



Texas Commission on Environmental Quality
Form OP-UA7 - Instructions
Flare Attributes

General:

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

- Table 1:** Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111)
Control of Air Pollution from Visible Emissions and Particulate Matter
- Table 2:** This table has been retired as of 06/01/00. All questions relating to the applicability of 30 TAC Chapter 117, Subchapter B: Commercial, Institutional, and Industrial Sources (to flares), are contained on Form OP-REQ1.
- Table 3:** Title 40 Code of Federal Regulations Parts 60 and 61 (40 CFR Part 60 and 40 CFR Part 61)
Subpart A: General Provisions of Standards of Performance for New Stationary Sources and National Emission Standards for Hazardous Air Pollutants
- Table 4:** Title 40 Code of Federal Regulations Part 63
Subpart A: General Provisions of National Emission Standards for Hazardous Air Pollutants for Source Categories
- Table 5a-5b:** Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter H, Division 1: Highly-Reactive Volatile Organic Compounds-Vent Gas Control

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

The Texas Commission on Environmental Quality (TCEQ) **requires** that a Core Data Form be submitted on all incoming registrations unless **all** of the following are met: the Regulated Entity and Customer Reference Numbers have been issued by the TCEQ and no core data information has changed. The Central Registry, a common record area of the TCEQ which maintains information about TCEQ customers and regulated activities, such as company names, addresses, and telephone numbers. This information is commonly referred as “core data.” The Central Registry provides the regulated community with a central access point within the agency to check core data and make changes when necessary. When core data about a facility is moved to the Central Registry, two new identification numbers are assigned: the *Customer Reference (CN)* number and the *Regulated Entity (RN)* number. The Core Data Form is required if facility records are not yet part of the

Central Registry or if core data for a facility has changed. If this is the initial registration, permit, or license for a facility site, then the Core Data Form must be completed and submitted with application or registration forms. If amending, modifying, or otherwise updating an existing record for a facility site, the Core Data Form is not required, unless any core data information has changed. To review additional information regarding the Central Registry, go to the TCEQ Web site at www.tceq.texas.gov/permitting/central_registry/.

Unit attribute questions that do not require a response from all applicants are preceded by qualification criteria in the instructions. If the unit does not meet the qualification criteria, a response to the question is not required. **Anytime a response is not required based on the qualification criteria, leave the space on the form blank.** **Notwithstanding any qualification criteria in the form instructions or information provided in other TCEQ guidance, the applicant may leave an attribute question blank (or indicate “N/A” for “Not Applicable”) if the attribute is not needed for the applicable requirement determinations of a regulation for a unit.**

In some situations, the applicant has the option of selecting alternate requirements, limitations, and/or practices for a unit. Note that these alternate requirements, limitations, and/or practices must have the required approval from the TCEQ Executive Director and/or the U.S. Environmental Protection Agency Administrator before the federal operating permit application is submitted.

If you have questions on how to fill out this form or about air quality permit, please call 512/239-1250. Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call 512/239-3282.

Specific:

**Table 1: Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111)
Control of Air Pollution from Visible Emissions and Particulate Matter**

UNIT ID NO.: Enter the identification number (ID No.) for the flare (maximum 10 characters) as listed on Form OP-SUM entitled, “Individual Unit Summary.”

SOP/GOP 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]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers please refer to the TCEQ guidance document entitled “Federal Operating Permit Application Guidance Document.”

ACID GASES ONLY: Enter “YES” if the flare is used *only* as an acid gas flare as defined in 30 TAC § 101.1. Otherwise, enter “NO.”

▼ **Complete “Emergency/Upset Conditions Only” only if “Acid Gases Only” is “NO.”**

EMERGENCY/UPSET CONDITIONS ONLY: Enter “YES” if the flare is used *only* under emergency or upset conditions. Otherwise, enter “NO”.

▼ **Continue only if “Acid Gases Only” is “YES.”**

ALTERNATE OPACITY LIMITATION (AOL): Enter “YES” if complying with an AOL under 30 TAC § 111.113. Otherwise, enter “NO” (*GOP applicants must answer “NO”*).

AOL ID NO.: If an AOL has been approved, enter the corresponding AOL unique identifier (maximum 10 characters) for each unit. If the unique identifier is unavailable, then enter the date of the AOL 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 account number. Otherwise, leave this column blank.

▼ **Continue only if “Alternate Opacity Limitation (AOL)” is “NO”.**

CONSTRUCTION DATE: Select one of the following options for the construction date of the newest source routing emissions to the flare. Enter the code on the form.

<u>Code</u>	<u>Description</u>
72-	Source began construction on or before January 31, 1972
72+	Source began construction after January 31, 1972

Table 2: This table has been retired as of 06/01/00. All questions relating to the applicability of 30 TAC Chapter 117, Subchapter B: Commercial, Institutional, and Industrial Sources (to flares), are contained on Form OP-REQ1.

Table 3: Title 40 Code of Federal Regulations Parts 60 and 61 (40 CFR Part 60 and 40 CFR Part 61) General Provisions of Standards of Performance for New Stationary Sources and National Emission Standards for Hazardous Air Pollutants

UNIT ID NO.: Enter the identification number (ID No.) for the flare (maximum 10 characters) as listed on Form OP-SUM entitled, “Individual Unit Summary.”

SOP/GOP 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]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information before determining the GOP index number. For additional information relating to SOP and GOP index numbers please refer to the TCEQ guidance document entitled “Federal Operating Permit Application Guidance Document.”

SUBJECT TO 40 CFR § 60.18: Enter “YES” if the flare is subject to 40 CFR § 60.18. Otherwise, enter “NO”.

▼ **Continue Only if “Subject to 40 CFR § 60.18” is “YES.”**

ADHERING TO HEAT CONTENT SPECIFICATIONS: Enter “YES” if the owner or operator is adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Otherwise, enter “NO”.

▼ **Continue only if “Adhering to Heat Content Specifications” is “YES.”**

FLARE ASSIST TYPE: Select one of the following options for the type of flare assist. Enter the code on the form.

<u>Code</u>	<u>Description</u>
STEAM	Steam-assisted
AIR	Air-assisted
NONE	Non-assisted

▼ Continue only if “Flare Assist Type” is “STEAM” or “NONE.”

FLARE EXIT VELOCITY: Select one of the following ranges for actual flare exit velocity. Enter the code on the form.

<u>Code</u>	<u>Description</u>
60-	Flare Exit Velocity is less than 60 feet per second (ft/s) (18.3 m/sec)
60-400	Flare Exit Velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)
400+	Flare Exit Velocity is greater than or equal to 400 ft/s (122 m/sec)

▼ Continue only if “Flare Exit Velocity” is “60-400” or “400+.”

HEATING VALUE OF GAS: Select one of the following ranges for heating value of gas. Enter the code on the form.

<u>Code</u>	<u>Description</u>
1000-	Heating Value is less than or equal to 1000 Btu/scf (37.3 MJ/scm)
1000+	Heating Value is greater than 1000 Btu/scf (37.3 MJ/scm)

**Table 4: Title 40 Code of Federal Regulations Part 63
Subpart A: National Emission Standards for Hazardous Air Pollutants for Source Categories**

UNIT ID NO.: Enter the identification number (ID No.) for the flare (maximum 10 characters) as listed on Form OP-SUM entitled, “Individual Unit Summary.”

SOP INDEX NO.: Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP index numbers, please refer to the TCEQ guidance document entitled “Federal Operating Permit Application Guidance Document.”

REQUIRED UNDER 40 CFR PART 63: Enter “YES” if the flare is required by a Subpart under 40 CFR Part 63. Otherwise, enter “NO”.

▼ Continue only if “Required Under 40 CFR Part 63” Is “YES.”

HEAT CONTENT SPECIFICATION: Enter “YES” if the owner or operator is adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Otherwise, enter “NO”.

▼ Continue only if “Heat Content Specification” Is “YES.”

FLARE ASSIST TYPE: Select one of the following options for the type of flare assist. Enter the code on the form.

<u>Code</u>	<u>Description</u>
STEAM	Steam-assisted
AIR	Air-assisted
NONE	Non-assisted

▼ Continue only if “Flare Assist Type” is “STEAM” or “NONE.”

FLARE EXIT VELOCITY: Select one of the following ranges for actual flare exit velocity. Enter the code on the form.

<u>Code</u>	<u>Description</u>
60-	Flare Exit Velocity is less than 60 feet per second (ft/s) (18.3 m/sec)
60-400	Flare Exit Velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)
400+	Flare Exit Velocity is greater than or equal to 400 ft/s (122 m/sec)

▼ Continue only if “Flare Exit Velocity” is “60-400” OR “400+.”

HEATING VALUE OF GAS: Select one of the following ranges for heating value of gas. Enter the code on the form.

<u>Code</u>	<u>Description</u>
1000-	Heating Value is less than or equal to 1000 Btu/scf (37.3 MJ/scm)
1000+	Heating Value is greater than 1000 Btu/scf (37.3 MJ/scm)

Table 5a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter H, Division 1: Highly-Reactive Volatile Organic Compounds-Vent Gas Control

- ★ Complete this table only for operations located in the Houston/Galveston/Brazoria area; and;
- ★ Complete this table only for operations with a flare that emits or has the potential to emit HRVOC.
- ★ Do not complete this table if, at the site, all individual gas streams routed to a flare contain less than 5% by weight of HRVOC at all times, and all individual vent gas streams not routed to a flare contain less than 100 ppmv HRVOC at all times.

UNIT ID NO.: Enter the identification number (ID No.) for the flare (maximum 10 characters) as listed on Form OP-SUM entitled, “Individual Unit Summary.”

SOP INDEX NO.: Site operating permit (SOP) applicants should indicate the SOP Index Number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP Index Numbers, please go to the TCEQ Web site at www.tceq.state.tx.us/assets/public/permitting/air/Guidance/Title_V/additional_fop_guidance.pdf.

OUT OF SERVICE: Enter “YES” if the flare was permanently out of service by April 1, 2006. Otherwise, enter “NO”.

★ Continue only if “Out of Service” is “NO.”

TOTAL GAS STREAM: Enter “YES” if the flare receives a total gas stream with greater than 100 ppmv HRVOC at any time. Otherwise, enter “NO.”

GAS STREAM CONCENTRATION: Enter “YES” if the flare receives a gas stream containing 5% or greater HRVOC by weight at any time. Otherwise, enter “NO”.

★ Complete “Exempt Date” only if “Total Gas Stream” or Gas Stream Concentration” is “NO”.

EXEMPT DATE: Enter “YES” if the flare became exempt after 12/31/05. Otherwise, enter “NO”.

★ Continue only if “Total Gas Stream” and “Gas Stream Concentration” are “YES.”

ALTERNATIVE MONITORING (AM): Enter “YES” if using alternative monitoring (AM) and testing methods approved by the executive director. Otherwise, enter “NO”.

AM ID NO.: If an AM has been approved, enter the corresponding AM unique identifier (maximum 10 characters) for each unit. If the unique identifier is unavailable, then enter the date of the AM 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 account number. Otherwise, leave this column blank.

MINOR MODIFICATION: Enter “YES” if using any minor modification to the monitoring and testing methods approved by the executive director. Otherwise, enter “NO”.

MINOR MODIFICATION ID NO.: If a minor modification has been approved, enter the corresponding minor modification unique identifier (maximum 10 characters) for each unit. If the unique identifier is unavailable, then enter the date of the minor modification approval letter in the table column. The unique identifier and/or date of the approval letter are contained in the compliance file under the appropriate account number. Otherwise, leave this column blank.

FLARE TYPE: Select one of the following codes that best describes the type of flare at the facility. Enter the code on the form.

<u>Code</u>	<u>Description</u>
MULTI	Flare is in multi-purpose service
ABLOAD	Flare is used solely for abatement of emissions from marine loading operations or transport vessel loading and unloading operations.
ABMSS	Flare is used solely for abatement of emissions from scheduled or unscheduled maintenance, startup, or shutdown activities.
EMER	Flare is an emergency flare as defined in § 115.10.
TEMP	Flare is in temporary service and temporarily receives HRVOC emissions
LIQDUAL	Flare is specifically designed to receive and control liquid or dual phase streams containing HRVOCs
ALKYL	Flare is used to control vent gases from metal alkyl production processes.
OTHER	Flare is in other service.

▼ Do not continue if “Flare Type” is “LIQDUAL.”

Table 5b: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter H, Division 1: Highly-Relative Volatile Organic Compounds-Vent Gas Control

UNIT ID NO.: Enter the identification number (ID No.) for the flare (maximum 10 characters) as listed on Form OP-Sum entitled, “Individual Unit Summary.”

SOP INDEX NO.: Site Operating permit (SOP) applicants should indicate the SOP Index Number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). For additional information relating to SOP Index Numbers, please go to the TCEQ Web site at http://www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/additional_fop_guidance.pdf.

★ Complete “Monitoring Requirements” only if “Flare Type” is “MULTI,” “ABMSS,” “EMER” or “ALKYL.”

MONITORING REQUIREMENTS: Enter “YES” if the flare is complying with the continuous monitoring requirements in § 115.725(d). Otherwise, enter “NO”.

▼ Do not continue if “Flare Type is “ALKYL” and “Monitoring Requirements” is “NO.”

★ Complete “§ 115.725(e) Requirements” only if “Flare Type” is “ABLOAD.”

§ 115.725(e) REQUIREMENTS: Enter “YES” if the flare is complying with the requirements in § 115.725(e). Otherwise, enter “NO”.

▼ Do not continue if “Flare Type is “ABLOAD” and “§ 115.725(e) Requirements” is “YES.”

★ Complete “Multi-purpose Usage” only if “Flare Type” is “MULTI” and “Monitoring Requirements” is “NO.”

MULTI-PURPOSE USAGE: Select one of the following codes that best describes the usage of the multi-purpose flare. Enter the code on the form.

<u>Code</u>	<u>Description</u>
ABATE	Flare is used for abatement of emissions from marine loading operations or transport vessel loading and unloading operations AND for abatement of emissions from scheduled or unscheduled maintenance, startup, or shutdown activities.
LOADEMER	Flare is used for abatement of emissions from marine loading operations or transport vessel loading and unloading operations AND as an emergency flare.
MSSEMER	Flare is used for abatement of emissions from scheduled or unscheduled maintenance, startup, or shutdown activities AND as an emergency flare.
ALL	Flare is used for abatement of emissions from marine loading operation or transport vessel loading and unloading operations AND for abatement of emission from scheduled or unscheduled maintenance, startup, or shutdown AND as an emergency flare.

★ Complete “Flow Rate” if “Monitoring Requirements” is “NO” and “Flare Type: is “ABMSS” or if “Monitoring Requirements” is “NO” and “Multi-purpose Usage” is “ABATE,” “MSSEMER,” or “ALL.”

FLOW RATE: Enter “YES” if the flow rate of the gas routed to the flare is determined by using process knowledge and engineering calculations. Otherwise, enter “NO”.

★ Complete “Physical Seal” if “Flare Type” is “EMER” or if “Multi-purpose Usage” is “LOADEMER,” “MSSEMER,” or “ALL” and “Monitoring Requirements” is “NO.”

PHYSICAL SEAL: Enter “YES” if the flare is equipped with a physical seal. Otherwise, enter “NO”.

★ Complete “Monitoring Option” and “§ 115.725(h)(4) Alternative” only if “Flare Type” is “TEMP.”

MONITORING OPTION: Select one of the following codes that best describes the monitoring option used to demonstrate compliance with § 115.722(a)-(d). Enter the code on the form.

<u>Code</u>	<u>Description</u>
FLOW	Using the flow monitoring requirements in § 115.725(d)(1)
PROC	Using process knowledge
ACTUAL	Using actual measurements

SUB Using the flow monitoring data from the monitored flare system as data substitution.
(For flares that temporarily receive HRVOC emissions from flare systems that are monitored in
accordance with § 115.725(d)).

§ 115.725(h)(4) ALTERNATIVE: Enter “YES” if the owner/operator is choosing to implement monitoring options in
§ 115.725(h)(4)(A) or § 115.725(h)(4)(B) in lieu of the continuous monitoring requirements in § 115.725(d)(2).
Otherwise, enter “NO”.

★ **Complete “Tank Service” if “Monitoring Requirements” is “YES” or if “115.725(e) Requirements” is “NO”
or if “Flare Type” is “TEMP” and “§ 115.725(h)(4) Alternative” is “NO” or if “Flare Type” is “OTHER.”**

TANK SERVICE: Enter “YES” if the flare is in dedicated service for storage tanks with 95% or greater of an individual
HRVOC. Otherwise, enter “NO”.



**Flare Attributes
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Federal Operating Permit Program**

**Table 1: Title 30 Texas Administrative Code Chapter 111 (30 TAC Chapter 111)
Control of Air Pollution from Visible Emissions and Particulate Matter**

Date :	Permit No.:	Regulated Entity No.:
Area Name:		

Unit ID No.	SOP/GOP Index No.	Acid Gases Only	Emergency/Upset Conditions Only	Alternate Opacity Limitation (AOL)	AOL ID No.	Construction Date



**Flare Attributes
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Federal Operating Permit Program**

Table 2: This table has been retired as of 06/01/00. All questions relating to the applicability of 30 TAC Chapter 117, Subchapter B: Commercial, Institutional, and Industrial Sources (to flares), are contained on Form OP-REQ1.



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Federal Operating Permit Program**

Table 3: Title 40 Code of Federal Regulations Part 60 and 61 (40 CFR Part 60 and 40 CFR Part 61)

Subpart A: General Provisions of Standards of Performance for New Stationary Sources and National Emission Standards for Hazardous Air Pollutants

Date:	Permit No.:	Regulated Entity No.:
Area Name:		

Unit ID No.	SOP/GOP Index No.	Subject To 40 CFR §60.18	Adhering To Heat Content Specifications	Flare Assist Type	Flare Exit Velocity	Heating Value of Gas



**Flare Attributes
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Federal Operating Permit Program**

**Table 4: Title 40 Code of Federal Regulations Part 63
Subpart A: General Provisions of National Emission Standards for Hazardous Air Pollutants for Source Categories**

Date:	Permit No.:	Regulated Entity No.:
Area Name:		

Unit ID No.	SOP/GOP Index No.	Required Under 40 CFR Part 63	Heat Content Specification	Flare Assist Type	Flare Exit Velocity	Heating Value of Gas



**Flare Attributes
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Federal Operating Permit Program**

**Table 5a: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter H, Division 1: Highly-Reactive Volatile Organic Compounds-Vent Gas Control**

Date:	Permit No.:	Regulated Entity No.:
Area Name:		

Unit ID No.	SOP Index No.	Out of Service	Total Gas Stream	Gas Stream Concentration	Exempt Date	Alternative Monitoring (AM)	AM ID No.	Minor Modification	Minor Modification ID No.	Flare Type



**Flare Attributes
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**Table 5b: Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115)
Subchapter H, Division 1: Highly-Reactive Volatile Organic Compounds-Vent Gas Control**

Date:	Permit No.:	Regulated Entity No.:
Area Name:		

Unit ID No.	SOP Index No.	Monitoring Requirements	§115.725(e) Requirements	Multi-Purpose Usage	Flow Rate	Physical Seal	Monitoring Option	§115.725(h)(4) Alternative	Tank Service