

# APPENDIX HH - PART 1 - NEW PROCESSES AND EQUIPMENT THAT MAY REQUIRE AIR PERMITS

Here is a representative list of processes, equipment and facilities that may be subject to air permit regulations. If a proposed project includes or modifies equipment of the type listed below, the Department of Environmental Health and Safety (DEHS) shall evaluate emission sources and shall determine if an air permit is required prior to starting construction or modification. If you have any questions as to whether your project involves equipment requiring an air permit, call DEHS at (612) 626-7095. (Refer to attached forms for submitting information on engines or boilers and furnaces.)

(LINK TO PARTS 2 AND 3)

## 1. Combustion Equipment

- A. Engines used to power generator sets or fire pumps – *See Part 3 for checklist.*
- B. Boilers, furnaces or other space-heating equipment powered by fossil fuel or wood (excludes water heaters strictly used for domestic purposes) – *See Part 2 for checklist.*
- C. Dryers, ovens or furnaces powered by fossil fuel or wood, and used in processing material
- D. Incinerators

## 2. Storage Vessels

- A. Solvent storage tanks
- B. Petroleum product storage tanks, except for tanks that store liquid petroleum gas (LPG) and liquid natural gas (LNG), natural gas or lubricating oils

## 3. Materials Handling

- A. Grain-handling equipment such as conveyors, grinders and elevator legs
- B. Ore-handling equipment such as conveyors, screeners and pellet equipment
- C. Shredders and crushers
- D. Distribution of fuel such as gasoline and diesel fuel from bulk storage tanks into vehicles

#### **4. Cleaning, Coating and Finishing of Materials (Other than Laboratory Scale Operations)**

- A. Solvent cleaning, degreasers and parts washers
- B. Ethylene oxide sterilizers
- C. Sand blasting or other types of abrasive blasting
- D. Fermenters
- E. Painting, including but not limited to paint booths, spray guns and dip tanks
- F. Plating: chrome plating or chromic acid anodizing
- G. Surface coating of a product (includes but is not limited to coating wood, metal and plastics)

#### **5. Laboratories and Research Facilities**

New or renovated laboratories do not require a permit amendment because they are considered “insignificant activities”. However, aggregate laboratory emissions are tracked and calculated based on the total number of operating fume hoods and a standard emission factor.

The University is required to track the number of fume hoods in operation. If your project involves the installation or removal of fume hoods, please call DEHS at (612) 626-7095.

#### **6. Additional Operations that may Require Permits**

- A. Offset printing
- B. Minerals processing
- C. Pharmaceutical manufacturing
- D. Animal or domestic wastewater treatment facilities
- E. Soil roasters
- F. Woodworking done as part of construction activities
- G. Metals recovery operations

#### **End of Appendix HH - Part 1 - New Processes and Equipment that may Require Air Permits**

**University of Minnesota Facilities Management and  
Department of Environmental Health & Safety  
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