San Joaquin Valley Unified Air Pollution Control District
Supplemental Application Form

Flares

Please complete one form for each flare.

This form must be accompanied by a completed Authority to Construct/Permit to Operate Application form

PERMIT TO BE ISSUED TO:
FLARE LOCATION (STREET ADDRESS or ¼ SECTION, TOWNSHIP, & RANGE or LAT/LONG):

PROCESS DESCRIPTION

Process Data	Gas Streams/Processes the Flare Serves (include permit number(s), if applicable):	
	Is the flare gas pressure ≥ 5 psig? ☐ Yes ☐ No	
	Maximum Potential Flare Gas Flowrate: _____ acf/hr, _____ acf/day, _____ acf/year	
	Is this a municipal landfill flare? ☐ Yes ☐ No	Is this an emergency flare? ☐ Yes ☐ No

EQUIPMENT DESCRIPTION

Tip Data	Tip Manufacturer:	Tip Model:
	Serial No.:	Tip Manufacturer's rated capacity: _____ (MMcf/hr)
	Tip Opening Cross Sectional Area: _____ (ft2)	
Flare Design and Emission Control Equipment	☐ Air-assist flare, _____ scfm of assist air	
	☐ Steam assist flare, _____ lb/min of assist steam	
	☐ Coanda effect flare	
	☐ Other type of flare (please provide details):	
	Smokeless Operation? ☐ Yes ☐ No, Source:	
Flare Emissions Data	NO_X Emission Factor: _____ (lb/MMBtu)	
	PM_{10} Emission Factor: _____ (lb/MMBtu)	
	CO Emission Factor: _____ (lb/MMBtu)	
	VOC Emission Factor: _____ (lb/MMBtu)	
	VOC destruction efficiency: _____ %	
Source of Data	☐ Manufacturer's Specifications ☐ Emissions Source Test ☐ AP-42 ☐ Other _____ **Note: please provide copies of all sources of emissions data.**	

Northern Regional Office * 4800 Enterprise Way * Modesto, California 95356-8718 * (209) 557-6400 * FAX (209) 557-6475
Central Regional Office * 1990 East Gettysburg Avenue * Fresno, California 93726-0244 * (559) 230-5900 * FAX (559) 230-6061
Southern Regional Office * 34946 Flyover Court * Bakersfield, California 93308 * (661) 392-5500 * FAX (661) 392-5585
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FLARED GAS DATA

Flared Gas Data	Fuel Type:	
	Flare Gas Fuel Flow Meter? ☐ Yes ☐ No	
	Higher Heating Value: _____ Btu/scf	Sulfur Content: _____ gr/100 scf
	Carbon to Hydrogen ratio:	
	Percent weight of hydrocarbons heavier than pentane (please attach gas analysis):	

PILOT EQUIPMENT AND FUEL DATA

Pilot Type	Intermittent ☐	Continuous ☐	Automatic (Flow Sensing) Ignition System ☐	Heat Sensing Ignition System ☐
Pilot Fuel Data	Type of pilot gas fuel (e.g., LPG/propane, methane, or process gas stream):			
	Pilot Fuel Consumption: _____ (scf/hr)		Sulfur Content: _____ gr/100 scf	
	Pilot Gas Fuel Flow Meter: ☐ Yes ☐ No			

GAS SULFUR TREATMENT (if applicable)

Sulfur Treatment System	Type of system (submit manufacturer's documentation):
	Control Efficiency:_____ %, Source:
	Outlet sulfur concentration: _____ ppmw or gr-S/100 scf, Source:

HEALTH RISK ASSESSMENT DATA

Operating Hours	Maximum Operating Schedule: _____ hours per day, and _____ hours per year		
Receptor Data	Distance to nearest Residence	_____ feet	Distance is measured from the proposed flare location to the nearest property line of the nearest apartment, house, dormitory, etc.
	Direction to nearest Residence	_____	Direction from the flare to the receptor, i.e. Northeast or South.
	Distance to nearest Business	_____ feet	Distance is measured from the proposed flare location to the nearest property line of the nearest office building, factory, store, etc.
	Direction to nearest Business	_____	Direction from the flare to the receptor, i.e. North or Southwest.
Facility Location	☐ Urban (area of dense population) ☐ Rural (area of sparse population)		

Select the Appropriate Flare Type and Fill Out the Required Modeling Parameters

Flare Type	☐ Open Flare[1]	☐ Partially Enclosed Flare[2]	☐ Enclosed Flare[3]
Flare Tip Height	_____ feet above grade	_____ feet above grade	N/A
Enclosure Height	N/A	_____ feet above grade	_____ feet above grade
Velocity	N/A	Flowrate: _____acfm	Flowrate: _____acfm
Diameter	_____inches at flare tip	_____inches at flare tip	_____inches at enclosure opening
Temperature	_____°F	_____°F	_____°F

[1]A vertically or horizontally oriented open pipe flare from which gases are released into the air before combustion is commenced.
[2]A flare composed of gas burner(s) within an enclosure such that the flame is visible beyond the end of the enclosure when active.
[3]A flare composed of gas burner(s) within an enclosure such that the flame is **not** visible beyond the end of the enclosure when active.