

Department of Environmental Quality  
 Northwest Region  
 Air Quality Program

Simple  
 AIR CONTAMINANT DISCHARGE PERMIT  
 REVIEW REPORT

BCC RPI Hillsboro LLC  
 25300 NW Evergreen Road  
 Hillsboro, Oregon 97124  
 503-884-3400

Unassigned emissions	
Emission credits	
Source test	
COMS	
CEMS	
Compliance schedule	
Special conditions	
Annual report	X
Semi-annual report	
Quarterly report	

Monthly report	
Excess emissions report	
NSPS	Dc
NESHAP	
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Public Notice	Cat II

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## PERMITTING

### PERMITTING ACTION

1. The permit is a renewal for an existing Air Contaminant Discharge Permit (ACDP) which was issued on 08/27/2002 and was originally scheduled to expire on 01/01/2007. The old ACDP is being converted to a Simple ACDP in accordance with the rules adopted in May 2001.

### OTHER PERMITS

2. Other permits issued or required by the Department of Environmental Quality for this source include:
  - a. National Pollution Discharge Elimination System Permit
  - b. Hazardous Waste Generator ID Number

### ATTAINMENT STATUS

3. The source is located in a maintenance area for CO and Ozone, and an attainment area for all other criteria pollutants.
4. The source is not located within 10 kilometers of the any Class I Air Quality Protection Areas.

## SOURCE DESCRIPTION

### OVERVIEW

5. The permittee operates a polycrystalline silicon wafer manufacturing facility. The facility was built in 1997.
6. The following changes have been made to the facility since the last permit renewal:
  - a. In March 1999, all manufacturing operations were suspended until market conditions improve. The permit is being maintained to allow operation of the boilers for space heating and continued customer support. This permit does not preclude the manufacturing process from being restated at this facility.
  - b. Several addendums have been issued to designate the permit as a Simple ACDP, extend the expiration date until 01/01/2007 and change the owners' name twice.

### PROCESS AND CONTROL DEVICES

7. Existing air contaminant sources at the facility consist of the following:

- a. Two 300 hp Natural Gas fired Boilers without emission controls, installed in 1997
- b. Two 500 hp Natural Gas fired Boilers, without emission controls, installed in 1997
- c. Three 1000 kW emergency diesel generators and two 500 kW emergency diesel generators installed in 1997
- d. Two diesel emergency Fire Water Pumps installed in 1997

## COMPLIANCE

8. The facility was inspected on 07/01/1998 and 05/01/1999 and found to be in compliance with permit conditions.
9. During the prior permit period there were no, complaints recorded for this facility.
10. No enforcement actions have been taken against this source since the last permit renewal.

## SPECIAL CONDITIONS

11. The permittee is required notify the Department within 7 days of restarting manufacturing operations, and must ensure the permit properly covers operations before beginning operation.

## EMISSIONS

12. Proposed PSEL information:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limits (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	0	0	0	13	24	11
PM <sub>10</sub>	0	0	0	13	14	1
SO <sub>2</sub>	0	0	0	2	39	37
NO <sub>x</sub>	0	0	0	39	39	0
CO	0	0	0	9	99	90
VOC	0	0	0	14	39	25

- a. The proposed PSELs for all pollutants are equal to the Generic PSEL in accordance with OAR 340-216-0064(4)(b) and the netting basis is zero in accordance with OAR 340-222-0040(2).
- b. The PSEL is a federally enforceable limit on the potential to emit.

#### SIGNIFICANT EMISSION RATE ANALYSIS

13. For each pollutant, the proposed Plant Site Emission Limit is less than the Netting Basis plus the significant emission rate, thus no further air quality analysis is required.

#### MAJOR SOURCE APPLICABILITY

##### CRITERIA POLLUTANTS

14. A major source is a facility that has the potential to emit more than 100 tons per year of any criteria pollutant. This facility is not a major source of criteria pollutant emissions.

##### HAZARDOUS AIR POLLUTANTS

15. A major source is a facility that has the potential to emit more than 10 tons/year of any single HAP or 25 tons/year of combined HAPs. This source is not a major source of hazardous air pollutants.

#### ADDITIONAL REQUIREMENTS

##### NSPS APPLICABILITY

16. 40 CFR Part 60, Subpart Dc is applicable to the source because all four boilers are rated in excess of 10 mmBtu/hr heat input. Monthly monitoring of fuel usage for each boiler is required.

##### NESHAPS/MACT APPLICABILITY

17. There are no sources at this facility for which NESHAPS/MACT standards have been promulgated.

##### RACT APPLICABILITY

18. The facility is located in the Portland AQMA, but it is not one of the listed source categories in OAR 340-232-0010, thus the RACT rules do not apply

### TACT APPLICABILITY

19. The source is meeting the states TACT/Highest and Best Rules by conducting the following activities (more detailed descriptions are included in the prior permit):
  - a. The boilers burn only natural gas and use Low NOx burners to minimize emissions from combustion.
  - b. NOx emissions produced by the chemical reaction of nitric acid and hydrofluoric acid in acid etch and cleaning processes are controlled by two wet scrubbers with estimated control efficiencies of 90%. The scrubbers are three stage chemical scrubbers which remove more soluble NOx compounds in the first stage, oxidize NO in the second stage to more soluble NOx compounds which are removed in the third stage.
  - c. Process VOC control devices consist of adsorber concentrators followed by a catalytic oxidizer. Control efficiency is expected to exceed 90%.

### PUBLIC NOTICE

20. Pursuant to OAR 340-216-0064(5)(a), issuance of Simple Air Contaminant Discharge Permits require public notice in accordance with OAR 340-209-0030(3)(b), which requires that the Department provide notice of the proposed permit action and a minimum of 30 days for interested persons to submit written comments. **This public notice will be made available for public comment from February 23, 2007 until March 27, 1007, 5pm.**

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Document3  
3/20/2007