

NC Toxic Air Pollutant Reports ***(pursuant to Session Law 2012-91)***

North Carolina Division of Air Quality

Environmental Review Commission Meeting
December 13, 2012

Air Toxics – Summary

Section 1

- Exempts sources subject to certain federal regulations
- Codifies “Director’s Call” provision

Section 2

- Requires rule amendments

Section 3

- Requires review of rules and their implementation

Section 4

- Requires reports on implementation of this act

Air Toxics – Section 4

- **Requires DAQ report to the ERC on the implementation of this Act**
 - **December 1, 2012, 2013 and 2014**
 - **The report shall include an analysis of air toxic emission changes and a summary of results of the Division's analysis of air quality impacts.**

Implementation of Air Toxics Legislation

- **June 28, 2012-October 28, 2012**
- **12 of 115 (10.4%) applications triggered DAQ review**
- **Analysis of review**

Emission Analysis	Rely on Previous Modeling Analysis	Facility Voluntarily Submitted Modeling	Director's Call
4	6	2	0

Implementation of Air Toxics Legislation

- **Pollutants commonly encountered during review:**

Toxic Air Pollutant	Number of Instances >1
Formaldehyde	5
Arsenic	4
Beryllium	4
Cadmium	4
Nickel	4
Manganese	4
Benzene	2
Fluorides	2

NC Air Toxics Emissions

	CY2009	CY2010	CY2011
TAP Only (pounds/yr)	38,142,325	36,385,525	31,712,917
HAP Only (pounds/yr)	32,774,769	32,604,346	27,977,691
HAP + TAP (pounds/yr)	48,493,673	46,497,405	41,410,502

TAP = 97 Toxic Air Pollutants regulated by NC State Air Toxics Rule

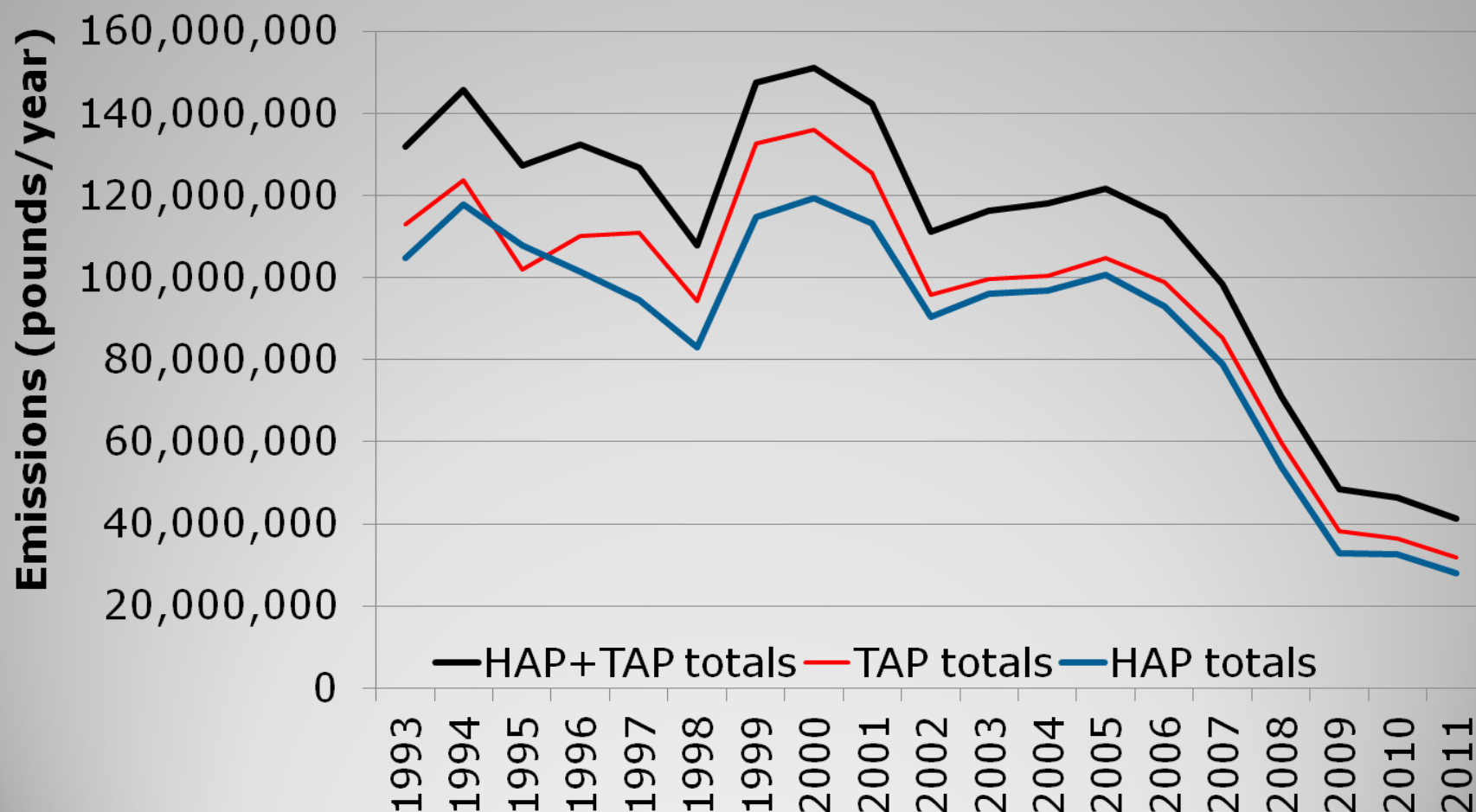
HAP = 187 Hazardous Air Pollutant regulated under 40 CFR Part 61 & 63

HAP + TAP = 111 unique HAPS added to the 97 TAPs.

Note: CY2011 represents emissions reported for 2011 operating year or the most currently reported year. Emissions inventories for several facilities have yet to be reviewed and/or submitted.

Source: Annual toxic air emissions reported by North Carolina facilities to the Division of Air Quality

Trends in NC Air Toxics



Source: Annual toxic air emissions reported by North Carolina facilities to the Division of Air Quality

Air Toxics – Section 3

- **Requires DAQ to review the State air toxics rules and their implementation to determine whether changes could:**
 - **Reduce unnecessary regulatory burden**
 - **Increase the efficient use of DAQ resources while maintaining protection of public health**
- **Conduct the review in consultation with interested parties**
- **Report the results of the review and include recommendations to the ERC by 12/1/12**

Recommendations for Rule Changes

- 1. Develop an additional set of emissions thresholds for pollutants coming from unobstructed vertical stacks**
- 2. Exempt natural gas and propane combustion units**
- 3. Exempt emergency engines**
- 4. Eliminate SIC call**
- 5. Clarify use of actual rate of emissions**
- 6. Remove the term “unadulterated wood” from rules**

1. Develop additional toxic permitting emission thresholds

- **Develop an additional set of emissions thresholds for pollutants coming from unobstructed vertical stacks**
 - **Additional thresholds may be 5-7 times higher than current thresholds**
 - **Health based standards stay the same.**

Impact:

- **Fewer facilities modeling**

2. Exempt natural gas and propane combustion units

- **US EPA has exempted certain gas-fired combustion units from federal air toxics rules. Another federal rule only prescribes work practice standards on affected units.**
- **Toxic air emissions from these sources are well below the TPERs.**

Impact:

- **Up to 150 facilities have sources that may qualify for this exemption.**

3. Exempt emergency engines

- **US EPA federal air toxics rules apply to all emergency engines and only prescribe work practice standards.**
- **Used temporarily in emergency situations.**
- **Small.**
- **Few hours of operation.**
- **Peak shaving engines are not considered emergency engines.**

Impact:

- **Up to 150 facilities have sources that may qualify for this exemption.**

4. Eliminate SIC call

- **15A NCAC 02Q .0705 provides a mechanism for the Director to require all facilities under the same four-digit Standard Industrial Classification (SIC) to submit an application to comply with the NC air toxics rules.**
- **The existing Director's Call rule and SL 2012-91 provide adequate authority to address any unacceptable risks to human health from any facility.**

5. Clarify use of actual rate of emissions

- **Clarify in the rule to ensure that DAQ is implementing it consistently.**

6. Remove term “unadulterated wood” from rules

- **Elimination of this term will prevent confusion with definitions for combustion sources in federal rules.**

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