GREAT LAKES BINATIONAL TOXICS STRATEGY STAKEHOLDER FORUM

Coke Plants – Major BaP Sources

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COKE OVEN RULES
Part 63 – Subpart L

- Promulgated – October 1993
- Sources Covered – Charging, Doors, Lids, Offtake Systems, Collecting Mains, Non-recovery Batteries

COKE OVEN RULE CHANGES

- Residual Risk Rule – Promulgated April 2005, Compliance by July 2005 (Tightening of 1993 rules)
- Subpart CCCCC – Promulgated April 2003, Compliance by April 2006 (More emission points controlled: Pushing, Quenching, Combustion Stack)

NUMBER OF OPERATING COKE PLANTS

- Total: 9 plants
- By-product: 7 plants
- Non-recovery: 2 plants

PLANTS CLOSE TO GREAT LAKES

- EES Coke – River Rouge, MI (Lake Erie)
- U.S. Steel – Gary, IN (Lake Michigan)
- Mittal Steel – Burns Harbor, IN (Lake Michigan)
- Indiana Harbor Coke – East Chicago, IN (Lake Michigan)*
- Algoma Steel – Sault Ste. Marie, ONT (Lake Huron and Lake Superior)

RULE IMPLEMENTATION

- Residual Risk Rule (MACT plants only)

  Three plants in Region 5: State compliance inspections, with one possible issue regarding door emissions on non-recovery plant

- Subpart CCCCC

  Limited inspections by State agencies, follow-up needed

SUBPART CCCCC ISSUE

Some coke plants feel Subpart CCCCC not applicable

Emission of any single hazardous air pollutant is less than 10 tons per year, and of any combination of pollutants is less than 25 tons per year

US/CANADA JOINT EFFORT ALGOMA STEEL

Issue – Numerous complaints from U.S. Tribes and residents in Sault Ste. Marie, MI: Heavy black and red smoke from Algoma Steel (beginning in 1997)

ALGOMA STEEL PROJECT SUMMARY

- Consultation group formed
- Canada working with Algoma to reduce plant emissions
- Ambient air monitoring network implemented (particulate matter, speciated particulate matter, VOCs, PaHs) – Monitors in both U.S. and Canada
- Report of emission reductions and monitoring results in progress

ALGOMA MONITORING DATA
BaP

- U.S. EPA Reference concentration (1-in-1 million excess lifetime cancer risk): 0.9 ng/m3
- Lake Superior State University (U.S. side – approx 2 miles): 0.1 ng/m3 (2004-2006 avg)
- Canada side: 0.5 ng/m3; 1.8 ng/m3 (two sites, 2001-2003 avg)