# Form OP-UA48 - Instructions Reactor 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 The individual unit summary (OP-SUM) information and the negative applicable/superseded requirement determinations (OP-REQ2) will be provided on each individual OP-UA form for the applicable units identified in the unit attribute tables.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 (CNXXXXXXXXX). 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 (RNXXXXXXXX). 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: <a href="https://www.tceq.texas.gov/permitting/air/titlev/permit">www.tceq.texas.gov/permitting/air/titlev/permit types.html</a>.

## **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 units with one or more potentially applicable requirements addressed in this form must be identified on the OP-SUM sheet. The term "unit" in these instructions has the meaning of "emission unit" as defined in 30 TAC Chapter 122.

The purpose of this sheet is to list individual units 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 each unit must also be listed on this form. For units which were authorized to construct or modify under Permits by Rule (PBR), list all applicable PBR information, including registration numbers. If a unit 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 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. Units 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 (GRPXXXXXXX).

## **Specific**

## Table 1

## **Unit Action Indicator (Unit AI):**

Complete this section only for a permit revision or renewal. Select "A" from the dropdown menu if the emission unit indicated is an addition to the existing permit. Select "D" from the dropdown menu if the existing emission unit indicated is being deleted from the permit. If an emission unit 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 an existing unit in the permit, leave blank.

#### Unit ID No.:

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

- For emission units with potentially applicable requirements, enter Facility ID Nos. (FINs) as listed in the TCEQ State of Texas Air Reporting System (STARS).
- If FIN currently does not exist in STARS, then a new ID No. that is consistent with the existing numbering system must be provided by the applicant. Unit ID Nos. cannot begin with "GRP" (the character sequence reserved for Group ID Nos.).

## **Group ID No.:**

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

# **Unit Name/Description:**

Each unit must be given a name or description that distinguishes it from other units as much as practicable. The Unit Name/Description should clearly indicate the type of unit. If possible, please avoid using generic descriptions, such as "Tank" or "Boiler," for multiple units. (Maximum 50 characters)

- Enter a text name or description for the unit 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.

Unit ID No.	Group ID No.	Unit Name/Description	
B-1	GRP-BOILER	Boiler 1	
B-2	GRP-BOILER	Boiler 2	
T-3		Tank 3	
T-4		Tank 4	

#### **CAM (For reference only):**

Indicate if the unit is subject to 40 CFR Part 64 by selecting "Y" from the dropdown menu in the "CAM" column next to the unit. 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 unit; however, a unit may have multiple authorizations. *All preconstruction authorizations listed on this form must also be identified on Form OP-REQ1*.

When a unit 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 for a unit

Unit AI	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
A		Flare1		Diamine Flare	Y	A	NSR Permit	1234		
A		Flare1		Diamine Flare	Y	A	PSD	PSDTX1234		
A		Flare1		Diamine Flare	Y	A	PBR	23456, 34567	106.261	11/01/2003
A		Flare1		Diamine Flare	Y	A	PBR	23456, 34567	106.262	11/01/2003

Example 2: Adding and deleting a PCA for a unit

Unit AI	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		A	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 emission unit. Select "D" from the dropdown menu if a preconstruction authorization is being deleted from the emission unit. If a preconstruction authorization is not being added/deleted from the emission unit, 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 unit 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 units 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 units 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 units authorized by PBR must also be identified on Form OP-PBRSUP.

Format	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 <a href="https://www.tceq.texas.gov/permitting/air/permitbyrule/air-pbr">https://www.tceq.texas.gov/permitting/air/permitbyrule/air-pbr</a>.

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 units 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.

A negative applicability determination is any regulatory citation that provides the basis whereby every operating condition of an emission unit 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 units 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 emission units 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 Group 1 or Group 2 storage tank, subject to 40 CFR Part 63, Subpart G, may not be required to comply with 40 CFR Part 60, Subpart Kb due to rule overlap of 40 CFR Part 63, Subpart G. In this case, the permit applicant may request a permit shield from 40 CFR Part 60, Subpart Kb. In this case, the applicant must submit the superseding requirement citation, § 63.110(b), and a textual description of the superseding determination, if they elect to comply with only the superseding requirement.

When an emission unit 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 emission unit before listing the next unit.

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/titley/ty\_site\_guidance.html.

#### **Specific:**

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

## **Unit Action Indicator (AI):**

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.

## **Unit ID No.:**

Select the identification number (ID No.) (maximum 14 characters) of the unit 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).

Example Applicable Regulatory Requirements\*

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. <i>XXX</i> ( <i>x</i> )( <i>yy</i> )( <i>zz</i> )
	Chapter 112	§ 112. <i>XXX</i> ( <i>x</i> )( <i>yy</i> )( <i>zz</i> )
	Chapter 113	§ 113. <i>XXX</i> ( <i>x</i> )( <i>yy</i> )( <i>zz</i> )
	Chapter 115, Storage of VOCs	§ 115. <i>XXX</i> ( <i>x</i> )( <i>yy</i> )( <i>zz</i> )
	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	$\S 61.XX(x)(yy)(zz)$
40 CFR Part 63, Subparts, NESHAP by source category, including hazardous organic (HON)	MACT XX	§ 63.XXX(x)(yy)(zz)

<sup>\*</sup> 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-UA48 Form Unit Attribute Tables- Instructions**

#### General:

This form is used to provide a description and data pertaining to reactor with potentially applicable requirements associated with a particular account 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 reactor, 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:

**Tables 1a - 1b:** Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart III: Standards of

Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic

Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes

**Tables 2a - 2c:** Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart RRR:

Standards of Performance for Volatile Organic Compound Emissions from Synthetic

Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes

The application area name from Form OP-1 entitled, "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.

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 which 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 <a href="https://www.tceq.texas.gov/permitting/central\_registry">www.tceq.texas.gov/permitting/central\_registry</a>.

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 (EPA) Administrator before the federal operating permit application is submitted.

**Specific:** 

Table 1a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart III: Standards of

Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes

**★** Complete only for affected facilities that produce any chemicals listed in 40 CFR § 60.617 as a product, co-product, by product, or intermediate.

#### **Unit ID No.:**

Enter the identification number (ID No.) for the air oxidation reactor or combination of reactors (maximum 14 characters) as listed on Form OP-SUM.

#### **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 see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

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

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

Code	Description
83-	On or before October 21, 1983
83+	After October 21, 1983

## **▼** Continue only if "Construction/Modification Date" is "83+."

## **Affected Facility:**

Select one of the following affected facility types. Enter the code on the form.

Code	Description
AIROX	Air oxidation reactor not discharging its vent stream into a recovery system
AIROXREC	Combination of an air oxidation reactor and recovery system into which its vent
	stream is discharged
2+AIROX	Combination of two or more air oxidation reactors and common recovery systems into
	which their vent streams are discharged
OTHER	Facility cannot be classified in any of the above categories

## **▼** Continue only if "Affected Facility" is "AIROX," "AIROXREC," or "2+AIROX."

## **TRE Index Value:**

Select one of the following total resource effectiveness (TRE) index values for the affected facility. Enter the code on the form.

Code	Description
4-	TRE index value is less than or equal to 4.0
4+	TRE index value is greater than 4.0
NCE	TRE index value is not calculated or claimed for exemption 40 CFR § 60.610(c)

#### **Control Device:**

Select one of the following methods for which the affected facility achieves compliance. Enter the code on the form.

Code	Description
TRE1+	The affected facility achieves compliance by maintaining a TRE index value greater than
	1.0 without the use of VOC emission control devices
FLARE	The affected facility achieves compliance by combusting the emissions in a flare that
	meets the requirements of 40 CFR § 60.18
INCIN	Non-catalytic incinerator is used to comply with TOC emission limits
CATINC	Catalytic incinerator is used to comply with TOC emission limits
B44-	Boiler or process heater with design heat input capacity less than 44 MW (150
	MMBTU/hr) is used to achieve compliance
B44+	Boiler or process heater with design heat input capacity greater than or equal to
	44 MW (150 MMBTU/hr) is used to achieve compliance
OTHER	Compliance demonstration with control devices other than an incinerator, boiler,
	process heater, or flare has been approved by the EPA Administrator

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

If applicable, enter the identification number (maximum 14 characters) 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. Use multiple lines if more than one control device is used. If there is no control device, leave this column blank.

# Table 1b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart III: Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes

# **★** Complete only if "TRE Index Value" is "4-" or "NCE" and "Control Device" is

#### "TRE1+." Unit ID No.:

Enter the identification number (ID No.) for the air oxidation reactor or combination of reactors (maximum 14 characters) as listed on Form OP-SUM.

#### **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 see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> fop guidance.html.

# **★** Complete "Recovery Device" only if "Control Device" is "TRE1+."

# **Recovery Device:**

Select one of the following options for the recovery device. Enter the code on the form.

Code	Description
ABS	Absorber used as the final recovery device
COND	Condenser used as the final recovery device
CARB	Carbon adsorber used as the final recovery device
OTHER	Compliance demonstration with a recovery device other than an absorber, condenser, or
	carbon adsorber which has been approved by the EPA Administrator

## **Recovery Device ID No.:**

If applicable, enter the identification number (ID No.) for the final recovery 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, leave this column blank.

## **★** Complete "AMOC ID No." only if "Control Device" or "Recovery Device" is "OTHER."

#### AMOC ID No.:

If an alternate method of control (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 "Recovery Device" is "ABS," "COND," or "CARB."

## TRE for Halogenated Vent Stream:

Enter "YES" if the total resource effectiveness (TRE) index value is being calculated for a halogenated vent stream. Otherwise, enter "NO."

# **Organic Monitoring Device:**

Enter "YES" if an organic monitoring device is used to indicate the concentration level of organic compounds exiting the recovery device based on a detection principal. Otherwise, enter "NO."

#### Table 2a:

Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart RRR: Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes

#### Unit ID No.:

Enter the identification number (ID No.) for the reactor process (or combination of reactor processes) (maximum 14 characters) as listed on Form OP-SUM.

#### **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 see the Completing FOP Applications – Additional Guidance on the TCEQ website at

www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

## Chemicals Listed in 40 CFR § 60.707:

Enter "YES" if the affected facility is part of a process unit that produces any chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Otherwise, enter "NO."

## **▼** Continue only if "Chemicals Listed in § 60.707" 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
90- On/or before June 29, 1990
90+ After June 29, 1990

## **▼** Continue only if "Construction/Modification Date" is "90+."

## **Affected Facility Type:**

Select one of the following options that describes the affected facility type. Enter the code on the form.

Code	Description
REACT	Reactor process not discharging its vent stream into a recovery system (reactor
	process is not designed and operated as a batch operation, does not produce beverage
	alcohol, and uses, contains, or produces VOC)
COMBO	Combination of a reactor process and the recovery system into which its vent stream is
	discharged (reactor process is not designed and operated as a batch operation, does not
	produce beverage alcohol, and uses, contains, or produces VOC)
2COMBO	Combination of two or more reactor processes and the common recovery system into
	which their vent streams are discharged (reactor process is not designed and operated as
	a batch operation, does not produce beverage alcohol, and uses, contains, or produces
	VOC)
BATCH	Reactor process that is designed and operated as a batch operation
BEVALC	Reactor process operating as a part of a process unit which produces beverage alcohols
NOVOC	Reactor process operating as a part of a process unit which uses, contains, and produces
	no VOC
OTHER	Facility cannot be classified in any of the above categories

# **▼** Continue only if "Affected Facility Type" is "REACT," "COMBO," or "2COMBO."

## Subject to Title 40 CFR Part 60, Subpart DDD:

Enter "YES" if the reactor process is subject to the provisions of Title 40 CFR Part 60, Subpart DDD. Otherwise, enter "NO."

# **▼** Continue only if "Subject to NSPS DDD" is "NO."

## Subject to Title 40 CFR Part 60, Subpart NNN:

Enter "YES" if the vent stream is routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN and has no other releases to the air except for a pressure relief valve. Otherwise, enter "NO."

# **▼** Continue only if "Subject to Title 40 CFR Part 60, Subpart NNN" is

## "NO." TRE Index Value:

Select one of the following options that describes the total resource effectiveness (TRE) index value for the affected facility. Enter the code on the form.

Code	Description
8-	TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or
	claimed for exemption 40 CFR § 60.700(c)(2)
8+	TRE index value is greater than 8.0

### TRE for Halogenated Vent Stream:

Enter "YES" if a TRE index value is being calculated for a halogenated vent stream. Otherwise, enter "NO."

#### Table 2b:

Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart RRR: Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes

# **▼** Continue only if "TRE" is "8-."

#### Unit ID No.:

Enter the identification number (ID No.) for the reactor process (or combination of reactor processes) (maximum 14 characters) as listed on Form OP-SUM.

#### **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 see the Completing FOP Applications – Additional Guidance on the TCEQ website at

www.tceq.texas.gov/permitting/air/guidance/titlev/tv fop guidance.html.

## **Total Design Capacity:**

Select one of the following options to describe the design capacity for all chemicals produced within the unit. Enter the code on the form.

Code	Description
1-	Total design capacity is less than 1 gigagram per year (1,100 tons per year)
1+	Total design capacity is greater than or equal to 1 gigagram per year (1,100 tons per year)

## **▼** Continue only if "Total Design Capacity" is "1+."

#### **Vent Stream Flow Rate:**

Select one of the following options that describes the vent stream flow rate. Enter the code on the form.

Code	Description
11-	Vent stream flow rate is less than 0.011 scm/min
11+	Vent stream flow rate is greater than or equal to 0.011 scm/min or value is not measured

## **▼** Continue only if "Vent Stream Flow Rate" is

#### "11+." TOC Exemption:

Select one of the following options that describes the total organic compounds (TOC) concentration exemption. Enter the code on the form.

Code	Description
18	Concentration of TOC, less methane and ethane, in the vent stream is less than 300 ppmv
	as measured by Method 18
25A	Concentration of TOC, less methane and ethane, in the vent stream is less than 150 ppmv
	as measured by Method 25A.
NOEX	No TOC concentration exemption

## **▼** Continue only if "TOC Exemption" is "NOEX."

#### **Control Device:**

Select one of the following options that describes the control device. Enter the code on the form.

Code	Description
TRE1+	The affected facility achieves compliance by maintaining a TRE index value greater
	than or equal to 1.0 without the use of a VOC emission control device
FLARE	Flare that meets the requirements of 40 CFR § 60.18
INCIN	Incinerator other than a catalytic incinerator used as the control device
CATINC	Catalytic incinerator used as the control device
B44-	Boiler or process heater with design heat input less than 44 MW (150 MMBTU/hr)
B44+	Boiler or process heater with design heat input greater than or equal to 44 MW (150
	MMBTU/hr)
OTHCD	Control device other than an incinerator, boiler, process heater, or flare, approved by the
	EPA Administrator

#### **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, leave this column blank

# Table 2c: Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60), Subpart RRR: Standards of

Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes

## Unit ID No.:

Enter the identification number (ID No.) for the reactor process (or combination of reactor processes) (maximum 14 characters) as listed on Form OP-SUM.

#### **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 see the Completing FOP Applications – Additional Guidance on the TCEQ website at <a href="https://www.tceq.texas.gov/permitting/air/guidance/titlev/tv">www.tceq.texas.gov/permitting/air/guidance/titlev/tv</a> for guidance.html.

# **★** Complete "Secondary Fuel" only if "Control Device" is "B44-."

#### **Secondary Fuel:**

Enter "YES" if the vent stream is introduced with the combustion air or as a secondary fuel. Otherwise, enter "NO."

# ★ Complete "Bypass Line" only if "Control Device" is "FLARE," "INCIN," "CATINC," "B44-," or "B44+."

## **Bypass Line:**

Enter "YES" if there is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere. Otherwise, enter "NO."

## **★** Complete "Bypass Line Valve Secured" only if "Bypass Line" is

#### "YES." Bypass Line Valve Secured:

Enter "YES" if the bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration. Otherwise, enter "NO."

# **★** Complete "Recovery Device" only if "Control Device" is "TRE1+."

# **Recovery Device:**

Select one of the following options that describes the recovery device. Enter the code on the form.

**Code Description** 

ABS Absorber used as the final recovery device COND Condenser used as the final recovery device CARB Carbon

adsorber used as the final recovery device

OTHRD Recovery device other than an absorber, condenser, or carbon adsorber is used as the final

recovery device, approved by the EPA Administrator

## **Recovery 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, leave this column blank.

## ★ Complete "Organic Monitor" only if "Recovery Device" is "ABS," "COND," or "CARB."

# **Organic Monitoring Device:**

Enter "YES" if an organic monitoring device is used to indicate the concentration level of organic compounds exiting the recovery device based on a detection principal. Otherwise, enter "NO."