BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Engineering Division

Data Form **F** Worksheet

Semiconductor Manufacturing Operations

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Data Form F is for semiconductor manufacturing operations that are subject to Regulation 8, Rule 30. Additional forms and all District regulations and rules are available on the District's web site. Submit one data form for each semiconductor fabrication area. Contact your assigned plant engineer or the Engineering Division at the above telephone number if you need assistance completing this form.

Plant No.	Business Name			
Source No.	Source Description			
Initial Date of	Operation (leave blank if this applica	tion is submitted to modify an existing permitted source)	/	/

Complete all applicable parts on this six-page form. Maximum annual throughput is the amount of material that will appear as a permit condition limit. The usage limit should be set high enough so that it is not likely to be exceeded while taking into consideration District BACT, offset, and toxics requirements. **Please propose an annual usage limit at this time and provide Material Safety Data Sheets for solvent mixtures and photoresist and other wafer coating materials.** *Please leave Material Codes blank, if unknown.

Part A – Solvent Cleaning Operations

1. Solvent Sinks (as defined in Regulation 8-30-214)

Solvent Name or Trade Name of Solvent Mixtures (attach MSDS for Solvent Mixtures)	Material Code*	Organic Content (wt %)	Density (Ib/gal)	Maximum Annual Throughput (gal/yr)	P-#, or If Abated, A-#
ONE COMPONENT SOLVENTS					
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
SOLVENT MIXTURES (MORE THAN ONE COMPONENT SOLVENTS)	Attach MSDS	Attach MSDS	Attach MSDS		

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2.	Solvent S	pray Stations	as defined in	Regulation 8-30-221	1)
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Solvent Name or Trade Name of Solvent Mixtures (attach MSDS for Solvent Mixtures)	Material Code*	Organic Content (wt %)	Density (Ib/gal)	Maximum Annual Throughput (gal/yr)	P-#, or If Abated, A-#
ONE COMPONENT SOLVENTS					
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
SOLVENT MIXTURES (MORE THAN ONE COMPONENT SOLVENTS)	Attach MSDS	Attach MSDS	Attach MSDS		

3. Solvent Vapor Stations (as defined in Regulation 8-30-222)

Solvent Name or Trade Name of Solvent Mixtures (attach MSDS for Solvent Mixtures)	Material Code*	Organic Content (wt %)	Density (Ib/gal)	Maximum Annual Throughput (gal/yr)	P-#, or If Abated, A-#
ONE COMPONENT SOLVENTS					
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
		100%			
SOLVENT MIXTURES (MORE THAN ONE COMPONENT SOLVENTS)	Attach MSDS	Attach MSDS	Attach MSDS		

*Please leave Material Codes blank, if unknown.

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4. Wipe Cleaning Operations (as defined in Regulation 8-30-225)

Solvent Name or Trade Name of Solvent Mixtures (attach MSDS for Solvent Mixtures)	Material Code*	Organic Content (wt %)	Density (Ib/gal)	Maximum Annual Throughput (gal/yr)	P-#, or If Abated, A-#
ONE COMPONENT SOLVENTS					
		100%			
		100%			
		100%			
		100%			
		100%			
SOLVENT MIXTURES (MORE THAN ONE COMPONENT SOLVENTS)	Attach MSDS	Attach MSDS	Attach MSDS		

Part B – Coating Operations

1. Photoresist (as defined in Regulation 8-30-215) and Other Wafer Coating

Photoresist/Other Wafer Coating Trade Name (attach MSDS)	Organic Content (wt %)	Density (Ib/gal)	Maximum Annual Throughput (gal/yr)	P-#, or If Abated, A-#

2. Solvent-Based Developer (as defined in Regulation 8-30-219)

Solvent-Based Developer Trade Name (attach MSDS)	Organic Content (wt %)	Density (Ib/gal)	Maximum Annual Throughput (gal/yr)	P-#, or If Abated, A-#

*Please leave Material Codes blank, if unknown.

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3. Other Miscellaneous Solvent Usage

Solvent Name or Trade Name of Solvent Mixtures (attach MSDS for Solvent Mixtures)	Material Code*	Organic Content (wt %)	Density (Ib/gal)	Maximum Annual Throughput (gal/yr)	P-#, or If Abated, A-#
ONE COMPONENT SOLVENTS					
		100%			
		100%			
		100%			
		100%			
SOLVENT MIXTURES (MORE THAN ONE COMPONENT SOLVENTS)	Attach MSDS	Attach MSDS	Attach MSDS		

Part C – Other Operations Involving Materials That Are Toxic (listed in Table 2-5-1 of Regulation 2-5)

1. Inorganic Liquids

Inorganic Liquid Name	Material Code*	Density (Ib/gal)	Maximum Annual Throughput (gal/yr)	P-#, or If Abated, A-#

*Please leave Material Codes blank, if unknown.

2. Organic and/or Inorganic Gases (excluding carrier gases)

Organic and/or Inorganic Gas Name	Material Code*	Maximum Annual Throughput (Ib/yr)	P-#, or If Abated, A-#

*Please leave Material Codes blank, if unknown.

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COMPLI	ANCE DE	ETERMINATION WORKSHEET (Completion required for all operations that exist in fab area source)
Photores	ist Opera	tions Using Solvent-Based Developer Requirements
🗌 Yes	🗌 No	Is solvent-based developer applied by any method other than by immersion in a solvent sink? If no, go to next section.
🗌 Yes	🗌 No	Are all exhaust gases containing VOC from both the solvent-based photoresist application and solvent- based developer operations in the fab area vented to an approved emission control device which captures and abates at least 90% (by weight) of VOC evaporated at the application and development operations? (8-30-302)
🗌 Yes	🗌 No	Is total combined net consumption of solvent-based photoresist and solvent-based developer less than 24 gallons per month? (8-30-402)
Solvent S	Sink Requ	uirements
🗌 Yes	🗌 No	Do all solvent sinks containing VOC have a cover? (8-30-304.1)
🗌 Yes	🗌 No	If no (all solvent sinks do not have a cover), are all uncovered solvent sinks containing VOC abated by an approved emission control device? (8-30-304.2; 8-30-304.5)
🗌 Yes	🗌 No	Is the capacity of all solvent sinks clearly labeled on the sink (8-30-304.2)
🗌 Yes	🗌 No	Are all materials containing VOC, including waste solvents, stored or disposed in a manner so as not to allow evaporation into the atmosphere? (8-30-304.3)
🗌 Yes	🗌 No	Are liquid solvent leaks repaired immediately or the equipment shut down (8-30-304.4)
🗌 Yes	🗌 No	Are there any unheated solvent sinks with a vapor pressure higher than 30 mmHg at 20 degrees C, OR any heated sinks with a freeboard ratio ¹ less than 0.75? (8-30-304.5)
🗌 Yes	🗌 No	If yes, are there any such sinks with capacity greater than 1 liter? (8-30-304.5.1)
🗌 Yes	🗌 No	If yes (greater than 1 liter), are all such sinks abated by an approved emission control device.(8-30-304.2; 8-30-304.5.2)
	1.	The vertical distance from the top of the evaporative area to the bottom of the lowest opening in the solvent cleaner (freeboard height) divided by the smaller of the length or width of the solvent cleaner evaporative area.
Solvent S	Spray Sta	tion Requirements
🗌 Yes	🗌 No	Does the station(s) operate as a sealed enclosure unless sampling, maintenance, loading or unloading procedures require operator access. (8-30-305.1)
🗌 Yes	🗌 No	If no (station is not a sealed enclosure), is station abated by an approved emission control device which captures and abates at least 90% (by weight) of VOC emitted from station? (8-30-305.1)
🗌 Yes	🗌 No	Are liquid solvent leaks repaired immediately or the equipment shut down (8-30-305.2)
🗌 Yes	🗌 No	Does station have VOC emissions that exceed 250 lb/month per station, as calculated in accordance with 8-30-504?
🗌 Yes	🗌 No	If yes (station's VOC emissions exceeds 250 lb/month), does an approved emission control device abate station? (8-30-305.3)
Solvent \	/apor Sta	tion Requirements
🗌 Yes	🗌 No	Does the station(s) operate as a sealed enclosure unless sampling, maintenance, loading or unloading procedures require operator access. (8-30-306.1)
🗌 Yes	🗌 No	If no (station is not a sealed enclosure), is station abated by an approved emission control device which captures and abates at least 90% (by weight) of VOC emitted from station? (8-30-306.1)
🗌 Yes	🗌 No	Are liquid solvent leaks repaired immediately or the equipment shut down (8-30-306.2)
🗌 Yes	🗌 No	Does station have VOC emissions that exceed 250 lb/month per station, as calculated in accordance with 8-30-504?
🗌 Yes	🗌 No	If yes (station's VOC emissions exceeds 250 lb/month), does an approved emission control device abate station? (8-30-306.3)

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Fab Area Wipe Cleaning Requirements

🗌 Yes	🗌 No	Is a solution containing less than or equal to 10% VOC by weight only used to perform wipe cleaning of fab area walls, floors and other fab area surfaces, including fabrication tool enclosures? (8-30-307)
🗌 Yes	🗌 No	Discarded rags and paper that have been used for cleaning are kept in a closed container. (8-1-320)
🗌 Yes	🗌 No	All solvent containers are closed at all times except when a solvent is being dispensed. (8-1-321)

Additional Comments, If Any

CERTIFICATION (I hereby certify that all information contained herein is true and correct)

Signature Title Date