

Semiconductor Operations Reporting Form*
Title 17, California Code of Regulations, Section 95324

For Official Use Only

Date Received:

SECTION A. EMISSIONS DATA REPORT TIME PERIOD

START DATE OF REPORTING PERIOD:

END DATE OF REPORTING PERIOD:

SECTION B. GENERAL INFORMATION

PART I. FACILITY LOCATION:

1. FACILITY NAME:

2. MAILING ADDRESS:

CITY:

STATE:

ZIP CODE:

3. STREET ADDRESS (IF DIFFERENT FROM ABOVE):

CITY:

STATE:

ZIP CODE:

PART II. CONTACT INFORMATION:

1. CONTACT NAME AND TITLE:

2. CONTACT E-MAIL ADDRESS:

3. CONTACT TELEPHONE NUMBER:

4. CONTACT FAX NUMBER:

*Use of this form is voluntary, but submittal of the specified data is required under title 17 CCR section 95324.

SECTION C. TIER CATEGORY AND EMISSIONS

TIER CATEGORY (check all that apply):

- TIER 1 (Operations that processed wafer surface area >37.7 million square centimeters/calendar year)
(Maximum limit is 0.2 Kg CO₂e/square centimeter)
- TIER 2 (Operations that processed wafer surface area >3.7 and ≤37.7 million square centimeters/calendar year)
(Maximum limit is 0.3 Kg CO₂e/square centimeter)
- TIER 3 (Operations that processed wafer surface area ≤3.7 million square centimeters/calendar year)
(Maximum limit is 0.5 Kg CO₂e/square centimeter)
- Reporting Only (Operations with emissions 0.0008 MMT or less of CO₂e per calendar year)

EMISSIONS (Total MMT CO₂e per calendar year):

- Per Subsection 95323(a), an operation that is replacing CVD or etching tools that process 150 millimeter diameter wafers with tools that process 200 millimeter diameter or larger wafers must comply with Table 1 emission standards by January 1, 2014.

SECTION D. GREENHOUSE GAS USAGE

ETCHING PROCESS:

C ₂ F ₆ :	MONTHLY AMOUNT (Kg):						ANNUAL AMOUNT (Kg):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	
C ₃ F ₈ :	MONTHLY AMOUNT (Kg):						ANNUAL AMOUNT (Kg):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	
C ₅ F ₈ :	MONTHLY AMOUNT (Kg):						ANNUAL AMOUNT (Kg):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	
CF ₄ :	MONTHLY AMOUNT (Kg):						ANNUAL AMOUNT (Kg):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	

CHF₃:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
CH₂F₂:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
c-C₄F₈:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
C₄F₈O:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
C₄F₆:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
COF₂:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
NF₃:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
SF₆:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
<i>CVD CHAMBER CLEANING PROCESS:</i>		
C₂F₆:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):

C₃F₈:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
C₅F₈:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
CF₄:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
CHF₃:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
CH₂F₂:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
c-C₄F₈:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
C₄F₈O:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
C₄F₆:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):
COF₂:	MONTHLY AMOUNT (Kg): Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec	ANNUAL AMOUNT (Kg):

NF₃:	MONTHLY AMOUNT (Kg):						ANNUAL AMOUNT (Kg):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	
SF₆:	MONTHLY AMOUNT (Kg):						ANNUAL AMOUNT (Kg):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	

SECTION E. WAFERS PROCESSED

MONTHLY AMOUNT (Square Centimeters):						ANNUAL AMOUNT (Square Centimeters):
Jan	Feb	Mar	Apr	May	Jun	
Jul	Aug	Sept	Oct	Nov	Dec	

SECTION F. EMISSIONS REDUCTION STRATEGIES USAGE

EMISSIONS REDUCTION STRATEGIES USED (check all that apply):

Process Optimization

Estimated emissions reduction in Kg CO₂e per square centimeter of wafer processed (Kg CO₂e/cm²):

Alternative Chemistries

Estimated emissions reduction in Kg CO₂e per square centimeter of wafer processed (Kg CO₂e/cm²):

Abatement Equipment

Permit:

The operator has applied for an authority to construct permit for abatement equipment from the appropriate permitting agency

The operator has a current permit for the abatement equipment from the appropriate permitting agency

Destruction Removal Efficiency Value:

Used the default destruction removal efficiency value in the Tier 2b calculation method in the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories report

Used an alternative destruction removal efficiency value

The alternative destruction removal efficiency value has been approved or is in the process of being approved by the permitting agency

Enter the alternative destruction removal efficiency value (percent):

Estimated emissions reduction in Kg CO₂e per square centimeter of wafer processed (Kg CO₂e/cm²):

Other

Estimated emissions reduction in Kg CO₂e per square centimeter of wafer processed (Kg CO₂e/cm²):

None

SECTION G. EMISSIONS IN MILLION METRIC TONS OF CARBON DIOXIDE EQUIVALENT (MMT CO₂e)

MONTHLY AMOUNT (MMT CO₂e):

Jan	Feb	Mar	Apr	May	Jun
Jul	Aug	Sept	Oct	Nov	Dec

ANNUAL AMOUNT (MMT CO₂e):

SECTION H. FLUORINATED HEAT TRANSFER FLUIDS (HTF)

HTF USAGE

None (Skip to SECTION I)

1. HTF USAGE:

Brand Name of HTF 1:	MONTHLY AMOUNT (mL):						ANNUAL AMOUNT (mL):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	

Brand Name of HTF 2:	MONTHLY AMOUNT (mL):						ANNUAL AMOUNT (mL):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	

Brand Name of HTF 3:	MONTHLY AMOUNT (mL):						ANNUAL AMOUNT (mL):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	

2. HTF PURCHASED:

Brand Name of HTF 1:	MONTHLY AMOUNT (mL):						ANNUAL AMOUNT (mL):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	

Brand Name of HTF 2:	MONTHLY AMOUNT (mL):						ANNUAL AMOUNT (mL):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	

Brand Name of HTF 3:	MONTHLY AMOUNT (mL):						ANNUAL AMOUNT (mL):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	

3. HTF ADDED TO SYSTEM INFORMATION:

System:	MONTHLY AMOUNT (mL):						ANNUAL AMOUNT (mL):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	
System:	MONTHLY AMOUNT (mL):						ANNUAL AMOUNT (mL):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	
System:	MONTHLY AMOUNT (mL):						ANNUAL AMOUNT (mL):
	Jan	Feb	Mar	Apr	May	Jun	
	Jul	Aug	Sept	Oct	Nov	Dec	

SECTION I. EMISSION CONTROL EQUIPMENT BREAKDOWNS, MALFUNCTIONS, & FAILURES

1. EMISSION CONTROL EQUIPMENT INFORMATION:

Breakdowns Malfunctions Failures

2. DETAILED EMISSION CONTROL EQUIPMENT INFORMATION:

A. Breakdown

B. Malfunctions

C. Failures

Note: Operators are usually required to report breakdowns, malfunctions, or failures to the appropriate permitting agency at the time of occurrence.

SECTION J. SIGNATURE BLOCK

In signing this form, I certify under penalty of perjury under the laws of the State of California that the information contained in this form is true, accurate and complete. I further certify that I am duly authorized to make this submittal on behalf of the regulated party.

Signature:	Printed Name:
Title:	Date: