

FLARE WORKSHEET INSTRUCTIONS

How to Complete this Worksheet

- Submit this worksheet as a supplemental document to an *Application for a Minor Source Authority to Construct/Permit to Operate*. If submitting this worksheet without a permit application, or in response to an AQMD request for supplemental information, locate and check the "Supplemental Information" box at the top left of Page 2.
- The worksheet must be filled out completely for all items that are applicable, except where noted as optional.
- The Application for a Minor Source Authority to Construct/Permit to Operate, all applicable emission unit and/or control device worksheet(s), and payment should be hand delivered to the AQMD drop box located (here), or mailed to: NNPH, AQMD

1001 E. Ninth Street, Suite B171 Reno, NV 89512

- Other forms that may be required in addition to this worksheet:
 - o For emission control equipment, use the appropriate *Emission Control Device Worksheet (Control Device, Cyclone, Flare, Fabric Filter/Baghouse, or Scrubber)* and duplicate as needed. Be sure to indicate the emission unit that the control equipment is affecting.
 - o If not operating on grid power and/or if there is an engine on site, use the Internal Combustion Engine Worksheet.
- More detailed instructions can be found on page 4.

Assistance and Resources

The Business Environmental Program, operated through the University of Nevada, is a free and confidential program designed to help small businesses in Washoe County comply with local and federal environmental regulations. This service may be contacted at 800.882.3233 or help@unrbep.org. The Business Environmental Program may provide information on completing this air quality application. They can also provide assistance in reviewing options for emission control equipment and submitting annual emissions.



Visit this link to learn more about working with BEP: https://unrbep.org/about-bep/working-with-bep/

- District Board of Health Regulations Governing Air Quality Management:
 https://www.washoecounty.gov/health/programs-and-services/air-quality/regulations/index.php
- The Air Quality Management Division Permitting Department can be contacted at 775.784.7200 Option 6 or AQMDPermitting@NNPH.org.



FLARE WORKSHEET

FOR AQMD USE ONLY
Permit No.:

Supplemental Information

Facility Information				
1. New Permit Permit Modification 2.	Existing facilities onl	ly. Permit Number:		
3. Facility Name:				
4. Facility Address:				
City: State:		ZIP Code:		
Specifications				
5. Manufacturer:	6. Date of Mai	nufacture:		
7. Model No.:	8. Serial No.:			
9. Flare Type (check all that apply): Ground Ele	evated Open Par	rtially Enclosed Enclosed		
10. Emergency Flare? Yes No				
11. Mixing Method: Steam Injected Compresse	ed Air Fuel Gas (Other (specify):		
12. Maximum design heat rating (in Btu/hr):				
13. Rated control efficiency (%): Pollutant(s) Controlled:				
14. Flare Gas Type:				
Higher heat value of flare gas (Btu/ft³):				
Maximum flare gas flow rate (ft³/hr):				
Flare gas fuel flow meter: Yes No				
Sulfur content of flare gas (gr/100 ft³):				
15. Pilot Type: Intermittent Continuous Auto	omatic Ignition System ((flow sensing) Heat Sensing Ignit	ion System	
Type of pilot gas fuel: Natural Gas LPG/Prop	oane Methane Oth	her (specify):		
Pilot fuel consumption (ft³/hr):				
Pilot gas fuel flow meter: Yes No				
Sulfur content of pilot gas (gr/100 ft³):				
16. Emission unit(s) or source(s) of emissions vented to the flare:				



17.	7. Flare tip height above grade (ft):				
	Flared gas temperature (°F):				
	Flared gas flow rate (ft³/min):				
	Flare height if different from tip height (ft):				
	Flare diameter (ft):				
18.	Maximum rated emissions concentrations. Select uni NO_x SO_2 CO	t of measure: ppm lb/hr lb/MMBtu PM/PM ₁₀ VOC			
19.	Source for emissions factor: Manufacturer's Spec Other (specify):	ifications Source Test AP-42			
20.	Gas Stream Composition:				
	Component	Select the one that applies: VOL % MOLE % WEIGHT %			

Attach manufacturer's specification sheet(s) for the flare. Include flare emissions in the PTE calculation.

All information above this line is required for this form to be considered complete. Duplicate sheet as needed.



DETAILED WORKSHEET INSTRUCTIONS

Facility Information

- 1. Specify if the worksheet is for a new permit or for modification of an existing permit by checking the appropriate box.
- 2. **For existing facilities only.** Provide the Permit Number (ex. AAIRXX-XXXX), which can be found at the top of page 1 of the existing Permit to Operate (ex. AAIRXX-XXXX).
- 3. Provide the facility name as it appears on the *Application for a Minor Source Authority to Construct/Permit to Operate.* If a permit already exists for this operation, enter the name as it appears on the existing permit, which can be found at the top of page 1 of the existing Permit to Operate where it says, "Permit Issued To".
- 4. Provide the facility address.

Specifications

- 5-8. Specify the manufacturer, date of manufacture, model number, and serial number of the flare.
- 9. Specify the type of flare used.
- 10. Specify whether, or not, the flare is an emergency flare.
- 11. Specify the primary mixing method for the flare.
- 12. Specify the maximum design heat rate in Btu/hr.
- 13. Specify the rated control efficiency of the pollutant(s) involved and the target pollutants controlled by the flare.
- 14. Specify the primary fuel type of the flare, the flare gas higher heat value, the maximum flow rate of the flare gas, whether the flare gas has a flow meter, and the sulfur content of the flare gas.
- 15. Specify the flare pilot type, the pilot fuel type, the consumption rate of the pilot fuel, whether the pilot fuel has a flow meter, and the sulfur content of the pilot gas.
- 16. Specify the emission units controlled by the flare.
- 17. Specify the height of the flare tip above grade, the temperature of the flared gas, the flow rate of the flared gas, the flare height if different from the flare tip height, and the diameter of the flare tip.
- 18. Specify the maximum rated emissions concentrations for each pollutant from the flare. Select the units used for reporting emissions: parts per million, pounds per hour, or pounds per million Btu.
- 19. Specify the emissions factor source for No. 17.
- 20. List the components of the gas stream and each one's volume, mole, or weight percentage. (Select the one that applies)