San Joaquin Valley AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Supplemental Application Form

Glass Melting Furnaces – Compliance with Rule 4354 (12/16/2021 amendments)

NOTE: *This form must be accompanied by a completed Authority to Construct (ATC) Application Form.*

FACILITY NAME: | FACILITY ID #:

FACILITY LOCATION:

EQUIPMENT DETAILS

PERMIT TO OPERATE #(s):

TYPE OF GLASS PRODUCED ☐ Container Glass ☐ Fiberglass ☐ Flat Glass ☐ Other: _____

GLASS FURNACE TOTAL HEAT INPUT RATING: MMBtu/hr

PERMITTED PRODUCTION CAPACITY: ton/day ton/year

FUEL & FIRING

PRIMARY FUEL: ☐ Natural Gas ☐ Other: _____

SUPPLEMENTAL HEATING TECHNIQUE: ☐ LPG/Propane ☐ Electric Heating ☐ Other: _____

FIRING TECHNOLOGY: ☐ 100% Air-fired ☐ Oxy-assisted ☐ Oxy-fuel ☐ Other: _____

PROPOSED EMISSIONS LIMITS

Please specify Rule 4354 NOx compliance schedule for this application: ☐ Phase I ☐ Phase II

Proposed emission limits to comply with Rule 4354:

Pollutant	Steady-State			Start-Up		Shutdown	
	lb/ton of glass produced (Block 24-hour Avg)	lb/ton of glass produced (Rolling 30-day Avg)	ppmv	(ppmv)	(lb/hr)	(ppmv)	(lb/hr)
NOx			N/A N/A				
SOx			N/A N/A				
PM_{10}			N/A N/A				
CO	N/A						
VOC	N/A						
Duration (please provide justification)				_____ hr/day	_____ hr/yr	_____ hr/day	_____ hr/yr

% O_2, dry basis, if corrected to other than 8%: _____%

NH_3 emissions in exhaust (if reagent used): _____ ppmv

EMISSIONS CONTROL SYSTEMS

Please provide information on emissions control systems used to comply with Rule 4354 limits

Pollutant	CE (%)*	Emission Control Systems
NOx		☐ Selective Catalytic Reduction (SCR) ☐ Catalytic Filter System ☐ Other: _____ Reagent used: ☐ Ammonia (NH_3) ☐ Urea ☐ Other: _____
SOx		☐ Dry scrubber ☐ Wet scrubber ☐ Semi-dry ☐ Other: _____ Sorbent used: ☐ Trona ☐ Calcium hydroxide ☐ Calcium Carbonate ☐ Other: _____
PM_{10}		☐ Electrostatic Precipitator ☐ Ceramic dust collector ☐ Other: _____
CO		☐ None ☐ Other: _____
VOC		☐ None ☐ Other: _____

***Source of Control Efficiency (CE)** (please provide copies of all supporting data):

☐ Manufacturer's Specifications ☐ Emission Source Test ☐ CEMS Data ☐ Other: _____

Northern Regional Office
4800 Enterprise Way
Modesto, CA 95356-8718
(209) 557-6400 * FAX (209) 557-6475

Central Regional Office
1990 E Gettysburg Avenue
Fresno, CA 93726-0244
(559) 230-5900 * FAX (559) 230-6061

Southern Regional Office
34946Flyover Court
Bakersfield, CA 93308-9725
(661) 392-5500 * FAX (661) 392-5585

Note: Please Complete the Following Section for Major Source Pollutants Only

BASELINE ACTUAL EMISSIONS

Please provide date for **Baseline Actual Emissions (BAE)** and indicate basis of the data:

☐ Previous 5 years data **OR** ☐ average during any consecutive 24-month period within the previous 10-years

Year							
Actual Emissions (lb/year)	CEMS Data*	NOx					
		SOx					
		CO					
	Source Test Data*	PM10					
		VOC					
Actual Production (ton-glass produced/year)							
Fuel Usage (MMscf/yr)	Primary						
	Supplemental						

*Please attach all supporting records of historical usage to determine BAE:

☐ Emissions Source Test ☐ CEMS Data ☐ Other: _____

PROJECTED ACTUAL EMISSIONS

Projected Actual Emissions (PAE) data attached (lb/year)? Yes ☐ No ☐

Note: For units with no increase in design capacity or potential to emit (PE), PAE is equal to annual emission rate at which unit is projected to emit in any1 year, selected by the operator, within 5 years after the unit resumes normal operation. If detailed PAE are not provided, District will use PE2 to calculate project emissions increase as = ∑(PE2 – BAE)

Unused Baseline Capacity (UBC) data attached (lb/year)? Yes ☐ No ☐

Note: When using historical data & company's expected business activity to determine PAE, portion of emissions after the project that the existing unit could have accommodated (UBC) before the project (during the same 24-month baseline period used to determine BAE) and that are unrelated to the particular project (including emissions increases due to product demand growth) are to be excluded. Thus Project Emissions Increase could be calculated as = PAE – BAE – UBC

HEALTH RISK ASSESSMENT DATA

Will this application result in change in stack parameters (Exhaust flowrate, release height, etc.)**?** Yes ☐ No ☐

Will this application result in increase in NH_3 emissions? Yes ☐ No ☐

If you answered **YES** to any questions above, please fill out the section below otherwise leave blank.

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 stack location to the nearest boundary of the nearest apartment, house, dormitory, etc.
	Direction to nearest Residence	_____	Direction from the stack to the receptor, i.e. Northeast or South.
	Distance to nearest Business	_____ feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest office building, factory, store, etc.
	Direction to nearest Business	_____	Direction from the stack to the receptor, i.e. North or Southwest.
Stack Parameters	Release Height	_____ feet above grade	
	Stack Diameter	_____ inches at point of release	
	Rain Cap	☐ Flapper-type ☐ Fixed-type ☐ None ☐ Other: _____	
	Direction of Flow	☐ Vertically Upward ☐ Horizontal ☐ Other: _____° from vert. or _____° from horiz.	
Exhaust Data	Flowrate: _____ acfm	Temperature: _____ °F	
Facility Location	☐ Urban (area of dense population) ☐ Rural (area of sparse population)		
	Include a facility plot plan showing the location of the stack. Please indicate North on the plot plan. For public notice projects, indicate on plot plan the facility boundaries or fence line and distance(s) from stack to boundaries.		