SUBCHAPTER I: MANUFACTURING
§§106.221, 106.224 - 106.227, 106.229, 106.231
Effective September 3, 2009

§106.221. Extrusion Presses.

Presses used exclusively for extruding metals, minerals, plastics, rubber, or wood are permitted by rule except where halogenated carbon compounds or hydrocarbon solvents are used as foaming agents. Presses used for extruding scrap materials or reclaiming scrap materials are not permitted by rule.

Adopted August 9, 2000 Effective September 4, 2000

§106.224. Aerospace Equipment and Parts Manufacturing.

Any new aerospace equipment and parts manufacturing plant, or physical and operational change to an existing aerospace equipment and parts manufacturing plant are permitted by rule, provided that the following conditions of this section are satisfied.

1) For purposes of this section, aerospace equipment and parts manufacturing plant means the entire operation on the property which engages in the fabrication or assembly of parts, tools, or completed components of any aircraft, helicopter, dirigible, balloon, missile, drone, rocket, or space vehicle. This permit by rule will not include composite aerospace equipment and parts manufacturing plants. Composite plants are defined to be plants whose products are less than 50% metal, by weight, based on annual production figures. This definition excludes those operations specifically authorized by other permits by rule. For example, a boiler would not be considered a part of the aerospace manufacturing plant, but could be authorized under §106.181 of this title (relating to Small Boilers, Heaters, and Other Combustion Devices), if all pertinent requirements were met.

2) Emission points associated with the aerospace equipment and parts manufacturing plant or changes to that plant shall be located at least 100 feet from any off-plant receptor. Off-plant receptor means any recreational area or residence or other structure not occupied or used solely by the owner or operator of the aerospace equipment and parts manufacturing plant or the owner of the property upon which the aerospace plant is located. Controlled access recreational areas owned by the property owner or the owner or operator of the aerospace plant are not off-plant receptors.

3) The total annual emissions, in tons per year, of the following air contaminants authorized under this section, on a cumulative basis, from the entire aerospace manufacturing plant shall not exceed the values specified:

(A) inhalable particulate matter - five tons per year (tpy);

(B) volatile organic compounds (VOC) - 15 tpy;

(C) acid gases or vapors - five tpy;

(D) non-VOC carbon compound emissions - ten tpy;
(E) total of air contaminants in subparagraphs (A) - (D) of this paragraph - 25 tpy.

(4) Hourly emissions of total new or increased emissions, including fugitives, of particulate matter or chemicals listed or referenced in Table 262 of §106.262 of this title (relating to Facilities (Emission Distance Limitations)), shall not exceed the hourly emission rate, E, as determined using the equation, \( E = \frac{L}{K} \) lb/hr and Table 224A, where:

\( E = \) maximum allowable hourly emission, lb/hr,
\( L = \) limit value (see Table 262), milligrams per cubic meter,
\( K = \) value from Table 224A (interpolate intermediate values), and
\( D = \) distance to the nearest off-plant receptor from the closest affected emission point.

<table>
<thead>
<tr>
<th>D, Feet</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>326</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>300</td>
<td>139</td>
</tr>
<tr>
<td>400</td>
<td>104</td>
</tr>
<tr>
<td>500</td>
<td>81</td>
</tr>
<tr>
<td>600</td>
<td>65</td>
</tr>
<tr>
<td>700</td>
<td>54</td>
</tr>
<tr>
<td>800</td>
<td>46</td>
</tr>
<tr>
<td>900</td>
<td>39</td>
</tr>
<tr>
<td>1,000</td>
<td>34</td>
</tr>
<tr>
<td>2,000</td>
<td>14</td>
</tr>
<tr>
<td>3,000</td>
<td>1</td>
</tr>
<tr>
<td>or more</td>
<td>1</td>
</tr>
</tbody>
</table>

(5) Before construction or change in operation begins, registration shall be submitted to the commission's Office of Permitting, Remediation, and Registration in Austin using a completed Form PI-7. The emission data provided in the PI-7 shall include all process emission sources at the plant, both existing and proposed, and shall be the maximum allowed emissions for permitted units, the actual emissions for existing grandfathered units or units permitted by rule, and the projected maximum allowable emissions for proposed units. Emissions shall be speciated by chemical compound and the stack parameters, as appropriate, for each emission source shall be provided. Registration shall include a description of the project, calculations, and data identifying specific chemical names, “L” values, “D” values, and a description of pollution control equipment, if any.

(6) An emissions inventory shall be compiled and/or updated on an annual basis for all process emission sources on the property, maintained on a two-year rolling retention cycle, and made available upon request by the executive director. The inventory records should include the basis for all
emissions estimates, sample calculations, and material usage records. Material and solvent usage records shall be maintained in sufficient detail to document compliance with this section.

(7) There shall be no visible emissions from each existing and proposed stack, hood, vent, or opening to the atmosphere.

(8) Any facility in which any chemical listed in subparagraph (D) of this paragraph will be handled or stored as a liquid or a compressed gas in a compound mixture of a concentration greater than 10% by weight or an aqueous solution of any chemical listed in subparagraph (D) of this paragraph greater than 50% by weight shall comply with subparagraphs (A) - (C) of this paragraph.

(A) The facility shall be located at least 300 feet from the nearest property line and 600 feet from any off-plant receptor.

(B) The cumulative amount of any one of the chemicals listed in subparagraph (D) of this paragraph, resulting from one or more authorizations under this section, shall not exceed 500 pounds on the plant property.

(C) Any chemical listed in subparagraph (D) of this paragraph shall be handled only in containers operated in compliance with United States Department of Transportation regulations (49 Code of Federal Regulations, Parts 171-178).

(D) Listed chemicals are: acrolein, ammonia, bromine, carbon disulfide, chlorine, ethyl mercaptan, hydrogen chloride, hydrogen bromide, hydrogen cyanide, hydrogen fluoride, hydrogen sulfide, phosphine, sulfur dioxide, methyl bromide, methyl isocyanate, methyl mercaptan, nickel carbonyl, phosgene.

Adopted August 9, 2000 Effective September 4, 2000

§106.225. Semiconductor Manufacturing.

 Modifications, additions, or relocations of equipment (excluding add-on controls) used for semiconductor manufacturing operations that result in the addition, increase, or substitution of an air contaminant are permitted by rule provided the following conditions of this section are satisfied.

(1) The following is a list of definitions for this section.

(A) **Permitted air contaminants** - The individual chemical compounds represented in the latest permit or permit amendment application approved by the executive director.

(B) **Ground Level Contaminant (GLC)\(_{1}(max)\)** new - The maximum hourly off-property GLC resulting from the new emission rate of air contaminant 1.

(C) **GLC\(_{1}(\text{receptor})\)** new - The maximum hourly off-property GLC at the sensitive receptor with the highest possible impacts resulting from the new emission rate of air contaminant 1.
(D) **GLC\textsubscript{2}(max)** - The maximum hourly off-property GLC resulting from the emission rate of air contaminant 2.

(E) **GLC\textsubscript{2}(receptor)** - The maximum hourly off-property GLC at the sensitive receptor with the highest possible impacts resulting from the emission rate of air contaminant 2.

(F) **ESL\textsubscript{1}** - The 30-minute Effects Screening Level (ESL) published in the commission's ESL list dated April 10, 1995, for air contaminant 1.

(G) **ESL\textsubscript{2}** - The 30-minute ESL published in the commission's ESL list dated April 10, 1995, for air contaminant 2.

(2) New emissions or an emission increase of any air contaminant less than 0.04 pounds per hour (sitewide) are exempt from all conditions of this section except paragraphs (3), (11), and (12) of this section.

(3) A permit has been issued by the commission for at least one emission source owned by the person using this section on the same property for which this section is being claimed.

(4) The facility's baseline GLCs of the permitted air contaminants have been determined using air dispersion modeling or other methods.

(5) New emission points are not authorized by this section.

(6) There will be no change in method of control for any air contaminants as represented in the latest permit or permit amendment application approved by the executive director.

(7) Increases of a permitted air contaminant shall meet all of the following criteria:

   (A) \( GLC_{1}(\text{max})_{\text{new}} \leq 2ESL_{1} \);

   (B) \( GLC_{1}(\text{receptor})_{\text{new}} \leq ESL_{1} \).

(8) Additions of a non-permitted air contaminant, substitutions of a non-permitted air contaminant for a permitted air contaminant, and substitutions of one permitted air contaminant for another permitted air contaminant shall meet all of the following criteria:

   (A) \( GLC_{2}(\text{max})_{\text{new}} \leq 2ESL_{2} \);

   (B) \( GLC_{2}(\text{receptor})_{\text{new}} \leq ESL_{2} \).

(9) If the commission ESL list dated April 10, 1995, does not include the air contaminant to be added or substituted, the permittee must use an ESL derived by the commission's Toxicology and Risk Assessment Division. The ESL shall be obtained in writing prior to the use of the new substance.
(10) The cumulative net annual emission increases of the following categories of air contaminants from multiple uses of this section shall not exceed the following values:

(A) particulate matter - five tons per year (tpy);
(B) volatile organic compounds (VOCs) - 15 tpy;
(C) non-VOCs - five tpy;
(D) acids/bases - ten tpy;
(E) any other air contaminant - five tpy;
(F) total of all emission increases - 25 tpy.

(11) The applicable ground-level concentration limits in Chapters 111, 112, and 113 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter; Sulfur Compounds; and Toxic Materials) shall not be exceeded.

(12) Within 30 days of use of this section, the permittee shall maintain documentation that demonstrates all applicable conditions of this section were satisfied. The documentation shall be made available to the commission upon request.

Adopted August 9, 2000 Effective September 4, 2000

§106.226. Paints, Varnishes, Ink, and Other Coating Manufacturing.

Coating manufacturing operations including raw material storage, weighing, mixing, milling, grinding, thinning, and packaging are permitted by rule, provided the conditions of this section are met. Coating manufacturing is defined as combining ingredients that are manufactured off-site to make paints, varnishes, sealants, stains, adhesives, inks, pigments, maskants, and paint strippers, etc. Resin manufacturing is not permitted by rule under this section.

(1) Materials usage shall not exceed the following rates:

(A) 345,000 gallons per year of solvent for all operations at a coating manufacturing site; and
(B) 200,000 pounds of dry powder per year for all operations at a coating manufacturing site.

(2) Operations involving powders which contain more than 0.1% by weight of chromium, cadmium, asbestos, lead, arsenic, cobalt, or strontium are not authorized by this section.

(3) The following conditions must be met to prevent and control emissions.
(A) There shall be no visible emissions from any emission point.

(B) Bags or sacks of dry powders shall be opened within an enclosed bag slitter or within an enclosed area.

(C) Material transfer, storage operations, or other similar operations shall be conducted in enclosed or covered containers which are opened only as necessary for transfer of ingredients.

(D) Mixing, milling, packaging, and filling operations shall be conducted under a hood or within an enclosure designed to capture emissions, which shall then be vented externally or through a carbon adsorption system.

(E) Operations which involve dry powders or pigments shall be vented through a filter.

(F) Any spills of dry powders or solvents shall be cleaned up promptly in a manner designed to control emissions.

(G) Waste materials shall be stored in covered containers and disposed of properly.

(4) Emissions from any operation which are vented externally shall be exhausted using forced air through a stack with an unobstructed vertical discharge. The stack must be, at a minimum, four feet above the peak of the roofline.

(5) The owner or operator of the facility shall keep records of all liquid and solid material usage rates on a monthly basis to demonstrate compliance with paragraph (1) of this section. The usage data shall be maintained for the most recent 24-month period.

Adopted August 9, 2000  Effective September 4, 2000

§106.227. Soldering, Brazing, Welding.

Brazing, soldering, or welding equipment, except those which emit 0.6 ton per year or more of lead, are permitted by rule.

Adopted August 9, 2000  Effective September 4, 2000

§106.229. Textile Dyeing and Stripping Equipment.

Equipment used exclusively for the dyeing or stripping of textiles is permitted by rule.

Adopted August 9, 2000  Effective September 4, 2000

§106.231. Manufacturing, Refinishing, and Restoring Wood Products.
Facilities, including drying or curing ovens, and hand-held or manually operated equipment, used for manufacturing, refinishing, and/or restoring wood products that meet the following requirements are permitted by rule.

(1) If a pneumatic sawdust collection system is used, it must be followed by a filter with no visible emissions.

(2) Waste materials shall be stored and disposed of properly. There shall be no visible emissions leaving the property.

(3) If the total coatings, solvents, and stripping agents used exceeds six gallons per day (gpd) or one gpd of methylene chloride, the following requirements must be met:

   (A) the application area must be exhausted using forced air through a stack with an unobstructed vertical discharge above the peak of the roof line; and

   (B) in addition to the requirements of subparagraph (A) of this paragraph, if application is made by spraying, the application area must also be vented through a filter system with a minimum particulate removal efficiency of 95%.

(4) Purchase receipts for total coatings, solvents, and stripping agents for the most recent 24 months must be kept on site and be made immediately available upon request of personnel from the agency or any other air pollution control agency having jurisdiction. If the total materials purchased exceeds 550 gallons in any one month, records of the amount of materials used per month must be kept on-site to demonstrate that total emissions do not exceed 25 tons per year in any consecutive 12 months.

Adopted August 9, 2000

Effective September 4, 2000