

**Form OP-UA50**  
**Fluid Catalytic Cracking Unit Catalyst Regenerator/  
Fuel Gas Combustion Device/Claus Sulfur Recovery Plant/Coking Unit 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 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 The individual unit summary (OP-SUM) information and the negative applicable/superseded requirement determinations (OP-REQ2) will be provided on each individual OP-UA form for the applicable units identified in the unit attribute tables.

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### **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 (CNXXXXXXXXXX). 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 (RNXXXXXXXXXX). 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](http://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.

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## 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.

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## 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 (GRPXXXXXX).

### 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 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 (GRPXXXXXX) (“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](http://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](http://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 <https://www.tceq.texas.gov/permitting/air/permitbyrule/air-pbr>.

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

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**Table 2**

**Complete Table 2 only for Affected Sources that are subject to the following Program(s): Acid Rain, Cross-State Air Pollution Rule (CSAPR), and/or Texas SO<sub>2</sub> Trading Program.**

**General:**

The Acid Rain Program permit requirements are defined in 30 TAC Chapter 122, Subchapter E. The CSAPR requirements are defined in 40 CFR Part 97. The Texas SO<sub>2</sub> Trading Program requirements are defined in 30 TAC Chapter 101, Subchapter H.

**Specific:**

**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 affected unit must be assigned an identification number (maximum 14 characters). The identification number listed on Table 2 must be the same as the identification number listed on Table 1 of this form for the same unit.

*Note: There may be differences between the Unit ID No. on the OP-SUM and unit names from other sources such as EPA COR, EIA (ORIS), TCEQ SIP lists, etc. However, the Unit ID No. utilized for OP-SUM, Table 2 must be consistent with those given on the OP-SUM, Table 1.*

**COR Unit ID No.:**

Enter the unit identification number (maximum 14 characters) that is listed on the EPA Certificate of Representation (COR).

**Acid Rain:**

Select “YES” from the dropdown menu for an affected unit subject to the Acid Rain Program (ARP). Otherwise, select “NO.”

**ARP Status:**

Select one of the following options from the dropdown menu that describes the ARP status for that unit.

<b>Code</b>	<b>Description</b>
EU	An existing affected unit with an existing Acid Rain permit
NEW	A new affected unit that does not have an existing Acid Rain permit (Applicant must also submit Form OP-AR1.)
RENEW	An existing affected unit with an existing Acid Rain permit for which the applicant is applying for a renewal (Applicant must also submit Form OP-AR1.)
NEXM	Applying for a new unit exemption under 40 CFR 72.7 (Applicant must also submit required additional information in a separate cover letter.)
REXM	Applying for a retired unit exemption under 40 CFR 72.8 (Applicant must also submit required additional information in a separate cover letter.)
OPT	A unit that is not an affected unit requiring an Acid Rain permit but applicant is electing to become an affected unit as an "OPT-IN" in the Acid Rain program under 40 CFR Part 74 (Applicant must also submit required additional information in a separate cover letter.)

**CSAPR:**

Select "YES" from the dropdown menu if the unit is subject to the requirements of 40 CFR Part 97, Subpart EEEEE (CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program). Otherwise, select "NO."

**CSAPR Monitoring:**

Select one of the following options from the dropdown menu that describes the CSAPR NO<sub>x</sub> Ozone Season Group 2 monitoring for that unit.

<b>Code</b>	<b>Description</b>
CEMS	A unit that is complying with the CEMS requirements of 40 CFR Part 75, Subpart H for NOX and heat input.
CEMSD	A gas or oil fired unit that is complying with the CEMS requirements of 40 CFR Part 75, Subpart H for NOX, and with the monitoring requirements of 40 CFR Part 75, Appendix D for heat input.
PEAK	A gas or oil fired peaking unit that is complying with the monitoring requirements of 40 CFR Part 75, Appendix E for NOX, and with the monitoring requirements of 40 CFR Part 75, Appendix D for heat input.
LME	A gas or oil fired unit that is complying with the Low Mass Emissions monitoring requirements of 40 CFR § 75.19 for NOX and heat input.
ALTMON	A unit that is complying with EPA-approved alternative monitoring system requirements of 40 CFR Part 75, Subpart E for NOX and heat input.
REXM	Applying for a retired unit exemption under 40 CFR Part 97, Subpart EEEEE (CSAPR NOX Ozone Season Group 2 Trading Program) (Applicant must also submit required additional information in a separate cover letter).

**Texas SO<sub>2</sub>:**

Select "YES" from the dropdown menu if the unit is complying with the requirements of 40 CFR Part 97, Subpart FFFFF (Texas SO<sub>2</sub> Trading Program). Otherwise, select "NO."

**Texas SO<sub>2</sub> Monitoring:**

Select one of the following options from the dropdown menu that describes the Texas SO<sub>2</sub> monitoring for that unit.

<b>Code</b>	<b>Description</b>
CEMS	A unit that is complying with the CEMS requirements of 40 CFR Part 75, Subpart B for SO <sub>2</sub> and 40 CFR Part 75, Subpart H for heat input.
CEMSD	A gas or oil fired unit that is complying with the monitoring requirements of 40 CFR Part 75, Appendix D for SO <sub>2</sub> and heat input.
LME	A gas or oil fired unit that is complying with the Low Mass Emissions monitoring requirements of 40 CFR § 75.19 for SO <sub>2</sub> and heat input.
ALTMON	A unit that is complying with EPA-approved alternative monitoring system requirements of 40 CFR Part 75, Subpart E for SO <sub>2</sub> and heat input.
REXM	Applying for a retired unit exemption under 40 CFR Part 97, Subpart FFFFF (Texas SO <sub>2</sub> Trading Program) (Applicant must also submit required additional information in a separate cover letter.)

**COR:**

Select “YES” from the dropdown menu to indicate that the applicant has submitted the COR to EPA for the Acid Rain and CSAPR programs, as applicable, and has included a copy of the required COR to TCEQ with this submittal. (Providing the required COR copy to TCEQ authorizes the Designated Representative (DR) (or Alternate Designated Representative (ADR)) to sign Form OP-CRO1, page 2, to certify Acid Rain and CSAPR program application submittal.) Otherwise, select “NO.”

**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/titlev/tv\\_site\\_guidance.html](http://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 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):**

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.

**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.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)

\* 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-UA50 Form Unit Attribute Tables- Instructions****General:**

This form is used to provide a description and data pertaining to the following units with potentially applicable requirements associated with a particular regulated entity number and application:

- Fluid catalytic cracking unit (FCCU) catalyst regenerators located at a petroleum refinery;
- Catalytic Reforming Unit (CRU) located at a petroleum refinery;
- Fuel gas combustion devices located at a petroleum refinery;
- Claus sulfur recovery plants located at a petroleum refinery;
- Claus sulfur recovery plants located outside a petroleum refinery boundaries but processing gases produced within a petroleum refinery, or; Coking units.

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 unit, 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 J: Standards of Performance for Petroleum Refineries

**Tables 2a – 2e:** Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60) Subpart Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007

**Tables 3a - 3e:** Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart UUU: National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries

**Tables 4a - 4b:** Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117) Subchapter B: Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Area

**Table 5:** Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart CC: National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

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), 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 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 is 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 to 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 the 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/index.html](http://www.tceq.texas.gov/permitting/central_registry/index.html).

**Specific:****Table 1a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart J: Standards of Performance for Petroleum Refineries**

- ★ **Complete this table only for FCCU catalyst regenerators located at a petroleum refinery, fuel gas combustion devices located at a petroleum refinery, and Claus sulfur recovery plants processing gases produced within a petroleum refinery. The sulfur recovery plant need not be physically located within the boundaries of a petroleum refinery to be an affected facility, provided it processes gases produced within a petroleum refinery.**
- ★ **Do not complete Tables 1a-1b if you are choosing to comply with the applicable provisions of Subpart Ja to satisfy the requirements of this subpart as stated in §60.100(e). Skip to Tables 2a-2b and complete.**
- ★ **Do not complete Tables 1a-1b if flares only burn process upset gases and fuel gases due to relief valve leakage or other emergency malfunctions.**

**Unit ID No.:**

Enter the identification number (ID No.) for the FCCU catalyst regenerator, fuel gas combustion device, or Claus sulfur recovery plant (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 index numbers, please go to 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).

**Facility Type:**

Select one of the following options for each facility type. Enter the code on the form.

<b>Code</b>	<b>Description</b>
FCCU	FCCU catalyst regenerator
FLARELOW	Fuel gas combustion device, that is also a flare, that meets the requirements in § 60.105(a)(4)(iv) and §60.105(b) [inherently low in sulfur content]
FLAREHI	Fuel gas combustion device, that is also a flare, that does NOT meet requirements in § 60.105(a)(4)(iv) and 60.105(b)
FUELOW	Fuel gas combustion device, other than a flare, that meets the requirements in § 60.105(a)(4)(iv) and 60.105(b) [inherently low in sulfur content]
FUELHI	Fuel gas combustion device, other than a flare, that does NOT meet the requirements in § 60.105(a)(4)(iv) and 60.105(b)
SR20-	Claus sulfur recovery plant with a design capacity for sulfur feed less than or equal to 20 long tons per day (LTPD)
SR20+OCS	Claus sulfur recovery plant with a design capacity for sulfur feed greater than 20 LTPD with oxidation control systems
SR20RCS+I	Claus sulfur recovery plant with a design capacity for sulfur feed greater than 20 LTPD with reduction control systems followed by incineration
SRRCS+CON	Claus sulfur recovery plant with a design capacity for sulfur feed greater than 20 LTPD with reduction control systems not followed by incineration and using an instrument to continuously monitor and record the concentration of reduced sulfur and O <sub>2</sub> emissions
SRRCS-CON	Claus sulfur recovery plant with a design capacity for sulfur feed greater than 20 LTPD with reduction control systems not followed by incineration and is not using an instrument to continuously monitor and record the concentration of reduced sulfur and ORR <sub>2</sub> RR emissions

▼ **Do not continue if “Facility Type” is “SR20-.”**

**Construction/Modification Date:**

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

For “Facility Type” designation of “FCCU”:

<b>Code</b>	<b>Description</b>
73-B	On or before June 11, 1973
73-84	After June 11, 1973, and on or before January 17, 1984
84-07	After January 17, 1984, and on or before May 14, 2007
07+	After May 14, 2007

For “Facility Type” designation of “FLAREHI” or “FLARELOW”:

<b>Code</b>	<b>Description</b>
73-B	On or before June 11, 1973
73-08	After June 11, 1973, and on or before June 24, 2008
08+	After June 24, 2008

For “Facility Type” designation of “FUELHI” or “FUELOW”:

<b>Code</b>	<b>Description</b>
73-B	On or before June 11, 1973
73-07	After June 11, 1973, and on or before May 14, 2007
07+	After May 14, 2007

For “Facility Type” designation of “SR20+OCS”, “SR20RCS+I”, “SRRCS+CON”, or “SRRCS-CON”:

<b>Code</b>	<b>Description</b>
76-	On or before October 4, 1976
76-07	After October 4, 1976, and on or before May 14, 2007
07+	After May 14, 2007

▼ **Do not continue if “Construction/Modification Date” is “73-B,” “76-,” “07+,” or “08+.”**

★ **Go to Table 1b if “Facility Type” is “FLARELOW,” “FLAREHI,” “FUELOW,” or “FUELHI.”**

▼ **Do not continue if “Facility Type” is “SR20+OCS”, “SR20RCS+I”, “SRRCS+CON”, or “SRRCS-CON.”**

**Contact Material:**

Enter “YES” if the FCCU catalyst regenerator has a contact material that reacts with petroleum derivatives to improve feedstock quality in which the contact material is regenerated by burning off coke and/or other deposits. Otherwise, enter “NO.”

▼ **Do not continue if “Contact Material” is “YES” and “Construction/Modification Date” is “73-84.”**

★ **Complete “Sulfur Content” only if “Construction/Modification Date” is “84- 07.”**

**Sulfur Content:**

Select one of the following options to demonstrate which sulfur oxide compliance option the FCCU is utilizing. Enter the code on the form.

Code	Description
FEED	Measuring the total sulfur content in the FCCU fresh feed
CD	The FCCU uses an add-on control device to control SO <sub>2</sub> emissions
NOC	The FCCU does not use an add-on control device to control SO <sub>2</sub> emissions

**Discharged Gases:**

Enter “YES” if gases discharged by the FCCU pass through an incinerator or waste heat boiler in which auxiliary or supplemental liquid or solid fossil fuel is burned. Otherwise, enter “NO.”

**CO Monitoring:**

Enter “YES” if you have demonstrated to the Administrator that the average CO emissions are less than 50 ppm (dry basis). Otherwise, enter “NO.”

★ **Complete “CO Exemption ID” only if “CO Monitoring” is “YES.”**

**CO Exemption ID:**

Enter the CO Monitoring Exemption ID or date of the approval letter from the Administrator. Otherwise, leave this column blank. *(Submit the approval letter with your application).*

▼ **Do not continue if “Facility Type” is “FCCU.”**

**Table 1b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart J: Standards of Performance for Petroleum Refineries**

**Unit ID. No.:**

Enter the identification number (ID. No.) for the FCCU catalyst regenerator, fuel gas combustion device, or Claus sulfur recovery plant (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 index numbers, please go to 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 “Low Sulfur” only if “Facility Type” is “FUELOW” or “FLARELOW.”**

**Low Sulfur:**

Select one of the following options that describes which fuel gas stream is inherently low in sulfur. Enter the code on the form.

Code	Description
PILOT	Fuel gas stream that is pilot gas for heaters and flares
30PPMV	Fuel gas stream that meets a commercial-grade product specification for the sulfur content of 30 ppmv or less
INTOL	Fuel gas stream that is intolerant to sulfur contamination
OTHER	Fuel gas stream that has been demonstrated to the Administrator according to § 60.105(a)(4)(iv)(D) and §60.105(b)

- ★ Complete “SO<sub>2</sub> Exemption ID” only if “Low Sulfur” is “OTHER”.

**SO<sub>2</sub> Exemption ID:**

Enter the SO<sub>2</sub> Monitoring Exemption ID or date of the approval letter from the Administrator. Otherwise, leave this column blank. *(Submit the approval letter with your application).*

- ★ Complete “Monitoring Device” only if “Facility Type” is “FUELHI” or “FLAREHI.”

**Monitoring Device:**

Enter “YES” if an instrument is in place for continuously monitoring and recording the concentration by volume of SORR<sub>2</sub>RR emissions into the atmosphere. Otherwise, enter “NO.”

**Table 2a: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007**

- ★ Complete this table only for fluid catalytic cracking units (FCCU), fluid coking units (FCU), delayed coking units, fuel gas combustion devices (including flares and process heaters), and sulfur recovery plants located at petroleum refineries. The sulfur recovery plant need not be physically located within the boundaries of a petroleum refinery to be an affected facility, provided it processes gases produced within a petroleum refinery

**Unit ID. No.:**

Enter the identification number (ID. No.) for the affected unit (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 index numbers, please go to 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).

**Facility Type:**

Select one of the following options for each facility type. Enter the code on the form.

<b>Code</b>	<b>Description</b>
FCCU	fluid catalytic cracking unit
FCU	fluid coking unit
DCUFLR	delayed coking unit that vents exhaust vapor to a flare
DCUFUEL	delayed coking unit that vents exhaust vapor to a fuel gas combustion device, other than a flare or a process heater
DCUFUELCO	delayed coking unit that vents exhaust vapor to a CO boiler or furnace that is part of a FCCU/FCU affected facility
DCUFUELEX	delayed coking unit that vents exhaust vapor to a portable generator of fuel gas used for tank degreasing and/or cleaning
DCUPH	delayed coking unit that vents exhaust vapor to a process heater used as a fuel gas combustion device
FLARE	flare that is used for fuel gas combustion
PROHTR	process heater that is used for fuel gas combustion
FUEL	fuel gas combustion device, other than a flare or process heater
FUELCO	CO boiler or furnace that is part of a FCCU/FCU affected facility
FUELEX	portable generator of fuel gas used for tank degreasing and/or cleaning
SR20+	sulfur recovery plant greater than 20 long tons per day (LTPD)
SR20-	sulfur recovery plant less than or equal to 20 LTPD

- ★ **Complete “Construction/Modification Date” only if “Facility Type” is “FCCU,” “FCU,” “FLARE,” “PROHTR,” “FUEL,” “FUELCO,” “FUELEX,” “SRP20+,” or “SRP20-.”**

**Construction/Modification Date:**

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

<b>Code</b>	<b>Description</b>
07-	On or before May 14, 2007
07-08	After May 14, 2007, and on or before June 24, 2008
08+	After June 24, 2008



- ★ **Complete “DCU Construction/Modification Date” only if “Facility Type” is “DCUFLR,” “DCUFUEL,” “DCUFUELCO,” “DCUFUELEX,” or “DCUPH.”**

**DCU Construction/Modification Date:**

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

Code	Description
07-	Before May 14, 2007 for such activities defined in §60.100a(b)(1)
07+	On or after May 14, 2007 for such activities defined in §60.100a(b)(1)
08-	Before December 22, 2008 for such activities defined in §60.100a(b)(2)
08+	On or after December 22, 2008 for such activities defined in §60.100a(b)(2)
12-	Before September 12, 2012 for such activities defined in §60.100a(b)(3)
12+	On or after September 12, 2012 for such activities defined in §60.100a(b)(3)

- ▼ **Do not continue if “Construction/Modification Date” is “07-.”**
- ▼ **Do not continue if “Construction/Modification Date” is “07-08” and “Facility Type” is “FLARE.”**
- ▼ **Do not continue if “DCU Construction/Modification Date” is “07-,” “08-,” or “12-.”**
- ▼ **Do not continue if “Facility Type” is “DCUFUELEX” or “FUELEX.”**
- ▼ **Continue with Table 2a only if “Facility Type” is “FCCU” or “FCU.”**
- ★ **Go to Table 2b if “Facility Type” is “SRP20+” or “SRP20-.”**
- ★ **Go to Table 2c if “Facility Type” is “DCUFUEL,” “DCUFUELCO,” “DCUPH,” “FUEL,” “FUELCO,” or “PROHTR.”**
- ★ **Go to Table 2e if “Facility Type” is “DCUFLR” or “FLARE.”**
- ★ **Complete “Newly Constructed” only if “Facility Type” is “FCCU.”**

**Newly Constructed:**

Enter “YES” if the FCCU is newly constructed. Otherwise, enter “NO” if the FCCU is modified or reconstructed.

**PM Emission Limit:**

Select one of the following options that describes the PM emission limit. Enter the code on the form.

Code	Description
GRDSCF	Owner or operator is choosing PM limit in gr/dscf corrected to 0 percent excess air (a PM CEMS is used)
PMCOKE	Owner or operator is choosing PM limit in weight PM per weight coke burn-off

- ★ **Complete “PM Control” only if “PM Emission Limit” is “PMCOKE.”**

**PM Control:**

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

Code	Description
ELPREC	electrostatic precipitator
WTSCRB	wet scrubber
FABRIC	baghouse or similar fabric filter
CYC	cyclone
OTHER	a control device other than the four listed above

★ **Complete “CEMS Exempt” only if “Facility Type” is “FCCU” or “FCU.”**

**CEMS Exempt:**

Enter “YES” if the CO emissions from the FCCU or FCU are demonstrated to remain less than 50 ppmv and an exemption from a CO CEMS is claimed. Otherwise, enter “NO.”

★ **Complete “Post Combustion” only if “CEMS Exempt” is “YES.”**

**Post Combustion:**

Enter “YES” if the unit has a post-combustion control device for CO. Otherwise, enter “NO.”

**Table 2b: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007**

★ **Complete this table only for fluid catalytic cracking units (FCCU), fluid coking units (FCU), delayed coking units, fuel gas combustion devices (including flares and process heaters), and sulfur recovery plants located at petroleum refineries. The sulfur recovery plant need not be physically located within the boundaries of a petroleum refinery to be an affected facility, provided it processes gases produced within a petroleum refinery.**

**Unit ID. No.:**

Enter the identification number (ID. No.) for the affected unit (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 index numbers, please go to 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 this table only if “Facility Type” is “SRP20+” or “SRP20-.”**

**SRP SO<sub>2</sub> Control:**

Select one of the following options that describes SO<sub>2</sub> emission control for the sulfur recovery plant. Enter the code on the form.

Code	Description
OXY	plant utilizes an oxygen enrichment system.
INC+	plant utilizes an oxidation control or a reduction control system followed by incineration
INC-	plant utilizes a reduction control system not followed by incineration

**SRP Claus Unit:**

Select one of the following options that describes the oxygen enrichment system at the sulfur recovery plant. Enter the code on the form.

Code	Description
CLAUS	a regular Claus sulfur recovery plant
OTHER	Claus sulfur recovery plant that only uses ambient air in the Claus burner, elect not to monitor O <sub>2</sub> concentration of the air/oxygen mixture used in the Claus burner, or is a non-Claus sulfur recovery plant

- ★ Complete “Reduced Sulfur Compounds Monitor Alt” only if “SRP SO<sub>2</sub> Control” is “INC-.”

**Reduced Sulfur Compounds Monitor Alt:**

Enter “YES” if the owner or operator of the sulfur recovery plant uses an air or O<sub>2</sub> dilution and oxidation system to convert any reduced sulfur to SO<sub>2</sub> in place of the requirements in §60.106a(a)(2). Otherwise, enter “NO.”

**Flow Rate Weighted Average:**

Enter “YES” if the owner or operator of the sulfur recovery plant is complying with the emission limits as a flow rate weighted average for a group of release points. Otherwise, enter “NO.”

- ★ Complete “O<sub>2</sub> Monitoring Alt” only if “SRP Claus Unit” is “CLAUS.”

**O<sub>2</sub> Monitoring Alt:**

Enter “YES” if the owner or operator of the sulfur recovery plant is using a CPMS to measure and record the volumetric gas flow rate of ambient air supplied to the Claus burner in place of the requirements in §60.106a(a)(5). Otherwise, enter “NO.”

**Table 2c: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007**

- ★ Complete this table only if “Facility Type” is “DCUFUEL,” “DCUFUELCO,” “DCUPH,” “FUEL,” “FUELCO,” or “PROHTR.”

**Unit ID. No.:**

Enter the identification number (ID. No.) for the affected unit (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 index numbers, please go to 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 “AMEL” only if “Facility Type” is “DCUFUEL,” “DCUFUELCO,” or “DCUPH.”

**AMEL:**

Enter “YES” if using an alternate means of emission limitation (AMEL) as it pertains to 40 CFR Part 60, Subpart Ja. Otherwise, enter “NO.”

- ★ Complete “AMEL ID No.” only if “Alternate Means of Emission Limitation” is “YES.”

**AMEL ID No.:**

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

- ▼ Continue only if “Alternative Means of Emission Limitation” is “NO.”

- ★ **Complete “Sulfur Emission Limit” only if “Facility Type” is “DCUFUEL,” “DCUPH,” “FUEL,” or “PROHTR.”**

**Sulfur Emission Limit:**

Select one of the following options that describes the Sulfur emission limit. Enter the code on the form.

Code	Description
SO <sub>2</sub>	Owner or operator is choosing Sulfur Emission Limit in terms of ppmv SO <sub>2</sub> emitted
H <sub>2</sub> S	Owner or operator is choosing Sulfur Emission Limit in terms of ppmv H <sub>2</sub> S in fuel gas

**§60.107a(b) Exemption:**

Enter “YES” if the fuel gas combustion device is eligible for the exemption on §60.107a(b) (i.e., the fuel gas stream can be demonstrated to be inherently low-sulfur). Otherwise, enter “NO.”

- ★ **Complete “Common Source of Fuel Gas” only if “Facility Type” is “DCUFUELCO” or “FUELCO;” or if “Facility Type” is “DCUFUEL,” “DCUPH,” “FUEL,” or “PROHTR” and “Sulfur Emission Limit” is “H<sub>2</sub>S.”**

**Common Source of Fuel Gas:**

Enter “YES” if the fuel gas combustion device uses a common source of gas as described in §60.107a(a)(2)(iv). Otherwise, enter “NO.”

- ▼ **Do not continue if “Facility Type” is “DCUFUEL,” “DCUFUELCO,” “FUEL” or “FUELCO.”**

**Table 2d: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007**

- ★ **Complete this table only if “Facility Type” is “DCUPH” or “PROHTR.”**

**Unit ID. No.:**

Enter the identification number (ID. No.) for the affected unit (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 index numbers, please go to 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).

**Alternative Standard:**

Enter “YES” if the process heater meets the criteria and has requested approval from the Administrator for a NO<sub>x</sub> emissions limit as described in §60.102a(i). Otherwise, enter “NO.”

- ▼ **Continue only if “Alternative Standard” is “NO.”**

**Heater Capacity:**

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

Code	Description
40-	the process heater is rated equal to or less than 40 MMBtu/hr
40-100	the process heater is rated greater than 40 MMBtu/hr but less than 100MMBtu/hr
100+	the process heater is rated equal to or greater than 100 MMBtu/hr

- ▼ **Do not continue if “Heater Capacity” is “40-.”**

**Heater Type:**

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

<b>Code</b>	<b>Description</b>
NDPH	the unit is a natural draft process heater
FDPH	the unit is a forced draft process heater
CONDPH	the unit is a co-fired natural draft process heater
COFDPH	the unit is a co-fired forced draft process heater

**NO<sub>x</sub> Emission Limit:**

Select one of the following options that describes the NO<sub>x</sub> emissions limit. Enter the code on the form.

For “Heater Type” designation of “NDPH” and “FDPH”:

<b>Code</b>	<b>Description</b>
PPMV	the owner or operator is choosing the NO <sub>x</sub> concentration emission limit
HVB	the owner or operator is choosing the NO <sub>x</sub> per heating value basis emission limit

For “Heater Type” designation of “CONDPH”:

<b>Code</b>	<b>Description</b>
PPMV	the owner or operator is choosing the NO <sub>x</sub> concentration emission limit
EQ3	the owner or operator is choosing the NO <sub>x</sub> emission limit based on Equation 3 in §60.102a(g)(2)(iii)(B)

For “Heater Type” designation of “COFDPH”:

<b>Code</b>	<b>Description</b>
PPMV	the owner or operator is choosing the NO <sub>x</sub> concentration emission limit
EQ4	the owner or operator is choosing the NO <sub>x</sub> emission limit based on Equation 4 in §60.102a(g)(2)(iv)(B)

★ **Complete “Low-NO<sub>x</sub>” only if “Heater Capacity” is “40-100.”**

**Low-NO<sub>x</sub>:**

Select one of the following options that describes if the process heater has low-NO<sub>x</sub> or ultra-low-NO<sub>x</sub> burners. Enter the code on the form.

For “NO<sub>x</sub> Emission Limit” designation of “PPMV”:

<b>Code</b>	<b>Description</b>
LOWC	the process heater is equipped with combustion modification-based technology to reduce NO <sub>x</sub> emissions and the owner or operator elects to comply with the monitoring requirements in paragraphs §60.107a(c)(1) through (5)
ALTLOWC	the process heater is equipped with combustion modification-based technology to reduce NO <sub>x</sub> emissions and the owner or operator elects to comply with the alternative to the monitoring requirements in paragraphs §60.107a(c)(1) through (5)

For “NO<sub>x</sub> Emission Limit” designation of “HVB,” “EQ3”, and “EQ4:

<b>Code</b>	<b>Description</b>
LOWD	the process heater is equipped with combustion modification-based technology to reduce NO <sub>x</sub> emissions and the owner or operator elects to comply with the monitoring requirements in paragraphs §60.107a(d)(1) through (7)
ALTLOWD	the process heater is equipped with combustion modification-based technology to reduce NO <sub>x</sub> emissions and the owner or operator elects to comply with the alternative to the monitoring requirements in paragraphs §60.107a(d)(1) through (7)

★ **Complete “O<sub>2</sub> Operating Curve” only if “Low-NO<sub>x</sub>” is “ALTLOWC” or “ALTLOWD.”**

**O<sub>2</sub> Operating Curve:**

Enter “YES” if an O<sub>2</sub> operating curve is used rather than a single O<sub>2</sub> operating limit. Otherwise, enter “NO.”

★ **Complete “Gas Composition Analyzer” only if “Heater Capacity” is “100+” and “NO<sub>x</sub> Emission Limit” is “HVB”; or if “Heater Capacity” is “40-100” and “NO<sub>x</sub> Emission Limit” is “HVB” and “Low-NO<sub>x</sub>” is “ALTLOWD.”**

**Gas Composition Analyzer:**

Enter “YES” if an O<sub>2</sub> operating curve is used rather than a single O<sub>2</sub> operating limit. Otherwise, enter “NO.”

**Table 2e: Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007**

★ **Complete this table only if “Facility Type” is “DCUFLR” or “FLARE.”**

**Unit ID. No.:**

Enter the identification number (ID. No.) for the affected unit (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 index numbers, please go to 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).

**AMEL:**

Enter “YES” if using an alternate means of emission limitation (AMEL) as it pertains to 40 CFR Part 60, Subpart Ja. Otherwise, enter “NO.”

★ **Complete “AMEL ID No.” only if “Alternate Means of Emission Limitation” is “YES.”**

**AMEL ID No.:**

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

▼ **Continue only if “Alternative Means of Emission Limitation” is “NO.”**

**Alternative Monitoring:**

Enter “YES” if the flare meets the requirements and complies with the alternative monitoring mentioned in §60.107a(g). Otherwise, enter “NO.”

★ Complete “§60.107a(e)(4) Exemption” only if “Alt Mon” is “NO.”

**§60.107a(e)(4) Exemption:**

Enter “YES” if the flare is eligible for the exemption in §60.107a(e)(4). Otherwise, enter “NO.”

**§60.107a(a)(3) Exemption:**

Enter “YES” if the flare is eligible for the exemption on §60.107a(a)(3) (i.e., the fuel gas stream can be demonstrated to be inherently low-sulfur). Otherwise, enter “NO.”

★ Do not complete “Common Source of Fuel Gas” if “§60.107a(a)(3) Exemption” is “YES.”

**Common Source of Fuel Gas:**

Enter “YES” if the flare uses a common source of gas as described in §60.107a(a)(2)(iv). Otherwise, enter “NO.”

**Modified Flare:**

Enter “YES” if the flare is considered as a modified flare. A modification to a flare commences when a project that includes any of the activities in paragraphs §60.100a(c)(1) or (2) is commenced. Otherwise, enter “NO.”

**Cascaded Flare System:**

Enter “YES” if the flare is used as a part of a cascaded flare system. Otherwise, enter “NO.”

**Table 3a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart UUU: National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries**

★ Complete this table for catalytic cracking units (CCUs) that:

- are located at a petroleum refinery that is a major source of HAP emissions
- meet the definition of an affected source as defined by § 63.1562(b)

**Unit ID. No.:**

Enter the identification number (ID. No.) for the catalytic cracking unit (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 index numbers please go to 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).

**CCU PM/Ni Emission Limitation:**

Select one of the following options that describes the HAP PM or Ni emission limit for the catalytic cracking unit. Enter the code on the form.

<b>Code</b>	<b>Description</b>
TABLE1.1	CCU subject to the NSPS for PM in 40 CFR § 60.102 and not electing § 60.100(e) complying with Table 1.1 to Subpart UUU
TABLE1.2A	CCU subject to the NSPS for PM in 40 CFR § 60.102a(b)(1)(i) or 40 CFR § 60.102 and electing § 60.100(e) and complying with the 1.0 g/kg (1.0 lb PM/1,000 lb) of coke burn-off in Table 1.2 to Subpart UUU
TABLE1.2B	CCU subject to the NSPS for PM in 40 CFR § 60.102a(b)(1)(i) or 40 CFR § 60.102 and electing § 60.100(e) using a PM CEMS and complying with the 0.040 grain per dry standard cubic feet (gr/dscf) corrected to 0 percent excess air standard in Table 1.2 to Subpart UUU
TABLE1.3A	CCU subject to NSPS for PM in 40 CFR § 60.102a(b)(1)(ii) complying with the 0.5g/kg (0.5 lb/1000 lb) coke burn-off in Table 1.3 to Subpart UUU
TABLE1.3B	CCU subject to NSPS for PM in 40 CFR § 60.102a(b)(1)(ii) using a PM CEMS complying with the 0.020 gr/dscf corrected to 0 percent excess air standard in Table 1.3 to Subpart UUU
OPT1A	Option 1a: Elect NSPS subpart J requirements for PM per coke burn limit and 30% opacity, not subject to the NSPS for PM in 40 CFR § 60.102 or § 60.102a(b)(1) complying with Table 1.4 to Subpart UUU
OPT1B	Option 1b: Elect NSPS subpart Ja requirements for PM per coke burn-off limit, not subject to the NSPS for PM in 40 CFR § 60.102 or § 60.102a(b)(1) complying with Table 1.5 to Subpart UUU
OPT1C	Option 1c: Elect NSPS subpart Ja requirements for PM concentration limit, not subject to the NSPS for PM in 40 CFR § 60.102 or § 60.102a(b)(1) complying with Table 1.6 to Subpart UUU
OPT2	Option 2: PM per coke burn-off limit, not subject to the NSPS for PM in 40 CFR § 60.102 or § 60.102a(b)(1) complying with Table 1.7 to Subpart UUU
OPT3	Option 3: Nickel (Ni) lb/hr limit, not subject to the NSPS for PM in 40 CFR § 60.102 or § 60.102a(b)(1) complying with Table 1.8 to Subpart UUU
OPT4	Option 4: Nickel (Ni) per coke burn-off limit, not subject to the NSPS for PM in 40 CFR § 60.102 or § 60.102a(b)(1) complying with Table 1.9 to Subpart UUU

**CCU PM/Ni Control Device:**

Select the control device used for PM or Ni emissions control. Enter the code on the form.

<b>Code</b>	<b>Description</b>
CYCLONE	Cyclone
FABFLT	Fabric Filter
WETSCR1	Wet scrubber
WETSCR2	Wet scrubber of the non-venturi jet-ejector design
ESP	Electrostatic Precipitator

**CCU PM/Ni Control Device ID No.:**

If applicable, enter the identification number 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 “CCU PM Control Device Alt ID” only if “CCU PM Control Device” is “OTHER.”**

**CCU PM/Ni Control Device Alt ID:**

If an alternate has been approved, then enter the corresponding alternate unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the alternate 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.

**CCU PM/Ni Monitoring Method:**

Select the monitoring method used to demonstrate compliance with the PM or Ni emission limit. Enter the code on the form.

Code	Description
ALT	Monitoring approved alternative parameters under § 63.1573(e)
ALTCOM	Alternative to COMS approved under § 63.1573(f)
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System

- ★ **Complete “CCU PM/Ni Alt Monitoring ID” only if “CCU PM/Ni Monitoring Method” is “ALT,” or “ALTCOM.”**

**CCU PM/Ni Alt Monitoring ID:**

If an alternate has been approved, then enter the corresponding alternate unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the alternate 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.

**Multiple CCUs Served by a Single Wet Scrubber:**

Enter “Yes” if multiple CCUs are served by a single wet scrubber complying with § 63.1575(j). Otherwise, enter “NO.”

**Table 3b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart UUU: National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries**

- ★ **Complete this table for catalytic cracking units (CCUs) that:**

- are located at a petroleum refinery that is a major source of HAP emissions
- meets the definition of an affected source as defined by § 63.1562(b)

**Unit ID. No.:**

Enter the identification number (ID. No.) for the catalytic cracking unit (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 index numbers please go to 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).

**CCU CO Emission Limitation:**

Select one of the following options that describes the CO emission limit for the CCU. Enter the code on the form.

Code	Description
TABLE8.1	CCU subject to the NSPS requirements for CO in 40 CFR § 60.103 or § 60.102a(b)(4) complying with Table 8.1 to Subpart UUU
TABLE8.2	CCU not subject to the NSPS requirements for CO in 40 CFR § 60.103 or § 60.102a(b)(4) complying with Table 8.2 to Subpart UUU

- ★ **Complete “CCU CO Control Device” and “CCU CO Control Device ID. No.” only if you are using a CO control device, and “CCU CO Emission Limitation” is “TABLE8.2.”**

#### CCU CO Control Device:

Select the control device used for CO emissions control. Enter the code on the form.

Code	Description
FLARE	Flare meeting the requirements of § 63.670
THERMINC	Thermal Incinerator
PRHTR	Process Heater with a design heat input capacity less than 44 MW or in which all vent streams are not introduced into the flame zone
BOILER	Boiler with a design heat input capacity less than 44MW or in which all vent streams are not introduced into the flame zone
OTHER	Other control device approved under § 63.1573(e)

#### CCU CO Control Device ID No.:

If applicable, enter the identification number 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 “CCU CO Control Device Alt ID” only if “CCU CO Control Device” is “OTHER.”**

#### CCU CO Control Device Alt ID:

If an alternate has been approved, then enter the corresponding alternate unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the alternate 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.

#### CCU CO Monitoring Method:

Select the monitoring method used to demonstrate compliance with the CO emission limit. Enter the code on the form.

Code	Description
CEMS	Continuous Emissions Monitoring System for measuring CO concentration
CEMS50-	Using CEMS to demonstrate CO emission average under 50 ppm (dry basis)
CPMS	Continuous Parameter Monitoring System for measuring combustion zone temperature

#### CCU Bypass Line:

Select one of the following options that describes if a bypass line is used to divert an affected vent stream away from a control device.

Code	Description
NONE	No bypass line serving the catalytic cracking unit
BYOPT1	Install and operate an automated system to detect flow in the bypass line (Option 1)
BYOPT2	Use a manual lock system by installing a car-seal or lock-and-key device (Option 2)
BYOPT3	Seal the bypass line by installing a solid blind between piping flanges (Option 3)
BYOPT4	Vent the bypass line to a control device (Option 4)
BYALT	Complying with alternative work practice standard approved by EPA as stated in § 63.1569(a)(2)

- ★ **Complete “CCU Bypass Line Alt Monitoring ID” only if “CCU Bypass Line” is “BYALT.”**

**CCU Bypass Line Alt Monitoring ID:**

If an alternate has been approved, then enter the corresponding alternate unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the alternate 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**.

**Table 3c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUU: National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries – Catalytic Reforming Units**

- ★ **Complete this table for catalytic reforming units (CRUs) that:**
- **are located at a petroleum refinery that is a major source of HAP emissions**
  - **meets the definition of an affected source as defined by § 63.1562(b)**

**Unit ID. No.:**

Enter the identification number (ID. No.) for the catalytic reforming unit (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 index numbers please go to 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).

**CRU TOC Emission Limitation:**

Select one of the following options that describes the total organic compounds (TOC) emission limitation for the catalytic reforming unit. Enter the code on the form.

<b>Code</b>	<b>Description</b>
TABLE15.1	Vent emissions of TOC to a flare that meets the requirements of §63.670 (Option 1) complying with Table 15.1 to Subpart UUU
TABLE15.2	Reduce uncontrolled emissions of TOC or nonmethane TOC by 98% by weight or to a concentration of 20 ppmv (Option 2) complying with Table 15.2 to Subpart UUU

- ★ **Do not complete “CRU TOC Compliance Method” if “CRU TOC Emission Limitation” is “Table15.1”**

**CRU TOC Compliance Method:**

Select the compliance option for reducing TOC emissions.

<b>Code</b>	<b>Description</b>
PRCENT	Complying with the TOC percent reduction limit
CONCEN	Complying with the TOC concentration limit

**CRU TOC Control Device:**

Select one of the following options that describes the control device used to control TOC emissions.

<b>Code</b>	<b>Description</b>
THERMINC	Thermal Incinerator
PRHTR	Process Heater with a design heat input capacity less than 44 MW or in which all vent streams not introduced into the flame zone
BOILER44-	Boiler with a design heat input capacity less than 44MW or in which all vent streams not introduced into the flame zone
BOILER44+	Boiler with a design heat input capacity less equal to or greater than 44MW or which all vent streams are introduced into the flame zone
NONE	No control device

**CRU TOC Control Device ID No.:**

If applicable, enter the identification number 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 “CCU TOC Control Device Alt ID” only if “CCU TOC Control Device” is “OTHER.”**

**CCU TOC Control Device Alt ID:**

If an alternate has been approved, then enter the corresponding alternate unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the alternate 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.

**CRU Engineering Assessment:**

Enter “YES” if choosing to perform an engineering assessment for CRUs according to the requirements of § 63.1571(c). Otherwise, enter “NO.”

**CRU Alternate Monitoring:**

Enter “YES” if choosing to monitor alternate parameters in accordance with § 63.1573(e). Otherwise, enter “NO.”

★ **Complete “CRU Alt Monitoring ID” only if “CRU Alternate Monitoring” is “ADCS” or “ALT.”**

**CRU Alt Monitoring ID:**

If an alternate has been approved, then enter the corresponding alternate unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the alternate 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.

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**Table 3d: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart UUU: National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries**

★ **Complete this table for catalytic reforming units (CRUs) that:**

- **are located at a petroleum refinery that is a major source of HAP emissions**
- **meets the definition of an affected source as defined by § 63.1562(b)**

**Unit ID. No.:**

Enter the identification number (ID. No.) for the catalytic reforming unit (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 index numbers please go to 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).

**CRU HCL Emission Limitation:**

Select one of the following options that Which the CRU HCl emission limitation.

Code	Description
TABLE22.1	Existing semi-regenerative CRU reducing uncontrolled emissions of HCl 92% by weight or to a concentration of 30 ppmv complying with Table 22.1 to Subpart UUU
TABLE22.2	Existing cyclic or continuous CRU reducing uncontrolled emissions of HCl by 97% by weight or to a concentration of 10 ppmv complying with Table 22.2 to Subpart UUU
TABLE22.3	New semi-regenerative, cyclic, or continuous CRU reducing uncontrolled emissions of HCl by 97% by weight or to a concentration of 10 ppmv complying with Table 22.3 to Subpart UUU

**CRU HCl Compliance Method:**

Select the compliance option for reducing TOC emissions.

Code	Description
PERCENT	Complying with the HCl percent reduction limit
CONCEN	Complying with the HCl concentration limit

**CRU HCL Control Device:**

Select one of the following options that describes the control device used to control HCl emissions.

Code	Description
WETSCRUB	Wet Scrubber
INTSCR1	Internal Scrubbing System meeting the HCl outlet concentration limit
INTSCR2	Internal Scrubbing System meeting the HCl reduction standard
FBGSAS	Fixed-bed gas-solid adsorption system
MBGSAS	Moving-bed gas-solid adsorption system
NONE	No control device

**CRU HCL Control Device ID No.:**

If applicable, enter the identification number 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."

**CCU HCL Control Device Alt ID:**

If an alternate has been approved, then enter the corresponding alternate unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the alternate 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.

- ★ **Complete “Wet Scrubber Alt Monitoring” only if “CRU HCl Control Device” is “WETSCRUB” or “INTSCR2.”**

**CRU HCl Alt Monitoring:**

Select one of the following alternative monitoring methods.

Code	Description
ALT	Monitoring alternative parameters in accordance with § 63.1573(e)
PH	Using the alternative pH procedure in § 63.1573(b)(1)
ALK	Using the alternative alkalinity method in § 63.1573(b)(2)
NONE	No alternate monitoring

**CRU Bypass Line:**

Select one of the following options that describes the work practice standard for the bypass line. Enter the code on the form.

Code	Description
NONE	No bypass line serving the SRU
BYOPT1	Install and operate an automated system to detect flow in the bypass line (Option 1)
BYOPT2	Use a manual lock system by installing a car-seal or lock-and-key device (Option 2)
BYOPT3	Seal the bypass line by installing a solid blind between piping flanges (Option 3)
BYOPT4	Vent the bypass line to a control device (Option 4)
BYALT	Complying with alternative work practice standard approved by EPA as stated in § 63.1569(a)(2)

- ★ **Complete “CRU Bypass Line Alt Monitoring ID” only if “CRU Bypass Line” is “BYALT.”**

**CRU Bypass Line Alt Monitoring ID:**

If an alternate has been approved, then enter the corresponding alternate unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the alternate 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**.

**Table 3e: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart UUU: National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries**

- ★ **Complete this table for sulfur recovery units (SRUs) that:**
- are located at a petroleum refinery that is a major source of HAP emissions meet the definition of an affected source as defined by § 63.1562(b)

**Unit ID. No.:**

Enter the identification number (ID. No.) for the sulfur recovery unit (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 index numbers please go to 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).

**SRU Emission Limitation:**

Select one of the following options that describes the emission limitation for the SRU. Enter the code on the form.

<b>Code</b>	<b>Description</b>
TABLE29.1A1	New or existing Claus SRU subject to the NSPS for sulfur oxides in 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) using an oxidation control system or reduction control system followed by incineration complying with 250 ppmv SO <sub>2</sub> emission limit.
TABLE29.1A2	New or existing Claus SRU subject to the NSPS for sulfur oxides in 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) using an oxidation control system or reduction control system followed by incineration complying with SO <sub>2</sub> concentration determined using Equation 1 of 40 CFR § 60.102a(f)(1)(i).
TABLE29.1B1	New or existing Claus SRU subject to the NSPS for sulfur oxides in 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) using a reduction control system without incineration complying with 300 ppmv of reduced sulfur compounds calculated as ppmv SO <sub>2</sub> emission limit.
TABLE29.1B2	New or existing Claus SRU subject to the NSPS for sulfur oxides in 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) using a reduction control system without incineration complying with SO <sub>2</sub> concentration determined using Equation 1 of 40 CFR § 60.102a(f)(1)(i).
TABLE29.2A1	New or existing SRU not subject to the NSPS for sulfur oxides in 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) using an oxidation control system or reduction control system followed by incineration electing to comply with 250 ppmv SO <sub>2</sub> emission limit (Option 1).
TABLE29.2A2	New or existing SRU not subject to the NSPS for sulfur oxides in 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) using an oxidation control system or reduction control system followed by incineration electing to comply with SO <sub>2</sub> concentration determined using Equation 1 of 40 CFR § 60.102a(f)(1)(i) (Option 1).
TABLE29.2B1	New or existing SRU not subject to the NSPS for sulfur oxides in 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) using a reduction control system without incineration electing to comply with 300 ppmv of reduced sulfur compounds calculated as ppmv SO <sub>2</sub> emission limit (Option 1).
TABLE29.2B2	New or existing SRU not subject to the NSPS for sulfur oxides in 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) using a reduction control system without incineration electing to comply with SO <sub>2</sub> concentration determined using Equation 1 of 40 CFR § 60.102a(f)(1)(i) (Option 1).
TABLE29.3	New or existing SRU not subject to the NSPS for sulfur oxides in 40 CFR § 60.104(a)(2) or § 60.102a(f)(1) electing to comply with TRS emission limit of 300 ppmv (Option 2).

**SRU Alternate Monitoring:**

Enter "YES" if choosing to monitor alternate parameters in accordance with § 63.1573(e). Otherwise, enter "NO."

- ★ Complete “SRU Monitoring Method” only if “SRU Emission Limitation” is “TABLE29.1B1,” “TABLE29.1B2,” “TABLE29.2B1,” “TABLE29.B2,” or “TABLE29.3” AND “SRU Alternate Monitoring” is “NO.”

**SRU Monitoring Method:**

Select the monitoring method used to demonstrate compliance with the SRU emission limitation. Enter the code on the form.

Code	Description
SULOXY	CEMS for monitoring reduced sulfur and O <sub>2</sub> concentrations
DILOXY	Instrument having an air or SO <sub>2</sub> dilution and oxidation system to convert reduced sulfur to SO <sub>2</sub> for continuously monitoring and recording the concentration at zero percent excess air of the resultant SO <sub>2</sub>
TRSCEMS	CEMS for monitoring TRS concentrations (only use if SRU Emission Limitation is SRU5)
CPMS	CPMS for measuring and recording the combustion zone temperature of each thermal incinerator (only use if SRU Emission Limitation is SRU5)

**SRU Startup/Shutdown Emissions:**

Select one of the following options that describes the control of startup and shutdown purge gases. Enter the code on the form.

Code	Description
FLARE	Startup/shutdown emissions sent to flare meeting §63.670
TOX	Startup/shutdown emissions sent to thermal oxidizer
TINC	Startup/shutdown emissions sent to thermal incinerator
NONE	Startup/shutdown emissions not sent to control device

**SRU Bypass Line:**

Select one of the following options that describes the work practice standard for the bypass line. Enter the code on the form.

Code	Description
NONE	No bypass line serving the SRU
BYOPT1	Install and operate an automated system to detect flow in the bypass line (Option 1)
BYOPT2	Use a manual lock system by installing a car-seal or lock-and-key device (Option 2)
BYOPT3	Seal the bypass line by installing a solid blind between piping flanges (Option 3)
BYOPT4	Vent the bypass line to a control device (Option 4)
BYALT	Complying with alternative work practice standard approved by EPA as stated in § 63.1569(a)(2)

- ★ Complete “SRU Alt Monitoring ID” only if “SRU Bypass Line” is “BYALT.”

**SRU Bypass Line Alt Monitoring ID:**

If an alternate has been approved, then enter the corresponding alternate unique identifier for each unit or process (maximum 10 characters). If the unique identifier is unavailable, then enter the date of the alternate 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**.



**Table 4a: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter B: Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas**

- ★ **Complete this table for fluid catalytic cracking units (FCCU) (including CO boiler, CO furnace, and catalyst regenerator vent) located at a major source of NO<sub>x</sub> in the Houston/Galveston/Brazoria Eight-Hour ozone nonattainment areas. FCCUs located in the Beaumont/Port Arthur Eight-Hour ozone nonattainment area are exempt from Subchapter B per § 117.103(b)(4), except for CO boilers designated as opt-in units which are addressed in Form OP-UA6. There are no Subchapter B requirements relating to FCCUs in the Dallas/Fort Worth Eight-Hour ozone nonattainment area.**

**Unit ID. No.:**

Enter the identification number (ID. No.) for the FCCU (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 index numbers please go to 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).

**NO<sub>x</sub> Emission Limitation:**

Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable emission specifications. Select one of the following options. Enter the code on the form.

<b>Code</b>	<b>Description</b>
310D	Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(2) [relating to mass emissions cap and trade in Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration]
ACF	Boiler is complying with an annual capacity factor specification under Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(17)

- ★ **Complete “310A2-OPTION” only if “NO<sub>x</sub> Emission Limitation” is “310D.”**

**310A2-Option:**

Select one of the following § 117.310(a)(2) NO<sub>x</sub> emission options. Enter the code on the form.

<b>Code</b>	<b>Description</b>
310A2-A	40 ppmv NO <sub>x</sub> at 0.0% O <sub>2</sub> , dry basis per § 117.310(a)(2)(A).
310A2-B	90% NO <sub>x</sub> reduction of the exhaust concentration used to calculate the June – August 1997 daily NO <sub>x</sub> emissions per § 117.310(a)(2)(B).
310A2-C	install and certify a NO <sub>x</sub> CEMS or PEMS per § 117.310(a)(2)(C).

**NO<sub>x</sub> Monitoring System:**

Select one of the following monitoring system options. Enter the code on the form.

<b>Code</b>	<b>Description</b>
75ARC	Acid rain-affected unit subject to continuous emissions monitoring requirements of 40 CFR Part 75
75ARP	Acid rain-affected unit subject to predictive emissions monitoring requirements of 40 CFR Part 75
CEMS	Continuous emissions monitoring system
PEMS	Predictive emissions monitoring system

**NO<sub>x</sub> Emission Limit Average:**

Select one of the following options for the NO<sub>x</sub> emission limit. Enter the code on the form.

<b>Code</b>	<b>Description</b>
30DAY	Emission limit in pounds/MMBtu on a rolling 30-day average
BLK1-LB	Emission limit in pounds/hour on a block one-hour average
PPMV	Emission limit in parts per million by volume (ppmv)

Enter “YES” if the fluid catalytic cracking unit boiler is using supplemental fuel and thus requires a totalizing fuel flow meter. Otherwise, enter “NO.”

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**Table 4b: Title 30 Texas Administrative Code Chapter 117 (30 TAC Chapter 117), Subchapter B: Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas**

- ★ **Complete this table for fluid catalytic cracking units (FCCU) (including CO boiler, CO furnace, and catalyst regenerator vent) located at a major source of NO<sub>x</sub> in the Houston/Galveston/Brazoria Eight-Hour ozone nonattainment areas. FCCUs located in the Beaumont/Port Arthur Eight-Hour ozone nonattainment area are exempt from Subchapter B per § 117.103(b)(4), except for CO boilers designated as opt-in units which are addressed in Form OP-UA6. There are no Subchapter B requirements relating to FCCUs in the Dallas/Fort Worth Eight-Hour ozone nonattainment area.**

**Unit ID. No.:**

Enter the identification number (ID. No.) for the FCCU (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 index numbers, please go to 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).

- ★ **Do not complete “Fuel Flow Monitoring” if “Supplemental Fuel” is “No.”**

**Fuel Flow Monitoring:**

Select one of the following options to indicate how fuel flow is monitored. Enter the code on the form.

Code	Description
X40A	Fuel flow is with a totalizing fuel flow meter per 30 TAC § 117.340(a)
X40A2-A	Unit operates with a NO <sub>x</sub> and diluent CEMS and monitors stack exhaust flow per 30 TAC § 117.340(a)(2)(A)
X40A2-B	Unit vents to a common stack with a NO <sub>x</sub> and diluent CEMS and uses a single totalizing fuel flow meter per 30 TAC § 117.340(a)(2)(B)

**CO Emission Limitation:**

Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable CO emission specifications of 30 TAC Chapter 117, Subchapter B. Select one of the following options. Enter the code on the form.

Code	Description
310C	Title 30 TAC § 117.310(c)(1) 400 ppmv option
ACSS	Unit is complying with an Alternative Case Specific Specification under Title 30 TAC § 117.325(a)

**CO Monitoring System:**

Select one of the following options to indicate how the unit is monitored for CO exhaust emissions. Enter the code on the form.

Code	Description
CEMS	Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1)
PEMS	Predictive emissions monitoring system complying with 30 TAC § 117.8100(b)
OTHER	Other than CEMS or PEMS

**Ammonia NO<sub>x</sub> Reduction:**

Enter “YES” if urea or ammonia is injected into the exhaust stream for NO<sub>x</sub> control. Otherwise, enter “NO.”

▼ Continue only if “Ammonia NO<sub>x</sub> Reduction” is “Yes.”

**NH<sub>3</sub> Emission Limitation:**

Title 30 TAC Chapter 117 provides several methods to be in compliance with the applicable NH<sub>3</sub> emission specifications of 30 TAC Chapter 117. Select one of the following options. Enter the code on the form.

Code	Description
310C	Title 30 TAC § 117.310(c)(2) [relating to Emission Specifications for Attainment Demonstration]
ACSS	Unit is complying with an Alternative Case Specific Specification under Title 30 TAC § 117.325(a)

**NH<sub>3</sub> Monitoring:**

Select one of the following options to indicate how the unit is monitored for NH<sub>3</sub> emissions. Enter the code on the form.

Code	Description
CEMS	Continuous emissions monitoring system
PEMS	Predictive emissions monitoring system
MBAL	Mass balance
OXY	Oxidation of ammonia to nitric oxide (NO)
STUBE	Stain tube

**Table 5: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) Subpart CC: National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries**

★ **Complete this table for delayed coking units that:**

- are located at a petroleum refinery plant site that is a major source of HAP emissions,
- are located at a petroleum refinery plant site that was a major source of HAPs on September 10, 2024,
- emit, contain or contact one or more of the HAPs listed in Table 1 of 40 CFR Part 63, Subpart CC, and
- meet the definition of an affected source as defined by § 63.641.

**Unit ID. No.:**

Enter the identification number (ID. No.) for the delayed coking unit (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 index numbers please go to 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).

**Coke Drum Standard:**

Select one of the following options to indicate which operation standard the coke drum vessel meets. Enter the code on the form.

Code	Description
PRESS	Meeting pressure limit for coke drum vessel
TEMP	Meeting temperature limit for coke drum vessel

**Existing Source:**

Select one of the following options to indicate if the heat exchange system is existing or new. Enter the code on the form.

Code	Description
EXIST	The heat exchange system is an existing source
NEW	The heat exchange system is a new source

▼ **Continue only if “Coke Drum Standard” is “TEMP.”**

**Water Overflow Method:**

Enter “YES” if the water overflow method of coke cooling is used prior to complying with the operation standard in § 63.357(a). Otherwise, enter “NO.”

▼ **Continue only if “Water Overflow Method” is “YES.”**

**Overflow Water Control:**

Select one of the following options to indicate the method of control used for the overflow water. Enter the code on the form.

Code	Description
SEP	Overflow water is directed to a separator or similar device.
SSTK	Overflow water is directed to a storage vessel meeting the requirements in 40 CFR Part 63, Subpart SS.