

Cardboard and Other Paper-based Production

This category of sources includes the production corrugated fiberboard (cardboard) products and other paper-based products (CPBP) such as fruit packing trays and other packaging products.

Corrugated fiberboard is a paper-based material consisting of a fluted corrugated sheet and one or two flat linerboards. It is widely used in the manufacture of corrugated boxes and shipping containers; using "flute lamination machines". The corrugated medium and linerboard are made of containerboard, a paper-like material usually over 0.01 inches (0.25 mm) thick.

Other paper-based production includes packaging materials such as trays and pads made from recycled paper.



Emissions of Concern

Major emissions of concern from CPBP are: particulate matter (PM) from glue making and scrap paper; oxides of sulfur, oxides of nitrogen and carbon monoxide (SO_x, NO_x and CO) emissions from power boilers; and VOC and HAP emissions from Flexographic/Folder/Gluer Lines and Rotary Die Cutters.

Emission Controls

Common emission controls for CPBP include: cyclones and dust collectors for PM; low NO_x burner and flu-gas recirculation for power boilers; and use of low-VOC and water-based inks for VOC and HAP emissions.

New Source Review (NSR) & Fees

YRCAA requires that a NSR permit application be submitted and approved prior to the construction, installation, establishment, replacement or modification of air contaminant sources, emissions units or air pollution control equipment in YRCAA jurisdiction. This includes equipment associated with stationary or portable devices or any part of such a device that emits or has the potential to emit any air contaminant, including CPBP. There is a NSR permit application fee, and an Order of Approval fee, based on the staff time to conduct the review and draft the Order of Approval.

Annual Registration & Fees

Sources of air contaminants, including CPBP, must register annually with YRCAA and pay a fee. YRCAA's Board of Directors reviews fees annually. As a part of the registration program, businesses are required to complete and submit a registration form annually. The annual registration program enables YRCAA to classify sources and maintain an inventory of air contaminants. Information is also used to evaluate air pollution control strategies to attain and maintain National Ambient Air Quality Standards.



COMPLIANCE ASSISTANCE PROGRAM

Inspections

Regular inspections of registered sources are conducted to verify compliance with air pollution regulations. When inspecting CPBP, the compliance team will:

- review records;
- determine if any changes have been made to processes, equipment, materials or fuels;
- observe operation and maintenance activities;
- determine if any violations of rules, permits or orders exist; and
- determine if any corrective actions are needed to avoid enforcement.

If you have already installed or modified a CPBP or any equipment or process associated with a CPBP, or are planning to in the future, please contact YRCAA. Our staff is available to assist you with the permit and registration process.

YRCAA Rules

[YRCAA Regulation 1, Subsection 4.01](#)

State Rules

[WAC 173-400](#) – General Regulations for Air pollution Sources

Federal Rules

EPA has rules for control of hazardous air pollutants (HAPs) called maximum achievable control technology (MACT) standards. To determine if your facility, equipment or operation is subject to a MACT standard see the following links:

<http://www.epa.gov/airtoxics/mactfnlalph.html>

<http://www.epa.gov/ttn/atw/area/compilation.html>