

DRAFT
National Association of Clean Air Agencies (NACAA)
Major HAP Sources without MACT Standards
December 15, 2015

The following is list of sources emitting major amounts of hazardous air pollutants (HAPs) (i.e., 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs) that do not fall into any of the source categories listed under Section 112(c) of the Clean Air Act and are therefore not subject to a MACT.

Please provide updated information to Mary Sullivan Douglas of NACAA at mdouglas@4cleanair.org.

| Description of Source Category or Activity | Name & Location of Facilities | Estimated Potential Facility-wide Total HAP Emissions (in tpy) | Comments | Contact Person for More Information |
|---|---|--|---|---|
| Air-floated Kaolin Clay | Kentucky Tennessee Clay Company (KTC) TV-0080-0003 Langley, SC | Methanol 250 TPY | | Heinz Kaiser (803) 898-4089 Kaiserh@dhec.sc.gov |
| Bakeries Emissions from bread & cracker production and reported under SCC 30203299 | Pepperidge Farm, Inc Lakeland, FL | No limit on PTE in TV permit. > 10 tpy (acetaldehyde); Actual 2004 emissions: 11 tpy. Actual 2014 emissions: 3 tpy. | | Cindy Phillips (850) 717-9098 cindy.phillips@dep.state.fl.us |
| Brick Manufacturing | Continental Brick Company Martinsburg, WV | 166 tpy hydrogen fluoride 12 tpy hydrogen chloride | Each of the 2 main brick kilns is 8.25 tph; no final MACT; a previous version of the proposed MACT exempted kilns that were 10 tph or less; the current proposed MACT contains a “health-based option” to model to show no controls are necessary | Renu Chakrabarty (304) 926-0499, ext. 1246 renu.m.chakrabarty@wv.gov |
| Casket Manufacturing (surface coating and adhesives) | Batesville Manufacturing Batesville, MS | 230 tpy | SIC-3995 | B. Hailey B_J_Hailey@deq.state.ms.us |
| Ceiling Tile Manufacturing (1) | Armstrong World St. Helens, OR | 24.5 tpy (formaldehyde) | | Jerry Ebersole (503)229-6974 Ebersole.gerald@deq.state.or.us |
| Citrus Processing Emissions from direct-fired peel | Southern Garden Citrus Processing Corp. | No limit on PTE in permit. > 10 tpy (methanol); | | Cindy Phillips (850) 717-9098 |

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|--|---|---|--|---|
| dryer and reported under SCC 30299999 (dried peel) | Clewiston, FL | Actual 2014 emissions: 57 tpy > 25 tpy Total HAPS; Actual 2014 emissions: 78 tpy | | cindy.phillips@dep.state.fl.us |
| Coal-fired Rotary Kilns for Calcining Clay | CE Minerals Andersonville, GA | 25 tpy HCl >10 tpy HF | | Sean Taylor (404) 363-7047 Sean.taylor@dnr.ga.gov |
| Continuous Strand Fiberglass | PPG Chester, SC | 32 tpy | Not subject to wet-formed since it is continuous strand, not web-formed | Heinz Kaiser (803) 898-4089 Kaiserh@dhec.sc.gov |
| Crude Oil Lightering (2) | Overseas Shipholding Group (OSG) Big Stone Anchorage, DE | ~100 – 150 tpy PAHs & VOC-HAPs (2000 – 2011) | Total VOCs emissions ~13 times the PAHs & VOC-HAPs | Jim Snead jsnead@state.de.us |
| Custom Screenprint Wall Covering Manufacturing | Rainbow Creations, Inc. Ridgeland, MS | 119 tpy | SIC-2759 | B. Hailey B_J_Hailey@deq.state.ms.us |
| Electric Arc Furnaces at Steel Mills | Nucor Steel Huger, SC | HAP 51 TPY | | Heinz Kaiser (803) 898-4089 Kaiserh@dhec.sc.gov |
| Ferroalloys Production - Superalloys | Huntington Alloys Corp. Huntington, WV | 191 tpy nickel 56 tpy chromium 9.2 tpy manganese 1.3 tpy cobalt 20 tpy hydrochloric acid 3.7 tpy hydrofluoric acid | 40 CFR 63, Subpart XXX only covers melts that start with some type of ore as a raw material. However this facility is considered a superalloy category since it starts with raw materials that have already been refined rather than a raw ore and is therefore not subject to the MACT. | Renu Chakrabarty (304) 926-0499, ext. 1246 renu.m.chakrabarty@wv.gov |
| Ferroalloy manufacturing producing silicon, ferrosilicon, slags and other alloys | WVA Manufacturing , LLC Alloy, WV | 0.4 tpy formaldehyde 6.2 tpy hydrogen fluoride 133.7 tpy hydrochloric acid | 40 CFR 63, Subpart XXX only applies to ferromanganese | Renu Chakrabarty (304) 926-0499, ext. 1246 renu.m.chakrabarty@wv.gov |

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|---|--|---|--|---|
| | | | and silicomanganese production. | |
| Fiberglass Manufacturing | Owens Corning, Anderson, SC | 2,331 tpy | Wet formed fiberglass mat process has no HAP emissions | Heinz Kaiser (803) 898-4089 Kaiserh@dhec.sc.gov |
| | PPG Industries Fiberglass Products Inc. 0640-0040 | HF 15.78 TPY Methanol 32.4 TPY Fluorides 28.31 TPY | | |
| Fiberglass Yarn Manufacturing | AGY Aiken, SC | >300 tpy | Exempt from Wet formed fiberglass mat MACT | |
| Film Dyeing | CPFilms (2 facilities) Axton, VA Fieldale, VA | >10/25 tpy | | Pat Corbett Patrick.corbett@deq.virginia.gov |
| Flexible Tubing and Ductwork | Flexible Technologies Abbeville, SC TV-0040-0013 | HAP 133 TPY | | Heinz Kaiser (803) 898-4089 Kaiserh@dhec.sc.gov |
| Foam Insulation Board Manufacturing | Kingspan Winchester, VA | >10/25 tpy | | Pat Corbett Patrick.corbett@deq.virginia.gov |
| Glass & Mirror Manufacturing - Miscellaneous glass products (beveling assembly & silverline process) | Renin US, LLC, a Division of Renin Corporation (was The Stanley Works) Tupelo, MS | 40 tpy | SIC – 3231, 3471 | B. Hailey B_J_Hailey@deq.state.ms.us |
| Graphite Electrodes | Showa Denko Carbon Ridgeville, SC TV-0900-0025 | >25 tpy | | Heinz Kaiser (803) 898-4089 Kaiserh@dhec.sc.gov |
| Industrial Gas Production | Air Products and Chemicals, Inc. Wilmington, CA | Total HAP emissions: 25 tpy in 2010 HAPS >10 tpy: Methanol, 24 tpy in 2010 | | Ian MacMillan (909) 396-3244 imacmillan@aqmd.gov |
| Inorganic Pigment Manufacturing | EMD Millipore Corp. Savannah, GA | >10 tpy HCl | HCl used in production of bismuth oxychloride | Sean Taylor (404) 363-7047 Sean.taylor@dnr.ga.gov |
| Kaolin Proppants | Pyramax Wrens, GA | 100 tpy HCl 40 tpy methanol | | Sean Taylor (404) 363-7047 Sean.taylor@dnr.ga.gov |
| | Carbo Ceramics Toombsboro, GA | 100 tpy HCl 40 tpy methanol | | |
| | Carbo Ceramics | 100 tpy HCl | | |

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|--|--|--|--|--|
| | Millen, GA | 40 tpy methanol | | |
| | Carbo Ceramics McIntyre, GA | 100 tpy HCl 40 tpy methanol | | |
| | Imerys Oilfield Minerals Andersonville, GA | 100 tpy HCl 40 tpy methanol | | |
| Methyl Bromide Fumigation Operations | Dundalk Marine Terminal Baltimore, MD | 30 tpy of methyl bromide | There are also fumigation facilities at ports outside of MD that are major HAP sources. EPA Region III is aware of this. | Suna Yi Sariscak Suna.sariscak@maryland.gov |
| | Royal Pest Solutions Suffolk, VA Western Fumigation Suffolk, VA | >10 tpy (Methyl Bromide) | | Pat Corbett Patrick.corbett@deq.virginia.gov |
| | Royal Fumigation Wilmington, DE | Typically, a 5- month/year operation ~35 – 50 tpy (MeBr) | PTE – 85 tpy 51 tpy (2014) | Jim Snead jsnead@state.de.us |
| | Tioga Marine Terminal Philadelphia, PA | PTE >10/25 tpy (actual ~24 tpy) | | Edward Wiener (215) 685-9426 Edward.wiener@phila.gov |
| | Pier 84 Philadelphia, PA | PTE >10/25 (actual ~9tpy – could be synthetic minor) | | |
| Mica Production | Mica Co. of Canada, Inc. Newport News, VA | 123 tpy | | Pat Corbett Patrick.corbett@deq.virginia.gov |
| Microporous Membrane Manufacturing (1) | Emark or Entek Lebanon, OR | 95 tpy TCE | | Jerry Ebersole (503) 229-6974 Ebersole.gerald@deq.state.or.us |
| Musical Instrument Manufacturing | Peavey Electronics Plant3 Meridian, MS | 245 tpy | SIC-3651 | B. Hailey B_J_Hailey@deq.state.ms.us |
| | Peavey Electronics Plant2 Meridian, MS | 197 tpy | | |
| Needle Manufacturing Emissions from needle lube mixing sterilization and reported under SCC 49099999 | Covidien LP Deland, FL | Individual HAP (Hexane) < 65 tpy; Actual 2014 emissions: 37 tpy Total HAPS < 65 tpy Actual 2014 emissions: 38 tpy | | Cindy Phillips (850) 717-9098 cindy.phillips@dep.state.fl.us |
| Nitrogen Fertilizer Manufacturing | Koch Fertilizer Fort Dodge LLC (formerly Koch Nitrogen) | 5.51 tpy reported for 2014 (actual methanol emissions) | Not covered under MON. NOTE: | Christine Paulson (515) 725-9510 |

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|--|-------------------------------------|--|--|---|
| | Fort Dodge, IA | The total HAPs noted are actuals, not potentials. The facility is probably consistently high enough in its potentials that it is still considered major for HAP. | Facility has a diesel generator subject to the RICE NESHAP (subpart ZZZZ) and several boilers and process heaters subject to the Boiler MACT (subpart DDDDD) | Christine.paulson@dnr.iowa.gov |
| Non-Stainless Steel Manufacturing – Electric Arc Furnace (EAF) Operation, Stainless Steel Manufacturing – EAF Operation (1), (3) | Evraz Rivergate Plant, OR | 70 tpy >10 tpy benzene, xylenes, MEK, ethylbenzene | | Jerry Ebersole (503) 229-6974 Ebersole.gerald@deq.state.or.us |
| Nutritional Yeast (for animal consumption) | Diamond V Mills Cedar Rapids, IA | > 48.79 tpy reported for 2014 (actual, acetaldehyde emissions) | Subpart CCCC only covers yeast for human consumption. NOTE: Facility has 2 natural gas-fired boilers subject to Boiler MACT (subpart DDDDD) | Christine Paulson (515) 725-9510 Christine.paulson@dnr.iowa.gov |
| Onshore calcining of raw (green) coke | Rain CII Carbon LLC Moundsville, WV | 42 tpy nickel compounds | | Renu Chakrabarty (304) 926-0499, ext. 1246 renu.m.chakrabarty@wv.gov |
| Plastisol Burn-off Oven | Rack Processing, Inc. Dayton, OH | 37 tpy HCl (estimated PTE) | Subject under 111, but no rule exists(4) | Eileen Moran (937) 225-4004 emoran@rapca.org |
| Rubber & Latex Products Manufacturing - Gloves, catheters, etc. | North Safety Products Clover, SC | Permitted amounts 284 tpy (total HAPs): 56 tpy ethylbenzene 28 tpy toluene 199 tpy xylene 0.6 tpy chlorine | | Heinz Kaiser (803) 898-4089 Kaiserh@dhec.sc.gov |
| | C.R. Bard Moncks Corner, SC | Permitted amounts 262 tpy (total HAPs): 15 tpy methanol 247 thylene chloride 0.01 ethylene biphenyl isocyanate 0.15 methyl isobutyl ketone | | |

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|---|--|---|--------------------------------------|--|
| | | 0.0003 toluene 0.0005 hexane | | |
| - Rubber hoses, belts | Goodyear Norfolk, NE | 30 tpy | | Carrie Wiese (402) 471-6624 Carrie.wiese@nebraska.gov |
| - Miscellaneous rubber products (adhesives and cleaning solvents applied by hand) (1) | SMR Technologies West Virginia | 16.7 tpy toluene 7.2 tpy hexane 0.5 tpy misc. HAPs <0.5 tpy formaldehyde | | Renu Chakrabarty (304) 926-0499 ex.t 1246 Renu.m.chakrabarty@wv.gov |
| Sodium Chlorate & Hydrogen Peroxide Production | AKZO Noel Pulp & Performance Chemicals (was Eka Chemicals, Inc.) Columbus, MS | 711 tpy | SIC-2819 | B. Hailey B_J_Hailey@deq.state.ms.us |
| Synthetic Textile Fibers/Carbon Fiber | Cytec Carbon Fibers Rockhill, SC | 200 tpy | Received Exemption from Textile MACT | Heinz Kaiser (803) 898-4089 Kaiserh@dhec.sc.gov |
| Thermochemical Pulping | Resolute FP US, Inc., Grenada Operations (was Bowater, which was Newsprint South, Inc.) Grenada, MS | 128 tpy | SIC-2621 | B. Hailey B_J_Hailey@deq.state.ms.us |
| Thermomechanical Pulping | Bowater Catawba, SC | > 10/25 tpy | | Heinz Kaiser (803) 898-4089 Kaiserh@dhec.sc.gov |
| Titanium Dioxide Pigment Production | Chemours Company FC LLC (was E.I. Dupont de Nemours) Delisle Plant, MS | 1,849 tpy | SIC-2816 | B. Hailey B_J_Hailey@deq.state.ms.us |
| Titanium Refining/Smelting | TDY Industries Albany, OR | 671 tpy methyl isobutyl ketone 65 tpy gaseous chlorine and chloride | | Jerry Ebersole (503) 229-6974 Ebersole.gerald@deq.state.or.us |
| Travel Trail and Campers Manufacturing | Custom Fibreglass Mfg. Co., DBA Snugtop Long Beach, CA | Total HAP emissions: 35 tpy in 2011 HAPS >10 tpy: Styrene, 33 tpy in 2011 | | Ian MacMillan (909) 396-3244 imacmillan@aqmd.gov |
| Used Shingle Recycling | Recovery Technology Solutions, Jackson, GA | 100 tpy toluene | | Sean Taylor (404) 363-7047 Sean.taylor@dnr.ga.gov |

(1) A “Source Category List Change Request” Form has already been submitted to the EPA for these categories.

(2) In the preamble to the original May 13, 1994 proposed rule for “National Emission Standards for Hazardous Air Pollutants for Marine Tank Vessel Loading Operations” (40 CFR Part 63 Subpart Y), the EPA stated the following “. . . Nor does this source category include emissions from offshore vessel-to-vessel bulk liquid transfer operations (i.e.,

lightering operations). Lightering operations do not take place at onshore terminals. **The Agency may consider addressing lightering operations in a separate source category.**” (emphasis added) <http://www.epa.gov/ttn/atw/marine/fr13my94.pdf>

(3) Categories that have been delisted by the EPA

(4) The source is an incinerator, so it falls under Section 111. The Commercial and Industrial Solid Waste Incineration (CISWI) rule considered burn-off ovens (including rack reclamation units like this one), but they were not included in the final rule.

Number of Votes – Pollutants/Categories of Greatest Concern

- | | |
|--|---|
| 1. Methyl Bromide Fumigation Operations | 2. Nutritional Yeast (for animal consumption) |
| 2. Methyl Bromide Fumigation Operations | 3. Nutritional Yeast (for animal consumption) |
| 3. Ranks fumigation with methylene bromide (especially at ports) | |
| 4. Methyl Bromide Fumigation | 1. Microporous Membrane Manufacturing |
| 5. Fumigation | 2. Microporous Membrane Manufacturing |
| 6. Methyl Bromide Fumigation Operations | |
| 7. Methyl Bromide Fumigation | 1. Non-Stainless Steel Manufacturing – Electric Arc Furnace (EAF) Operation, Stainless Steel Manufacturing – EAF Operation |
| 8. methyl bromide fumigation | 2. Electric Arc Furnaces (EAF) at major sources |
| | |
| 1. Rubber and Latex Products Manufacturing | 1. titanium dioxide pigments |
| 2. Rubber and Latex | 2. Titanium Refining/Smelting |
| 3. General rubber production category (gloves, catheters, inner tubes bladders, hoses, etc.) | |
| 4. rubber and latex products | 1. H2S, which is not a HAP, but in need of better regulation at landfills. |
| 5. Rubber & Latex Products Manufacturing (gloves, catheters, etc.) | |
| | 1. Lightering of Crude Oil and other Petroleum Products (Note: While crude oil dominates lightering in Delaware River; I think OTC investigation was finding gasoline more prevalent in other markets, so I included the petroleum products and offered a renaming of the category) |
| 1. Bakeries | |
| 2. Bakeries | |
| 3. Bakeries | |
| | |
| 1. General fiber glass production category | 1. thermo-mechanical/-chemical pulping |
| 2. Other Fiberglass Manufacturing (i.e. to allow combination of the two separate categories) | |
| 3. Fiberglass | 1. Onshore calcining of raw (green) coke |
| | |
| 1. ferroalloy production | 1. kaolin proppants |
| 2. FERROALLOYS PRODUCTION – SUPERALLOYS | |
| 3. Ferroalloys Production – Superalloys | |
| | |
| 1. Nutritional Yeast - Animals | |