Table 7.

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

Series Of Processes:

Enter “YES” if the wastewater stream is treated using a series of treatment processes. Otherwise, enter “NO.”

* Complete “Hard piping” only if “Series of Processes” is “YES.” If “Series of Processes” is “NO,” go to “Biological Treatment Process.”

Hard Piping:

Enter “YES” if the wastewater stream for a combination of treatment processes is conveyed by hard piping. Otherwise, enter “NO.”

* Complete “Compliance under Title 40 CFR § 63.138(a)(7)(ii)” only if “Hard Piping” is “YES.”

Compliance Under Title 40 CFR § 63.138(a)(7)(ii):

Enter “YES” if the owner operator elects to comply with Title 40 CFR § 63.138(a)(7)(ii). Otherwise, enter “NO.”

Series Design Evaluation:

Enter “YES” if compliance for the series of treatment processes is demonstrated using design evaluation. Otherwise, enter “NO.”

* Complete “Biological Treatment Process” only if “Series of Processes” is “NO.” If “Series of Processes” is “YES,” go to “Vented to Control” on Table 7c.

Biological Treatment Process:

Select one of the following options that describe the treatment process. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| OPENBIO | Open biological treatment process |
| CLBIOAER | Closed aerobic biological treatment process |
| CLBIOAN | Closed anaerobic biological treatment process |
| NONBIO | Non-biological treatment process |

Wastewater Stream Designation:

Enter “YES” if the wastewater stream is designated as Group 1 per 40 CFR § 63.132(e). Otherwise, enter “NO.”

Wastewater Stream Treatment:

Select one of the following options that describe the treatment of the wastewater stream(s). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| 50PPMW | 50 ppmw concentration option |
| 10PPMW | 10 ppmw concentration option |
| STEAM | Design steam stripper option |
| PERC1 | Percent mass removal/destruction option by reducing the mass flow rate by the 99 percent per 40 CFR § 63.138(e)(1) |
| PERC2 | Percent removal/destruction option by reducing the mass flow rate by the Fr value per 40 CFR § 63.138(e)(2) |
| RCRA | Resource Conservation and Recovery Act (RCRA) unit option |
| RMR | Required Mass Removal (RMR) option under § 63.138(f) |
| 95RMR | 95-percent RMR option for biological processes under § 63.138(g) |

* Do Not Continue if “Wastewater Stream Treatment” is “RCRA.”

[Table 7b](#Tbl7b" \o "Table 7b): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart FFFF: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

* Complete “Steam Stripper Alternate Monitoring” only if “Wastewater Stream Treatment” is “STEAM.”

Steam Stripper Alternate Monitoring:

Enter “YES” if alternate monitoring parameters are requested and approved for the steam stripper. Otherwise, enter “NO.”

Steam Stripper AMP ID No.:

If an AMP has been approved, then enter the corresponding AMP unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the AMP approval letter. The unique identifier and/or the date of the approval letter are contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

* Do Not Complete “Treatment Process Design Evaluation” if “Biological Treatment Process” is “OPENBIO” or if “Wastewater Stream Treatment” is “STEAM.”

Treatment Process Design Evaluation:

Enter “YES” if compliance for the treatment process will be demonstrated using design evaluation. Otherwise, enter “NO.”

* Complete “Performance Test Exemption” only if “Biological Treatment Process” is “OPENBIO,” or if “Biological Treatment Process” is “CLBIOAER” or “CLBIOAN” and “Treatment Process Design Evaluation” is “NO.”

Performance Test Exemption:

Enter “YES” if the biological treatment process is exempt from performance test requirements per 40 CFR § 63.145(h)(1)(i) - (ii). Otherwise, enter “NO.”

* Complete “Combustion Process” only if “Wastewater Stream Treatment” is “PERC1” or “PERC2” and “Treatment Process Design Evaluation” is “NO.”

Combustion Process:

Enter “YES” if a combustion process is used for treatment. Otherwise, enter “NO.”

▼Do Not Continue if “Combustion Process” is “YES.”

* Complete “§ 63.145(e) Requirements Elected” only if one of the following conditions is true:
1. “Biological Treatment Processes” is “OPENBIO” or “CLBIOAER,” “Wastewater Stream Treatment” is “RMR” and “Performance Test Exemption” is “NO.”
2. “Biological Treatment Processes” is “CLBIOAER” or “CLBIOAN;” and “Wastewater Stream Treatment” is “95RMR” and “Performance Test Exemption” is “NO.”

§ 63.145(e) Requirements Elected:

Enter “YES” if the testing requirements of § 63.145(e) are elected. Otherwise, enter “NO.”

* Do not continue if “Biological Treatment Process” is “OPENBIO.”

[Table 7c](#Tbl7c" \o "Table 7c): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart FFFF: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

Vented To Control:

Enter “YES” if emissions from the treatment process are vented to a control device. Otherwise, enter “NO.”

* Complete “Fuel Gas System” only if “Biological Treatment Process” is “CLBIOAN” and “Vented to Control” is “NO.”

Fuel Gas System:

Enter “YES” if the closed anaerobic biological treatment process is vented through hard‑piping to a fuel gas system. Otherwise, enter “NO.”

**▼** Continue only if “Vented to Control” is “YES.”

Closed Vent System:

Select the option that describes the operation of the closed vent system. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| SUBPTG | Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.148 |
| SUBPTH | Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.172 |

By-pass Lines:

Select the option that describes by-pass lines on the closed vent system. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| NONE | No by-pass lines |
| FLOWIND | By-pass lines are monitored by flow indicators |
| CARSEAL | By-pass line valves are secured in the closed position with a car-seal or lock-and-key configuration |

Combination Of Control Devices:

Enter “YES” if the vent stream is treated using a combination of control devices. Otherwise, enter “NO.”

If the response to “Combination of Control Devices” is “YES,” complete one additional row on the form for each additional control device. Each row must have a unique SOP Index No.

Control Devices:

Select one of the following options that describe the control device used to treat the hazardous air pollutants (HAPs) in the vent stream(s). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| FLARE | Flare |
| BPH-44+ | Boiler or process heater with a design heat input capacity greater than or equal to 44 MW |
| BPH-VNT | Boiler or process heater into which the emission stream is introduced with primary fuel |
| BPH-HAZ | Boiler or process heater burning hazardous waste meeting 40 CFR § 63.139(d)(4)(iii) |
| HAZINC | Hazardous waste incinerator |
| VAPTH | Thermal vapor incinerator |
| VAPCAT | Catalytic vapor incinerator |
| BPH-44- | Boiler or process heater with a design heat capacity less than 44MW and into which the emission stream is not introduced with the primary fuel |
| OTHENC | Other enclosed combustion device |
| CADS | Carbon adsorber |
| COND | Condenser |
| SCRUB | Scrubber |
| OTHVRS | Other vapor recovery system |
| OTHER | Other control device |

Control Device ID No.:

If applicable, enter the identification number (ID No.) for the control device to which emissions are routed (maximum 10 characters. This number should be consistent with the control device identification number) listed on Form OP-SUM. If there is no control device, then leave this column blank.

* Complete “Compliance with 40 CFR § 63.139(c)(1) only if “Control Device Type” is “VAPTH”, “VAPCAT”, “BPH-44-” or “OTHENC.”

Compliance With 40 CFR § 63.139(c)(1):

Select one of the following options that describes the method of compliance specified in 40 CFR § 63.139(c)(1). Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| C1I | The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i) |
| C1II | The enclosed combustion device being used meets the 20 ppmv concentration provisions specified in 40 CFR § 63.139(c)(1)(ii)  |
| H3 | The enclosed combustion device being used meets the 20 ppmv concentration provisions but using alternate method specified in 40 CFR § 63.2485(h)(3) in lieu of 40 CFR § 63.139(c)(1)(ii) |
| C1III | The enclosed combustion device being used meets the 0.5 second residence time at 760 degrees C provisions specified in 40 CFR § 63.139(c)(1)(iii) |

[Table 7d](#Tbl7d): Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart FFFF: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

Process ID No.:

Enter the identification number (ID No.) for the treatment process (maximum 10 characters) as listed on Form OP-SUM (Individual Unit Summary).

SOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP and GOP index numbers, please see the Completing FOP Applications – Additional Guidance on the TCEQ website at [www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html](http://www.tceq.texas.gov/permitting/air/guidance/titlev/tv_fop_guidance.html).

Halogenated:

Select one of the following codes that describe the halogen characteristic of the stream. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| DES | The stream is designated as halogenated |
| DET | The stream is determined as halogenated  |
| NON | The stream is determined as non-halogenated |

* Complete “Halogen Reduction” only if “Halogenated” is “DES” or “DET” and “Control Device Type” is “FLARE,” “BPH-44+,” “BPH-VNT,” “BPH-HAZ,” “HAZINC,” “VAPTH,” “VAPCAT,” “BPH-44-,” or “OTHENC.”

Halogen Reduction:

Select one of the following codes that describes the halogen reduction device emission limit. Enter the code on the form.

| **Code** | **Description** |
| --- | --- |
| AFT20- | The halogen reduction device is located after the combustion control device and is reducing overall emissions of hydrogen halide and halogen HAP to a concentration ≤ 20 ppmv |
| AFT45- | The halogen reduction device is located after the combustion device and is reducing the overall emissions of hydrogen halide and halogen HAP to ≤ 0.45 kg/hr |
| AFT99+ | The halogen reduction device is located after the combustion device and is reducing overall emissions of hydrogen and halogen HAP by ≥99 percent |
| BEF | The halogen reduction device is located before the combustion control device and is reducing the halogen atom mass emission rate to ≤ 0.45 kg/hr or to a concentration ≤ 20 ppmv |

Alt 63G Mon Parameters:

Enter “YES” if the EPA Administrator has approved an AMP. Otherwise, enter “NO.”

AMP ID No.:

If an AMP has been approved, then enter the corresponding AMP unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the AMP approval letter. The unique identifier and/or the date of the approval letter are contained in the Compliance File under the appropriate account number. Otherwise, leave this column blank.

**▼** Continue only if “Alt 63G Mon Parameters” is “NO.”

* Complete “Regeneration” only if “Control Devices” is “CADS.”

Regeneration:

Enter “YES” if the carbon bed is regenerated onsite. Otherwise, enter “NO.”

* Complete “Performance Test” only if “Control Device Type” is “VAPTH,” “VAPCAT,” “BPH‑44-,” “CADS,” “COND” or “SCRUB.”

Performance Tests:

Enter “YES” if performance tests are used to demonstrate that the control device or combination of control devices achieves the appropriate conditions. Otherwise, enter “NO.”

* Complete “2485H3” only if “Performance Tests” is “YES” and “Control Devices” is “VAPTH” or “VAPCAT.”

2485(h)(3):

Enter “YES” if the method in 40 CFR § 63.2485(h)(3) is used in lieu of 40 CFR § 63.145(i)(2). Otherwise, enter “NO.”

* Complete “95% Performance Tests” only if “Performance Tests” is “YES.”

95% Performance Tests:

Enter “YES” if the performance tests are conducted to demonstrate compliance with 95% reduction efficiency. Otherwise, enter “NO.”

* Complete “Monitoring Options” only if “Alt 63G Mon Parameters” is “NO” and “Control Device Type” is “VAPTH”, “VAPCAT”, “BPH-44-”, “CADS” or “COND.”

Monitoring Options:

Select the monitoring option that describes the monitoring parameters being used for the control device. Enter the code on the form.

For control devices other than scrubbers and non-regenerative carbon adsorbers:

| **Code** | **Description** |
| --- | --- |
| TABLE13 | Control device is using the monitoring parameters specified in Table 13 |
| ORGMON | Control device is using an organic monitoring device as allowed under § 63.143(e)(2) |

For non-regenerative carbon adsorbers:

| **Code** | **Description** |
| --- | --- |
| ORGMON | Non-regenerative carbon adsorber is using an organic monitoring device as allowed under § 63.143(e)(2) |
| REPLACE | Non-regenerative carbon adsorber is replacing the carbon at a predetermined replacement interval  |

# Treatment Process Attributes

# Form OP-UA58 (Page 1)

# Federal Operating Permit Program

# Table 1: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart DD: National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
| --- | --- | --- |
|  |  |  |

| **Process ID No.** | **SOP Index No.** | **Removal or Destruction Method** | **Control Device ID No.** | **Average VOHAP Concentration** | **VOHAP Reduction** | **Stream VOHAP Concentration** | **Efficiency > 95%** | **Destruction Method** | **Direct Measurement** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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# Treatment Process Attributes

# Form OP-UA58 (Page 2)

# Federal Operating Permit Program

# Table 2a: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)

# Subpart FF: National Emission Standard for Benzene Waste Operations (Treatment Processes)

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
| --- | --- | --- |
|  |  |  |

| **Process ID No.** | **SOP Index No.** | **AMOC** | **AMOC ID No.** | **Complying With § 61.342(e)** | **Stream Combination** | **Benzene Removal** | **Process or Stream Exemption** | **Treatment Process Engineering Calculations** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
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# Treatment Process Attributes

# Form OP-UA58 (Page 3)

# Federal Operating Permit Program

# Table 2b: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)

# Subpart FF: National Emission Standard for Benzene Waste Operations (Treatment Processes)

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
| --- | --- | --- |
|  |  |  |

| **Process ID No.** | **SOP Index No.** | **Continuous Monitoring** | **Treatment Stream Unit Exemption** | **Openings** | **Fuel Gas System** | **Less Than Atmospheric** | **Closed-Vent System And Control Device** | **AMOC** | **AMOC ID No.** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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# Treatment Process Attributes

# Form OP-UA58 (Page 4)

# Federal Operating Permit Program

# Table 2c: Title 40 Code of Federal Regulations Part 61 (40 CFR Part 61)

# Subpart FF: National Emission Standard for Benzene Waste Operations (Treatment Processes)

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **By-Pass Line** | **By-Pass****Line Valve** | **Control Device Type/Operation** | **Control Device ID No.** | **Engineering Calculations** | **Alternate Monitoring Parameters** | **Carbon Replacement Interval** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 5)

# Federal Operating Permit Program

# Table 3a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart G: National Emission Standards for Organic Hazardous Air Pollutants

# From Synthetic Organic Chemical Manufacturing Industry Wastewater

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process****ID No.** | **SOP****Index No.** | **Series of Processes** | **Hard Piping** | **Compliance Under Title 40 CFR § 63.138(a)(7)(ii)** | **Series Design Evaluation** | **Biological Treatment Process** | **Wastewater Stream Designation** | **Wastewater Stream Treatment** | **Treatment Process Design Evaluation** | **Performance Test Exemption** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 6)

# Federal Operating Permit Program

# Table 3b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart G: National Emission Standards for Organic Hazardous Air Pollutants

# From Synthetic Organic Chemical Manufacturing Industry Wastewater

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process****ID No.** | **SOP****Index No.** | **Combustion Process** | **§ 63.145(e) Requirements Elected** | **Vented To Control** | **Fuel Gas System** | **Closed Vent System** | **By-Pass Lines** | **Combination of Control Devices** | **Control Device Type** | **Control Device ID No.** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 7)

# Federal Operating Permit Program

# Table 3c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart G: National Emission Standards for Organic Hazardous Air Pollutants

# From Synthetic Organic Chemical Manufacturing Industry Wastewater

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process****ID No.** | **SOP****Index No.** | **Compliance With Title 40 CFR § 63.139(c)(1)** | **Alternate Monitoring Parameters** | **AMP ID No.** | **Regeneration** | **Performance Tests** | **95% Reduction Efficiency** | **Monitoring Options** | **Continuous Monitoring** | **Continuous Monitoring ALT ID No.** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 8)

# Federal Operating Permit Program

# Table 4a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart CC: National Emission Standard Hazardous Air Pollutants from Petroleum Refineries

# Texas Commission on Environmental Quality

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# Treatment Process Attributes

# Form OP-UA58 (Page 9)

# Federal Operating Permit Program

# Table 4b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart CC: National Emission Standard Hazardous Air Pollutants from Petroleum Refineries

# Texas Commission on Environmental Quality

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# Treatment Process Attributes

# Form OP-UA58 (Page 10)

# Federal Operating Permit Program

# Table 4c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart CC: National Emission Standard Hazardous Air Pollutants from Petroleum Refineries

# Texas Commission on Environmental Quality

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# Treatment Process Attributes

# Form OP-UA58 (Page 11)

# Federal Operating Permit Program

# Table 4d: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart CC: National Emission Standard Hazardous Air Pollutants from Petroleum Refineries

# Texas Commission on Environmental Quality

**This table has been removed from the form.**

# Treatment Process Attributes

# Form OP-UA58 (Page 12)

# Federal Operating Permit Program

# Table 5a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart U: National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Series of Processes** | **Hard Piping** | **Compliance Under Title****40 CFR § 63.138(a)(7)(ii)** | **Series Design Evaluation** | **Biological Treatment Process** | **Wastewater Stream Designation** | **Wastewater Stream Treatment** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 13)

# Federal Operating Permit Program

# Table 5b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart U: National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Steam Stripper Alternate Monitoring** | **Steam Stripper AMP ID No.** | **Treatment Process Design Evaluation** | **Performance Test Exemption** | **Combustion Process** | **§ 63.145(e) Requirements Elected** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 14)

# Federal Operating Permit Program

# Table 5c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart U: National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Vented to Control** | **Fuel Gas System** | **Closed Vent System** | **By-pass Lines** | **Combination of Control Devices** | **Control Devices** | **Control Device ID No.** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 15)

# Federal Operating Permit Program

# Table 5d: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart U: National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Compliance with 40 CFR****§ 63.139(c)(1)** | **Alternate Monitoring Parameters** | **AMP ID No.** | **Regeneration** | **Performance Tests** | **95% Performance Tests** | **Monitoring Options** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 16)

# Federal Operating Permit Program

# Table 6a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart JJJ: National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Series of Processes** | **Hard Piping** | **Compliance Under Title****40 CFR § 63.138(a)(7)(ii)** | **Series Design Evaluation** | **Biological Treatment Process** | **Wastewater Stream Designation** | **Wastewater Stream Treatment** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 17)

# Federal Operating Permit Program

# Table 6b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart JJJ: National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Steam Stripper Alternate Monitoring** | **Steam Stripper AMP ID No.** | **Treatment Process Design Evaluation** | **Performance Test Exemption** | **Combustion Process** | **§ 63.145(e) Requirements Elected** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 18)

# Federal Operating Permit Program

# Table 6c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart JJJ: National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Vented to Control** | **Fuel Gas System** | **Closed Vent System** | **By-pass Lines** | **Combination of Control Devices** | **Control Devices** | **Control Device ID No.** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 19)

# Federal Operating Permit Program

# Table 6d: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart JJJ: National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Compliance with 40 CFR****§ 63.139(c)(1)** | **Alternate Monitoring Parameters** | **AMP ID No.** | **Regeneration** | **Performance Tests** | **95% Performance Tests** | **Monitoring Options** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 20)

# Federal Operating Permit Program

# Table 7a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart FFFF: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Series of Processes** | **Hard Piping** | **Compliance Under Title 40 CFR § 63.138(a)(7)(ii)** | **Series Design Evaluation** | **Biological Treatment Process** | **Wastewater Stream Designation** | **Wastewater Stream Treatment** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 21)

# Federal Operating Permit Program

# Table 7b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart FFFF: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Steam Stripper Alternate Monitoring** | **Steam Stripper AMP ID No.** | **Treatment Process Design Evaluation** | **Performance Test Exemption** | **Combustion Process** | **§ 63.145(e) Requirements Elected** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 22)

# Federal Operating Permit Program

# Table 7c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart FFFF: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process ID No.** | **SOP Index No.** | **Vented to Control** | **Fuel Gas System** | **Closed Vent System** | **By-pass Lines** | **Combination of Control Devices** | **Control Devices** | **Control Device ID No.** | **Compliance with 40 CFR § 63.139(c)(1)** |
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# Treatment Process Attributes

# Form OP-UA58 (Page 23)

# Federal Operating Permit Program

# Table 7d: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)

# Subpart FFFF: National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

# Texas Commission on Environmental Quality

| **Date** | **Permit No.:** | **Regulated Entity No.** |
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| **Process****ID No.** | **SOP****Index No.** | **Halogenated** | **Halogen Reduction** | **Alt 63G Mon Parameters** | **AMP ID No.** | **Regeneration** | **Performance Tests** | **2485(h)(3)** | **95% Performance Tests** | **Monitoring Options** |
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