## Form OP-UA28 - Instructions Polymer Manufacturing Attributes Texas Commission on Environmental Quality

The unit attributes (OP-UA) forms are used to provide a description and data pertaining to all emission units, emission points, processes and control devices with potentially applicable requirements associated with a particular regulated entity (RN) number and application. The information will be provided in an excel format. Each OP-UA form will include sheets for General Information, a Table of Contents, OP-SUM, OP-REQ2, and the unit attribute tables. The individual unit summary (OP-SUM) information and the negative applicable/superseded requirement determinations (OP-REQ2) will be provided on each individual OP-UA form for the applicable units identified in the unit attribute tables.

## **General Information Sheet**

The General Information sheet holds the permit information. The following permit application information is requested for the site:

## Date:

Enter the date the application is being submitted by the applicant to TCEQ (MM/DD/YYYY). Any subsequent submittals must show the date of revision.

## Customer Reference No. (CN):

Enter the customer reference number (CNXXXXXXX). This number is issued by TCEQ as part of the central registry process. If a customer reference number has not yet been issued, leave this space blank. Do not enter permit numbers, project numbers, account numbers, etc., in this space.

## **Regulated Entity No. (RN):**

Enter the regulated entity reference number for the site (RNXXXXXXX). This number is issued by TCEQ as part of the central registry process. If a regulated entity reference number has not yet been issued, leave this space blank. Do not enter permit numbers, project numbers, account numbers, etc., in this space.

#### Permit No.:

Enter the permit number assigned by TCEQ. Leave the permit number blank if a permit number has not been assigned.

#### Permit Area Name:

Enter the name of the application area (maximum 50 characters). This should be the same name provided on Form OP-1 (Site Information Summary).

#### **Permit Type:**

Choose the type of permit for which this application is being submitted from the dropdown menu (SOP, GOP, TOP). Information on the different permit types can be found on TCEQ's website at: www.tceq.texas.gov/permitting/air/titlev/permit\_types.html.

#### **Project Type:**

Choose the project type for which this application is being submitted from the dropdown menu (Initial, Revision, Renewal).

#### Submission Type:

Choose the submission type for which this form is being submitted from the dropdown menu (New Application, Existing Application Update).

#### **Project Number:**

Enter the project number assigned by TCEQ. Leave the project number blank if a project number has not been assigned.

Title V Form Release Date, Form Number, APD ID Number, and Version Revised Date are present and cannot be altered.

### **Table of Contents Sheet**

The Table of Contents lists all the sheets in the UA Form. If information is submitted on the OP-SUM, OP-REQ2 or the Unit Attribute tables, the "Data Submitted" column will display a "Yes". If no information is submitted, the "Data Submitted" column will remain blank. The Table of Contents information is auto populated. Applicants will not need to submit any information in the Table of Contents.

#### **Instructions for OP-SUM Sheet**

## General:

All processes with one or more potentially applicable requirements addressed in this form must be identified on the OP-SUM sheet. The term "process" refers to a collection of units or devices that have a physical relationship, or source cap, where a regulatory requirement is potentially applicable to the process as a whole.

The purpose of this sheet is to list individual processes addressed in the Federal Operating Permit (FOP) application and to provide identifying information and preconstruction authorizations. This form is also used to designate members of groups.

The corresponding preconstruction authorization for process must also be listed on this form. For processes which were authorized to construct or modify under Permits by Rule (PBR), list all applicable PBR information, including registration numbers. If a process is authorized under more than one preconstruction authorization, then list all applicable preconstruction authorizations, including any Prevention of Significant Deterioration (PSD) and/or nonattainment permit(s).

## **Groups:**

- A "group" is a collection of units/processes or devices that have identical applicability (or non-applicability) determinations and may, or may not, have a physical relationship.
- Group members may have different 30 TAC Chapter 116 or 30 TAC Chapter 106 preconstruction authorizations.
- Groups may be used on UA forms only if all unit attributes are identical.
- All groups must be mutually exclusive. Processes cannot be listed in more than one group on a given UA form.
- Grouping is optional.
- Groups are assigned an ID No. by the applicant, which must begin with the prefix "GRP" followed by a maximum of eleven characters (GRPXXXXXX).

#### **Processes:**

- A "process" is a quasi-unit representing a collection of units or devices that have a physical relationship and for which a regulatory requirement applies to the process as a whole.
- Individual units in a process do not need to be identified unless they have potentially applicable requirements unto themselves. Those individual units should be listed on the appropriate OP-UA form.

#### Specific:

## Table 1

# Unit Action Indicator (Unit AI):

Select "A" from the dropdown menu if the process indicated is an addition to the permit. Select "D" from the dropdown menu if the existing process indicated is being deleted from the permit. If the process is not being added/deleted from the permit, leave blank.

## **Revision No.:**

Complete this section only for a permit revision or renewal. Enter the revision number identified on Form OP-2, Table 2. This number will link the specified change to the appropriate permit revision. If no changes are made to a process in the permit, leave blank.

# **Process ID No.:**

Each process must be assigned an identification number. (Maximum 14 characters)

• Processes are assigned an ID No. by the applicant, which must begin with the prefix "PRO" followed by a maximum of eleven characters (PROXXXXXX).

# Group ID No.:

If applicable, enter the unique identification number for the group which includes this process (GRPXXXXXX) ("GRP" followed by a maximum of 11 characters) If the process is not a member of a group, leave this column blank. (See general instructions, above, for information regarding requirements for grouping processes in FOP applications.)

# **Process Name/Description:**

Each process must be given a name or description that distinguishes it from other processes as much as practicable. The Name/Description should clearly indicate the type of process. (Maximum 50 characters)

- Enter a text name or description for the process from STARS whenever possible.
- If no STARS name currently exists, a new name that is consistent with the existing naming convention must be provided by the applicant.

*Example:* The following example is intended as guidance on completion of columns on OP-SUM. It should be assumed that all criteria for inclusion in the application are met. Criteria for grouping are also assumed to be satisfied.

Process ID No.	Group ID No.	Name/Description
PRO-COAT1	GRPCOATING	Surface Coating Line 1
PRO-COAT2	GRPCOATING	Surface Coating Line 2
PRO-COAT3		Surface Coating Line 3

# CAM (For reference only):

Indicate if the process is subject to 40 CFR Part 64 by selecting "Y" from the dropdown menu in the "CAM" column next to the process. Please refer to 40 CFR Part 64 to determine applicability. *Certification by the Responsible Official (RO) pursuant to 30 TAC § 122.165 does not extend to the information which is designated on forms as "For reference only."* 

# **Preconstruction Authorizations (PCA):**

At least one PCA must be indicated for each process; however, a process may have multiple authorizations. *All preconstruction authorizations listed on this form must also be identified on Form OP-REQ1.* When a process has multiple authorizations, each PCA must be listed in a separate row.

The following examples are intended as guidance on completion of columns for the preconstruction authorizations. The examples are followed by specific instructions for each column.

Example 1: Adding multiple PCA Categories

Unit AI	Revision No.	Unit ID No.	Group ID No.	Unit Name/Description	CA M	PCA AI	Preconstruction Authorization (PCA) Category		Permit By Rule (PBR) Number	PBR Effective Date
А		Flare1		Diamine Flare	Y	А	NSR Permit	1234		
А		Flare1		Diamine Flare	Y	A	PSD	PSDTX1234		
А		Flare1		Diamine Flare	Y	А	PBR	23456, 34567	106.261	11/01/2003
А		Flare1		Diamine Flare	Y	A	PBR	23456, 34567	106.262	11/01/2003

Example 2: Adding and deleting a PCA

UI A	Revision No.	Unit ID No.	Group ID No.	Unit Name/Description	CAM	PCA AI	Preconstruction Authorization (PCA) Category	Authorization/ Registration Number	Permit By Rule (PBR) Number	PBR Effective Date
		T-3	GRPTANKS	Tank 3		А	Standard Permit	12345		
		T-3	GRPTANKS	Tank 3		D	PBR		106.432	09/04/2000

# Preconstruction Authorization Action Indicator (PCA AI):

Select "A" from the dropdown menu if a preconstruction authorization is being added for the process. Select "D" from the dropdown menu if a preconstruction authorization is being deleted from the process. If a preconstruction authorization is not being added/deleted from the process, leave blank.

# Preconstruction Authorization (PCA) Category:

Select from the dropdown menu the category of the PCA being added or deleted.

- PBR Permit by Rule claimed or registered under 30 TAC Chapter 106
- Standard Permit 30 TAC Chapter 116 and non-rule Air Quality Standard Permits
- NSR Permit 30 TAC Chapter 116 preconstruction authorizations
- PSD Prevention of Significant Deterioration Permits
- Nonattainment Nonattainment Permits
- GHG Greenhouse Gas Permits
- 112(G) [HAP] Hazardous Air Pollutant Permits
- MSW or IHW Municipal Solid Waste or Industrial Hazardous Waste Permits
- Exemption De Minimis Facilities or Sources authorized by 30 TAC Chapter 116, § 116.119

## Authorization/Registration Number:

List all TCEQ permit numbers for 30 TAC Chapter 116 preconstruction authorizations, Title I preconstruction authorizations (PSD and nonattainment permits) and 30 TAC Chapter 106 (PBR) registration numbers, under which the process is operating.

- **30 TAC Chapter 116 Permits:** Enter the TCEQ permit number, for example, 12345. This includes special permits and standard permit registrations.
- **Prevention of Significant Deterioration (PSD) Permit:** Enter the PSD permit number (PSDTXXXX), for example, PSDTX123. If the PSD permit has been modified, include the "M" suffix (PSDTXXXXMXX), for example, PSDTX123M5. *Title I authorizations should only be listed for processes addressed by the PSD or nonattainment permits*.
- Nonattainment Permit: Enter each nonattainment permit number (NXXX), for example, N123. If the nonattainment permit has been modified, include the "M" suffix (NXXXMXX), for example, N123M5. *Title I authorizations should only be listed for processes addressed by the PSD or nonattainment permits*.
- **Permit by Rule (previously Standard Exemption):** Enter the PBR Registration No. for each PBR registered under 30 TAC Chapter 106 and each standard exemption previously registered under 30 TAC Chapter 116.
- **Exemption:** Enter 116.119 for a de minimis facility or source, which has other potentially applicable or applicable requirements (these are authorized by 30 TAC Chapter 116, § 116.119). *De minimis facilities or sources should not be included if there are no other potentially applicable or applicable requirements.*

#### Permit by Rule (PBR) Number:

For each PBR claimed or registered under 30 TAC Chapter 106, and each standard exemption claimed or registered previously under 30 TAC Chapter 116, enter the number in the appropriate format shown below.

Note: All processes authorized by PBR must also be identified on Form OP-PBRSUP.

Format	et PBR/standard exemption claimed or registered date	
106.XXX	Authorized on or after March 14, 1997 (except 106.181 is on or after December 27, 1996)	
XXX	Authorized prior to March 14, 1997	

XXX = 30 TAC Chapter 116 standard exemption number or 30 TAC Chapter 106 PBR number.

# **PBR Effective Date:**

For each PBR claimed or registered under 30 TAC Chapter 106 and each standard exemption claimed or registered, enter the effective date of the rule. *MM/DD/YYYY = Effective date of the Standard Exemption or PBR in effect at the time claimed or granted. Information on version dates is available at:* 

Information on Chapter 116 version dates is available at:

www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/oldselist/se\_index.html. Information on Chapter 106 version dates is available at: www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/old106list/index106.html.

Please note that prior to March 14, 1997, a standard exemption list was incorporated by reference into 30 TAC Chapter 116 and each standard exemption had an assigned number, e.g., 112. Each standard exemption now resides in a section of 30 TAC Chapter 106 (e.g., 30 TAC § 106.148) and now is referred to as a PBR.

(Standard exemptions were readopted under the PBR designation on March 14, 1997.) Information regarding PBRs may be found on the TCEQ website at <u>https://www.tceq.texas.gov/permitting/air/permitbyrule/air-pbr</u>.

The applicant has the option of claiming a newer and more stringent version of the standard exemption or PBR if the original applicable version of the standard exemption or PBR cannot easily be determined. As an example of a standard exemption authorized before March 14, 1997, Standard Exemption No. 6 had an effective date of August 30, 1988. It was then amended with a new effective date of July 20, 1992. The standard exemption identifier for a compressor engine constructed in 1993 and registered under Standard Exemption No. 6 would be represented as:

Permit By Rule (PBR) Number	PBR Effective Date	
6	07/20/1992	

As an example of a PBR authorized on or after March 14, 1997, Standard Exemption No. 6 had an effective date of June 7, 1996. It was then amended and moved to 30 TAC § 106.512 with an effective date of March 14, 1997. The PBR identifier for a compressor engine constructed in 1998 and registered under 30 TAC § 106.512 would be represented as:

Permit By Rule (PBR) Number	PBR Effective Date
106.512	03/14/1997

# **Instructions for OP-REQ2 Sheet**

#### General:

The purpose of this sheet is to document negative applicability from potentially applicable requirements or to document duplicative, redundant, and or contradicting requirements that have been superseded by a more stringent or equivalent requirement for processes when a permit shield is requested. Negative applicability or superseded requirement determinations when a permit shield is NOT requested may be documented on this sheet OR the appropriate unit attribute table.

#### **OP-UA28 Instructions**

A negative applicability determination is any regulatory citation that provides the basis whereby every operating condition of a process is not subject to a regulation. For example, Title 40 Code of Federal Regulation § 60.110b(a) [40 CFR § 60.110b(a)] could be the regulatory basis for a negative applicability determination for a VOC storage tank of less than 75 cubic meters; therefore, the storage tank is completely exempt from 40 CFR Part 60, Subpart Kb.

Note: Numerous regulatory citations appear to authorize exemptions to qualifying processes from those regulations. However, closer examination typically reveals that there are still some requirements which must still be met (such as monitoring and/or recordkeeping).

For certain processes subject to certain 40 CFR Part 63 standards, other federal regulations may apply. In many instances one of the overlapping regulations may specify which rule supersedes the other. The regulation may state that the owner or operator only has to comply with a specific subpart after the compliance date or it may state that compliance with the subpart is deemed to be in or constitute compliance with other subparts. Although superseded rules do not qualify as negative applicability determinations, it has been determined that these instances can be documented on the OP-REQ2, if the applicant elects to comply only with the superseding requirement. For example, a surface coating process subject to 40 CFR Part 63, Subpart IIII, may not be required to comply with 40 CFR Part 63, Subpart PPPP due to rule overlap of 40 CFR Part 63, Subpart IIII. In this case, the permit applicant may request a permit shield from 40 CFR Part 63, Subpart PPPP. In this case, the applicant must submit the superseding requirement citation §63.4481(d), and a textual description of the superseding determination, if they elect to comply with only the superseding requirement.

When a process has one or more potential applicable requirements, the applicant must list all the requirements for which negative applicability or superseded requirement determinations can be made. Once the negative applicability or superseded requirement determinations have been made, indicate the citation and reason for the non-applicability or superseded requirement in the appropriate columns. Indicate the determinations for all potentially applicable requirements for each process before listing the next process.

Negative applicability or superseded requirement determinations for potentially applicable requirements, confirmed by TCEQ, may be approved as a permit shield (see instructions outlined in Area Wide Applicability Determinations, Form OP-REQ1, to request a permit shield). If a permit shield is requested, the determinations are always required on the OP-REQ2 sheet. For additional information relating to permit shields, refer to the TCEQ guidance document entitled "Site Operating Permit (SOP) Permit Shield Guidance found on TCEQ's website at: www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_site\_guidance.html.

# **Specific:**

Fill out the OP-REQ2 sheet to provide a negative applicability determination for processes included on this OP-UA form. If the process is not submitted on an OP-UA form, submit the negative applicability determination on the standalone OP-REQ2 form.

# Unit Action Indicator (AI):

Complete this section only for a permit revision or renewal. Select "A" from the dropdown menu if the negative applicability or superseded requirement is an addition to the permit. Select "D" from the dropdown menu if the negative applicability or superseded requirement is being deleted from the permit. For revisions to existing negative applicability or superseded requirements in the permit, use the "D" indicator for the existing permit shield and the "A" indicator for the revised permit shield.

#### **Revision No.:**

Complete this section only for a permit revision or renewal. Enter the revision number identified on Form OP-2, Table 2 (only for revision items within the application). This number will link the specific negative applicable requirement determination to the appropriate revision.

#### **Process ID No.:**

Select the identification number (ID No.) (maximum 14 characters) of the process as listed on the OP-SUM sheet.

# **Potentially Applicable Regulatory Name:**

Select the name of the potentially applicable requirement from the dropdown menu for which negative applicability or superseded requirement is being demonstrated. If the potentially applicable regulatory name is not found in the dropdown menu, enter it manually (maximum 50 characters).

Note: Permit shields cannot be granted for permit authorizations of any kind (i.e. - PSD, NSR permit, Acid Rain, etc.).

## Negative Applicability or Superseded Requirement Citation:

Enter the citation of the paragraph of the rule that was used to determine negative applicability or superseded requirements. Provide the citation detail to the level of the paragraph allowing the exemption, exclusion, or non-applicability. If there is more than one citation for determining negative applicability or superseded requirements, select the most appropriate or the clearest (least likely to be misinterpreted). Negative applicability or superseded requirement determinations by the applicant are subject to auditing during the permit application review. The applicant must always indicate the negative applicability or superseded requirement citation on the OP-REQ2. For examples on the level of detail for citations, see table below (maximum 36 characters).

Regulation	Potentially Applicable Regulatory Name (Input Format)	Negative Applicability or Superseded Requirement Citation (Input Format)
30 TAC Chapters 111, 112, 113, 115 and 117	Chapter 111	111.XXX(x)(yy)(zz)
	Chapter 112	112.XXX(x)(yy)(zz)
	Chapter 113	§ 113.XXX(x)(yy)(zz)
	Chapter 115, Storage of VOCs	§ 115.XXX(x)(yy)(zz)
	Chapter 117, ICI	§ 117.XXX(x)(yy)(zz)
40 CFR Part 60, Subparts, New Source Performance Standards (NSPS)	NSPS XXX	§ 60.XXX(x)(yy)(zz)
40 CFR Part 61, Subparts, National Emission Standards for Hazardous Air Pollutants (NESHAP)	NESHAP XX	61.XX(x)(yy)(zz)
40 CFR Part 63, Subparts, NESHAP by source category, including hazardous organic (HON)	MACT XX	§ 63.XXX(x)(yy)(zz)

Example Applicable Regulatory Requirements\*

\* This list is not intended to be exhaustive

# Negative Applicability/Superseded Requirement Reason:

Enter a textual description indicating the reason for the negative applicability or superseded requirement determination. If a permit shield is requested, the textual description provided will be recreated as the *Basis of Determination* for the permit shield in the permit. The description may include rule text, rule preamble, or other text resulting from a historical rule interpretation, EPA applicability determination Index (ADI), or case law. Use multiple lines if necessary (maximum 250 characters).

# **OP-UA28** Form Unit Attribute Tables- Instructions

# General:

This form is used to provide a description and data pertaining to all polymer manufacturing facilities 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 polymer manufacturing facility, 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 1a- 1f:Title 40 Code of Federal Regulations Part 60, Subpart DDD: Standards of Performance for<br/>Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

The Texas Commission on Environmental Quality (TCEQ) Regulated Entity Number (RNXXXXXXX) and 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), the date of the revision submittal, and the regulated entity number.

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 TCEQ requires that a Core Data Form be submitted on all incoming registrations unless a Regulated Entity and Customer Reference Number has been issued by the TCEQ and no core data information has changed. If a Regulated Entity or Customer Reference Number has been issued, then the number must be noted on the request or applicable form. For more information regarding the Core Data Form, call (512) 239-5175 or go to the TCEQ website at: www.tceq.texas.gov/permitting/central\_registry.

#### **Specific:**

# Table 1a:Title 40 Code of Federal Regulations Part 60, Subpart DDD: Standards of Performance for Volatile<br/>Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

# Process ID No.:

Enter the identification number (ID No.) for the polymer manufacturing facility (maximum 14 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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html.

### **Manufactured Product:**

Select one of the following options to describe the product manufactured by the affected facility. Enter the code on the form.

Code	Description
PROPYL	Polypropylene or polyethylene
STYRENE	Polystyrene
PET	Poly (ethylene terephthalate)
OTHER	The affected facility is not involved with the manufacture of polypropylene, polyethylene,
	polystyrene, or poly (ethylene terephthalate)

Note: If "Manufactured Product" is "PROPYL," "STYRENE," or "PET," Form OP-UA12 entitled "Fugitive Emission Unit Attributes," Table 5 must be submitted with this application.

# ▼ Continue only if "Manufactured Product" is "PROPYL," "STYRENE," or "PET."

#### **Continuous Process:**

Enter "YES" if the affected facility process is continuous. Otherwise, enter "NO."

#### ★ Complete the rest of Table 1 only if "Continuous Process" is "YES."

#### **Construction/Modification Date:**

Select one of the following options that describes the date of commencement of the most recent construction, reconstruction, or modification. Enter the code on the form.

Code	Description
87-	On or before September 30, 1987
87-89	After September 30, 1987 and on or before January 10, 1989
89+	After January 10, 1989

▼ Continue only if "Construction/ Modification Date" is "87-89" or "89+."

#### **Experimental Process Line:**

Enter "YES" if the affected facility is an experimental process line. Otherwise, enter "NO."

- ★ Complete the rest of Table 1 only if "Experimental Process Line" is "NO."
- ★ Complete "Modified after Applicability Date" if "Manufactured Product" is "STYRENE" or "PET."

### Modified after Applicability Date:

Enter "YES" if the affected facility modified or reconstructed after its applicability date. Otherwise, enter "NO."

- ★ Complete "Table 2 Threshold Emission Rates" only for processes that meet one of the following criteria:
  - 1. "Manufactured Product" is "PROPYL" and "Construction/Modification Date" is
    - "87-89"; or
  - 2. "Manufactured Product" is ASTYRENE" or "PET," and "Modified after Applicability Date" is "YES."

## Table 2 Threshold Emission Rates:

Select one of the following options to describe the uncontrolled emission rate. Enter the code on the form.

Code	Description
LESS	The uncontrolled emission rate is less than or equal to the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560
MORE	The uncontrolled emission rate is greater than the uncontrolled threshold emission rates in Table 2 of 40 CFR § 60.560

# Table 1b:Title 40 Code of Federal Regulations Part 60, Subpart DDD: Standards of Performance for Volatile<br/>Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

## **★** Complete only if "Manufactured Product" is "STYRENE" or "PET."

#### **Process ID No.:**

Enter the identification number (ID No.) for the polymer manufacturing facility (maximum 14 characters) as listed on Form OP-SUM entitled "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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html.

#### \* Complete "Control Device Method" only if "Table 2 Threshold Emission Rates" is "MORE."

#### **Control Device Modification:**

Enter "YES" if the affected facility is controlled by an existing control device that has been modified, reconstructed, or replaced. Otherwise, enter "NO."

- ★ Complete the rest of Table 1b only for processes that meet one of the following criteria:
  - 1. "Control Device Modification" is "YES"; or
  - 2. "Manufactured Product" is "STYRENE" and "Modified after Applicability Date" is "NO."

# **Emergency Vapor Recovery System:**

Enter "YES" if emissions are routed through an existing emergency vapor recovery system (EVRS). Otherwise, enter "NO."

## ★ Complete "EVRS Modification Date" only if "Emergency Vapor Recovery System" is "YES."

#### **EVRS Modification Date:**

Select one of the following options to describe the date which the EVRS was modified, reconstructed, or replaced. Enter the code on the form.

Code	Description
87-	On or before September 30, 1987
87+	After September 30, 1987

### ★ Complete the rest of Table 1 only if "EVRS Modification Date" is "87+."

#### **Emission Control Method:**

Select one of the following options to describe the means by which total organic compound (TOC) emissions are limited from the material recovery section. Enter the code on the form.

Code	Description
TOC	Facility limits continuous TOC emissions
OUTLET	Facility limits outlet gas stream temperatures for each final condenser
562A	Facility is choosing to comply with 40 CFR § 60.562-1(a) (1) (I) (A)
562B	Facility is choosing to comply with 40 CFR § 60.562-1(a) (1) (I) (B)
562C	Facility is choosing to comply with 40 CFR § 60.562-1(a) (1) (I) (C)

## ★ Complete the rest of Table 1b only if "Emission Control Method" is "TOC," "562A," "562B," or "562C."

#### **Control Device:**

Select one of the following options to describe the control device of the system. Enter the code on the form.

Code	Description
ABSORB	An absorber is the final system unit
CONDEN	A condenser is the final system unit
CARBADS	A carbon adsorber is the final system unit
CATINC	Catalytic incinerator
INCIN	Incinerator other than a catalytic incinerator
FLARE	Flare
BOIL150-	Boiler or process heater with a design heat input capacity is less than 150 MMBtu/hr
BOIL150+	Boiler or process heater with a design heat input capacity is greater than or equal to
	150 MMBtu/hr
OTHER	Another type of control device is utilized

#### **Control Device ID No.:**

Enter the identification number (ID No.) for the control device to which emissions are routed (maximum 14 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 1c:Title 40 Code of Federal Regulations Part 60, Subpart DDD: Standards of Performance for Volatile<br/>Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

# ★ Complete Table 1c only if "Manufactured Product" is "PET" and "Modified after Applicability Date" is "NO."

#### Process ID No.:

Enter the identification number (ID No.) for the polymer manufacturing facility (maximum 14 characters) as listed on Form OP-SUM entitled "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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html.

#### **Uses Dimethyl Terephthalate Process:**

Enter "YES" if the process line uses the dimethyl terephthalate process. Otherwise, enter "NO."

★ Complete "Esterification Vessels in the Raw Materials Preparation Area" only if "Uses Dimethyl Terephthalate Process" is "NO."

#### **Esterification Vessels in the Raw Materials Preparation Area:**

Enter "YES" if the affected facility is the esterification vessels in the raw materials preparation area. Otherwise, enter "NO."

## ★ Complete "Material Recovery Section" only if "Uses Dimethyl Terephthalate Process" is "YES."

#### **Material Recovery Section:**

Enter "YES" if the affected facility is the material recovery section. Otherwise, enter "NO."

### ★ Complete "TOC Emissions" only if "Material Recovery Section" is "YES."

#### **TOC Emissions:**

Select one of the following options to describe the TOC limited emissions. Enter the code on the form.

Code	Description
0.018-	TOC emissions are less than or equal to 0.018 kg TOC per Mg product (0.036 lbs/ton)
0.018 +	TOC emissions are greater than 0.018 kg TOC per Mg product (0.036 lbs/ton)

#### **PET Control Device:**

Select one of the following options to describe the control device of the system. Enter the code on the form.

Code ABSORB CONDEN CARBADS CATINC INCIN FLARE BOIL150- BOIL 150+	Description An absorber is the final system unit A condenser is the final system unit A carbon adsorber is the final system unit Catalytic incinerator Incinerator other than a catalytic incinerator Flare Boiler or process heater with a design heat input capacity less than 150 MMBtu/hr Pailer or process heater with a design heat input capacity greater than or equal to 150 MMBtu/hr
BOIL150-	
BOIL150+ OTHER	Boiler or process heater with a design heat input capacity greater than or equal to 150 MMBtu/hr Another type of control device is utilized

#### **Control Device ID No.:**

If applicable, enter the identification number (ID No.) for the control device to which emissions are routed (maximum 14 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 the rest of Table 1c only if "Material Recovery Section" is "NO" or "Esterification Vessels in the Raw Materials Preparation Area" is "NO."

## **Using Stream-Jet Ejectors:**

Enter "YES" if steam-jet ejectors are used. Otherwise, enter "NO."

# **Finishers:**

Select one of the following options to describe the number of finishers. Enter the code on the form.

Code	Description
SINGLE	Single end finisher
MULT	Multiple end finishers

## **Viscosity of Product:**

Select one of the following options to describe the viscosity types. Enter the code on the form.

Code	Description
LOW	Low viscosity product
HIGH	High viscosity product

 Tables 1d:
 Title 40 Code of Federal Regulations Part 60, Subpart DDD: Standards of Performance for Volatile

 Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

## ▼ Complete only if "Manufactured Product" is "PROPYL."

#### **Process ID No.:**

Enter the identification number (ID No.) for the polymer manufacturing facility (maximum 14 characters) as listed on Form OP-SUM entitled "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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv\_fop\_guidance.html.

### **Polyolefin Production:**

Select one of the following options to describe the number of polyolefin (propylene, low density polyethylene, high density polyethylene, or their copolymers) produced in a process line. Enter the code on the form.

Code	Description
1-	One or no polyolefin is produced
1+	More than one polyolefin is produced

# ▼ Continue only if "Table 2 Threshold Emission Rates" is "MORE" or "Construction/Modification Date" is "89+."

#### **Process Emissions:**

Select one of the following options to describe the vent gas stream emissions process. Enter the code on the form.

Code	Description
CONT	Individual vent gas streams emit continuous emissions
INTER	Individual vent gas streams emit intermittent emissions
BOTH	Process contains vent gas streams, some of which are emitted continuously and some which are
	emitted intermittently
NONE	Process section does not emit VOC emissions

## ★ Complete "Uncontrolled Annual Emissions" and "Weight Percent TOC" Only If "Process Emissions" Is "CONT" OR "BOTH."

## **Uncontrolled Annual Emissions:**

Select one of the following emission rates from an individual vent of a new, modified, or reconstructed facility. Enter the code on the form.

Code	Description
1.6-	Uncontrolled annual emissions are less than 1.6 Mg/yr (1.76 tpy)
1.6+	Uncontrolled annual emissions are greater than or equal to 1.6 Mg/yr (1.76 tpy)

## Weight Percent TOC:

Select one of the following TOC weight percent's from an individual vent of a new, modified, or reconstructed facility. Enter the code on the form.

Code	Description
0.1-	Weight percent TOC is less than 0.10%
0.1 +	Weight percent TOC is greater than or equal to 0.10%

# Table 1e:Title 40 Code of Federal Regulations Part 60, Subpart DDD: Standards of Performance for Volatile<br/>Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

# ★ Complete only if "Manufactured Product" is "PROPYL" and "Process Emissions" is "CONT" or "BOTH."

#### **Process ID No.:**

Enter the identification number (ID No.) for the polymer manufacturing facility (maximum 14 characters) as listed on Form OP-SUM entitled "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 index numbers, please go to the TCEQ website at www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

Note: These questions only pertain to those vent gas streams which are continuously emitted.

#### **Control of Continuous Emissions:**

Select one of the following options to describe the control of the continuous emissions. Enter the code on the form.

Code	Description
ALL	All continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561)
SOME	Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561)
NONE	Vent gas stream emissions are not controlled with an existing control device (as defined in 40 CFR § 60.561)

# \* Complete "Continuous Control Device" only if "Control of Continuous Emissions" is "ALL" or "SOME."

#### **Continuous Control Device:**

Select one of the following options to describe the control device of the system. Enter the code on the form.

Code	Description
ABSORB	Absorber
CONDEN	Condenser
CARBADS	Carbon adsorber
CATINC	Catalytic incinerator
INCIN	Incinerator other than a catalytic incinerator
FLARE	Flare
BOIL150-	Boiler or process heater with a design heat input capacity less than 150 MMBtu/hr
BOIL150+	Boiler or process heater with a design heat input capacity greater than or equal to 150 MMBtu/hr
OTHER	Another type of control device is utilized (e.g., material recovery system)

### **Control Device ID No.:**

Enter the identification number (ID No.) for the control device to which emissions are routed. 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 (maximum 14 characters).

★ Complete "Annual Emissions Entering the Control Device" only if "Control of Continuous Emissions" is "ALL" or "SOME."

### Annual Emissions Entering the Control Device:

Select one of the following options to describe the emission levels. Enter the code on the form.

Code	Description
CTE-	Annual emissions entering the control device are less than calculated threshold emissions (CTE)
	levels calculated in Table 3
CTE+	Annual emissions entering the control device are greater than or equal to CTE levels calculated in
	Table 3

★ Complete "Table 3 Control Requirements" only if "Control of Continuous Emissions" is "SOME" or "NONE."

#### **Table 3 Control Requirements:**

Enter "YES" if calculations from Table 3 require controls. Otherwise, enter "NO."

★ Complete "Emission Reduction from Control Device" only if "Table 3 Control Requirements" is "YES" or if "Annual Emissions Entering the Control Device" is "CTE+."

#### **Emission Reduction from Control Device:**

Select one of the following options to describe the emission reductions of the existing control device. Enter the code on the form.

Code	<b>Description</b>
98-	Existing control device (as defined in 40 CFR § 60.561) reduces emission by less than 98 percent or is greater than 20 ppmv
98+	Existing control device (as defined in 40 CFR § 60.561) reduces emissions by greater than or equal to 98 percent or less than or equal to 20 ppmv

# Table 1f:Title 40 Code of Federal Regulations Part 60, Subpart DDD: Standards of Performance for Volatile<br/>Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry

# ★ Complete Table 1f only if "Manufactured Product" is "PROPYL" and "Process Emissions" is "INTER" or "BOTH."

# Process ID No.:

Enter the identification number (ID No.) for the polymer manufacturing facility (maximum 14 characters) as listed on Form OP-SUM entitled "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 index numbers, please refer to the TCEQ website at www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title\_V/sop\_initial.pdf.

Note: These questions only pertain to those vent gas streams which are intermittently emitted.

# **Emergency Vent:**

Enter "YES" if the emissions are an emergency vent stream from a new, modified, or reconstructed facility. Otherwise, enter "NO."

# **★** Complete "Existing Control Device" only if "Emergency Vent" is "NO."

# **Existing Control Device:**

Enter "YES" if the vent stream is controlled in an existing control device (as defined in 40 CFR § 60.561) which has not been reconstructed, replaced, or its operating conditions modified as a result of state or local regulations. Otherwise, enter "NO."

# ★ Complete "Intermittent Control Device" only if "Existing Control Device" is "NO."

# **Intermittent Control Device:**

Select one of the following options to describe the control device of the system. Enter the code on the form.

Code	Description
CATINC	Catalytic incinerator
INCIN	Incinerator other than a catalytic incinerator
FLARE	Flare
BOIL150-	Boiler or process heater with a design heat input capacity less than 150 MMBtu/hr
BOIL150+	Boiler or process heater with a design heat input capacity greater than or equal to 150 MMBtu/hr
OTHER	Another type of control device is utilized

# **Control Device ID No.:**

Enter the identification number (ID No.) for the control device to which emissions are routed (maximum 14 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.