

## **Appendix 9B**

### **Determining BART-Eligible and BART-Subject Facilities**

## Description of BART-eligible and BART-subject Facilities

The DNRE determined that the electric generating units (EGUs) subject to BART are included in the Clean Air Interstate Rule (CAIR) program and therefore do not have to conduct BART control analyses at this time. The remainder of this appendix deals with the Non-EGU sources in Michigan that may be subject to BART requirements, using the federal BART guidelines.

To identify BART-subject sources, DNRE identified 35 non-EGU facilities with a total of 84 emission units within the state that were potentially subject to BART (i.e. BART-eligible) based on dates of installation and commencement of operations. (See Table 1)

Next, using emission inventory data from the years 2002 and 2004, DNRE evaluated the quantity of emissions from each source in relationship to the distance from known Class 1 areas, i.e. Q/d values. It was assumed that facilities with higher Q/d values have more than a 0.5 dV impact on more days over a relatively large area, and that a Q/d value of 10 TPY/km is a reasonable threshold. (i.e., facilities with Q/d values less than 10 TPY/km generally have few days over a relatively small area with more than a 0.5 dV impact). This resulted in six BART-eligible sources to be modeled in the next step of the evaluation. (See Table 2)

The next step involved the individual source attribution approach (dispersion modeling) using the 0.5 deciview threshold value, and using the CALPUFF model on the six facilities that met the Q/d criteria. This final step confirmed the six facilities as being non-EGU BART-subject sources (See Table 3). However, in the process of doing BART reviews, DNRE determined that an Empire mine furnace had shut down and that the Smurfit/Stone Container facility closed, resulting in removal of the two facilities from the BART-subject list.

**Table 1: BART-eligible Sources in Michigan**

<b>Source Name</b>	<b>Unit Description</b>	<b>SIC</b>
Cargill Salt	Spreader Stroker Boiler	2899
	Pulverized Coal Boiler	2899
Chrysler - Trenton Engine	Boiler #5	3714
Delphi Saginaw Steering	Boiler #5	3714
	Boiler #6	3714
	Boiler #4	3714
Detroit Diesel Corp	B & W	3519
Dow Corning Corp	Boiler # 8, 72 mmbtu/hr	2899
	Boiler # 6, 84 mmbtu/hr	2899
	Boiler #9, 72	2899
Eastern Michigan University	Boiler #1	8221
	Boiler #2	8221
Empire Iron Mining	Unit 1 Boilers (1-3)	1011
	Unit 2 Boilers (4-5)	1011
	Pit Boilers (6-7)	1011
	primary ore processing	1011
	Furnace Unit #1	1011
	Unit #1 scrubbers	1011
	Furnace Unit #2	1011
	Unit #2 scrubbers	1011
	furnace unit #3	1011
	Unit #3 scrubbers	1011
Ford - Livonia Transmission	Boiler #1	3714
	Boiler #3	3714
	Boiler #4	3714
Ford - Rawsonville	Boiler #1	3714
	Boiler #2	3714
	Boiler #5	3714
Ford - Saline	Boiler 166-77	3714
	Boiler 403-74	3714
Ford - Utica Trim	GRD Stor Boiler	3714
Gm - Pontiac Site Ope	Boiler #6	3714
	Boiler #7	3714
	Boiler #8	3714
	Boiler #9	3714
	Boiler #6	3714
Gm - Powertrain Div	Boiler #4	3714
	Boiler #5	3714
	Pouring/casting	33xx
Gm - Saginaw Metal	Boiler # 3-2	3321
	Boiler # 4-2	3321
Gm - Technical Ctr R	202 Boiler	3711
	Boiler #1	3711
Kalsec Inc Mfg Plant	Cleaver-Brooks	2087
Lafarge Midwest Inc.	Kilns 19	3241
	Kilns 20	3241

Source Name	Unit Description	SIC
	Kilns 21	3241
	Kilns 22	3241
	Kilns 23	3241
Louisiana Pacific Corp	Boiler #3	2493
Marathon Ashland Petro	Crude Oil heater	2911
Marblehead Lime Co	Kiln	3274
Merillat Industries Inc	Wood Boiler	2434
Michigan State University	Boiler #2	8221
	Boiler #3	8221
	Boiler #1	8221
Michigan Sugar Co Caro	Pkg. Boiler#3	2063
Michigan Sugar Co Carrollton	Riley Boiler	2063
Michigan Sugar Co Sebewaing	Pkg. boiler	2063
National Steel Corp Gld	Coke ovens & operations	3312
	O2 furnaces & operations	3312
	Boiler #9, 10-100 MMBTU/HR	3312
	Boiler #8, 10-100 MMBTU/HR	3312
New Page Paper Co	Boiler 8	2611
	Boiler 9	2611
Rouge Steel Company	Reheat furnace & heater	3312
	Reheat furnace & heater	3312
	Blast Furnaces & operations	3312
Sappi	Calciner	2621
	Boiler #3	2621
	Rec. Boiler	2621
St. Mary's Cement	Lime kiln with pre-calciner	3241
Smurfit-Stone Container	Boiler	2611
University Of Michigan	Boiler #3	8221
	Boiler #4	8221
Tilden Mining Co	Boiler #1(Pelletizing line #1)	1011
	primary crusher	1011
	cooler	1011
	dryer	1011
	Kiln	1011
Western Michigan University	Boiler #6	8221
William Beaumont Hospital	Boiler #1	8062
	Boiler #4	8062
	Boiler #5	8062

**Table 2: Facilities with a Q/d >10 TPY/km**

<b>Facility</b>	<b>County</b>	<b>Sox*</b>	<b>NOx*</b>	<b>Q/d</b>
Empire Iron Mining	Marquette	369	2,708	22
Lafarge Midwest Inc.(All Units)	Alpena	20,623	10,953	127.3
New Page Paper Company	Escanaba	193	1,726.6	22
St. Mary's Cement	Charlevoix	817	4,209	35
Smurfit-Stone Container	Ontonagon	1,949	1,128	23.5
Tilden Mining Co	Marquette	590	5,314	22

\* In Tons per Year

**Table 3: Final List of BART-subject Sources in Michigan**

<b>BART-subject Facility Name</b>	<b>City</b>
Empire Iron Mining*	Marquette
Lafarge Midwest Inc.	Alpena
New Page Paper Company	Escanaba
St. Mary's Cement	Charlevoix
Smurfit-Stone Container *	Ontonagon
Tilden Mining Co	Marquette

\*Due to permanent shut downs, a furnace at Empire and the Smurfit facility, the two facilities are no longer BART-subject