

**SUMMARY OF WORKING DRAFT OF PROPOSED RULE FOR
WOOD BUILDING PRODUCTS (SURFACE COATING) NESHAP
March 2001**

This document is intended to provide you a summary of requirements as they might appear in the upcoming Wood Building Products (Surface Coating) maximum achievable control technology (MACT) proposal. This document is a draft and based on information which could change as we conduct further review and analyses. This summary is intended for informational purposes, does not constitute final agency action, and cannot be relied upon to create any rights enforceable by any party.

APPLICABILITY: WHO IS SUBJECT TO THIS REGULATION?

The proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) would apply to ant new or existing facility that has surface coating operations involving wood building products and is a major source, is located at a major source, or is part of a major source of Hazardous Air Pollutants (HAP) emissions. Facilities that manufacture or apply surface coatings to pre-manufactured or modular homes are not subject to the proposed NESHAP requirements.

WHAT IS A WOOD BUILDING PRODUCT?

A wood building product (WBP) is defined as any finished or laminated wood product that contains more than 50 percent by weight wood or wood fibers and is used in the construction, either interior or exterior, of a residential, commercial, or institutional building. (Does not include wood substrates, wood furniture, or wood furniture components.)

WHAT IS A MAJOR SOURCE OF HAP EMISSIONS?

A major source of HAP emissions is a facility with potential to emit at least 10 tons/yr of any single HAP or 25 tons/yr of any combination of HAP as defined in the NESHAP General Provisions (40 CFR part 60) pursuant to section 112 of the Clean Air Act (CAA).

WHAT IS THE BACKGROUND OF THIS REGULATION?

This action proposes to add subpart QQQQ to 40 CFR part 63, pursuant to section 112 of the CAA. Section 112 of the CAA requires the U. S. Environmental Protection Agency (EPA) to list categories of major and area sources of HAP and to establish NESHAP for the listed source categories. The WBP source category was originally listed as the “flatwood paneling” source category, but the name of

the source category was changed to “wood building products” to more accurately reflect the types of products and manufacturing facilities in the source category.

WHAT ARE THE PROPOSED SUBCATEGORIES?

- (1) *Doors and windows.* Any facility that applies a coating to doors and windows, and door and window components, such as millwork, moulding, or trim.
- (2) *Flooring.* Any facility that applies a coating or laminate to solid wood flooring, engineered wood flooring, or wood laminate flooring.
- (3) *Interior wall paneling and tileboard.* Any facility that applies a coating to interior wall paneling products. Tileboard is a premium interior wall paneling product.
- (4) *Other interior panels.* Any facility that applies a coating to panels that are sold for uses other than interior wall paneling, such as sheathing, pegboard, and ceiling tiles.
- (5) *Exterior siding, doorskins, and miscellaneous.* Any facility that applies a coating to lap or panel siding, trimboard, doorskins, and other miscellaneous wood building products, including, but not limited to, shingles, awnings, shutters, and laminated veneer lumber.

WHAT IMPACTS MIGHT THE DELISTING PETITIONS FOR EGBE AND MEK HAVE ON THE NESHAP?

The Chemical Manufacturers Association (CMA) has petitioned the EPA to delist methyl ethyl ketone (MEK) and ethylene glycol butyl ether (EGBE). The American Forest and Paper Association (AFPA) has also petitioned the EPA to delist methanol. All three of these HAP solvents are used in varying amounts and combinations in many different wood building products surface coating operations. A final decision regarding the delisting petition(s) could impact a few facilities’ major source status and MACT floor determinations for this source category.

Both EGBE and MEK are listed in the top five pollutants emitted by surface coating operations at wood building products facilities. If methanol is delisted, it is not expected to have significant impacts on as many facilities or the MACT floor determinations. Therefore, we evaluated and included only the delisting of EGBE and MEK as the scenarios to consider related to the MACT development for this source category.

Based on an analysis of the MACT floor emission limits for this source category, it was determined that the combined scenario (where both EGBE and MEK are successfully delisted) would not be different significantly from EGBE alone being successfully delisted. In order to simplify all subsequent analysis of the comparative MACT floor(s), impacts, and costs, it was decided to assume that both solvents, EGBE and MEK, would be either successfully delisted or both petitions would be denied.

It is expected that final decisions or rulemakings regarding the current delisting petitions for EGBE and MEK will be made prior to promulgation of this standard. Therefore, the appropriate scenario will be used in the final (promulgated) wood building products (surface coating) NESHAP.

WHAT IS AN AFFECTED SOURCE?

The regulation applies to each new, reconstructed, and existing affected source. The affected source is the collection of all of the items listed below that are part of the wood building products surface coating facility:

- (1) All coating operations;
- (2) All storage containers and mixing vessels in which organic-HAP-containing coatings, thinning solvents, and cleaning materials are stored or mixed;
- (3) All manual and automated equipment and containers used for conveying organic-HAP-containing coatings, thinning solvents, and cleaning materials; and
- (4) All storage containers and all manual and automated equipment and containers used for conveying organic-HAP-containing waste materials generated by a coating operation.

The regulation does *not* apply to research or laboratory facilities; janitorial, building, and facility maintenance operations; or coating applications using hand-held nonrefillable aerosol containers.

The affected source also does not include processes that overlap with other NESHAP regulations including:

- (1) Those covered by the plywood and composite wood product manufacturing NESHAP proposed section DDDD to 40 CFR part 63;
- (2) Those covered by the wood furniture manufacturing NESHAP, section JJ to 40 CFR part 63; and
- (3) Wood treatment operations.

IS THERE A LOW-COATING USAGE EXEMPTION?

Yes. The proposed NESHAP includes an exemption for any facility using less than 1,500 gallons of as-applied coatings per year for their wood building product(s) coating operations. This low-usage exemption was established to ease the recordkeeping and reporting burden on major source facilities that are small businesses and/or have low HAP emissions from surface coating operations.

WHAT ARE THE EMISSION LIMITS?

TABLE 1. EMISSION LIMITS FOR AFFECTED SOURCES

For any affected source applying a surface coating to ...	If EGBE and MEK are ...	For existing sources, you must meet the following organic HAP emission limit in lb HAP/gal solids (kg HAP/L solids):	For new or reconstructed sources, you must meet the following organic HAP emission limit in lb HAP/gal solids (kg HAP/L solids):
(a) Doors and windows	(1) not delisted	1.45 (0.17)	0.48 (0.06).
	(2) delisted	1.14 (0.14)	0.03 (0.00).
(b) Flooring	(1) not delisted	0.78 (0.09)	0.00 (0.00).
	(2) delisted	0.78 (0.09)	0.00 (0.00).
(c) Interior wall paneling or tileboard	(1) not delisted	1.53 (0.18)	0.04 (0.00).
	(2) delisted	1.44 (0.17)	0.02 (0.00).
(d) Other interior panels	(1) not delisted	0.01 (0.00)	0.00 (0.00).
	(2) delisted	0.01 (0.00)	0.00 (0.00).
(e) Exterior siding, doorskins, and miscellaneous	(1) not delisted	0.06 (0.01)	0.00 (0.00).
	(2) delisted	0.06 (0.01)	0.00 (0.00).

WHAT ARE THE OPTIONS FOR MEETING THE EMISSION LIMITS?

To meet the applicable emission limit(s), one of the three compliance options listed in paragraphs (1) through (3) below must be used for each affected source.

- (1) *Compliant material option.* Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit and that each thinning solvent and each cleaning material used contains no organic HAP.
- (2) *Emission rate without add-on controls option.* Demonstrate that, based on data on the coatings, thinning solvents, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limits.
- (3) *Emission rate with add-on controls option.* Demonstrate that, based on data on the coatings, thinning solvents, and cleaning materials used in the coating operation(s), and the emission capture and add-on control efficiencies achieved, the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limits. If you use this compliance

option, you must also demonstrate that all capture systems and control devices for the coating operation(s) meet specified operating limits. Facilities utilizing add-on controls must also meet work practice standards.

HOW IS COMPLIANCE CALCULATED/DEMONSTRATED?

Using the collected coatings, thinning solvent, and cleaning material data, a monthly emission rate (total mass of organic HAP emitted/total volume of coating solids used) is calculated each month after the compliance date. The monthly emission rate is then combined with the previous 11 months (monthly emission rates) to calculate a 12-month rolling average HAP emission rate. The 12-month rolling average emission rate is then documented and used to demonstrate compliance with the applicable HAP emission limit. The emission rate must be equal to or less than the established emission rate listed on Table 1.

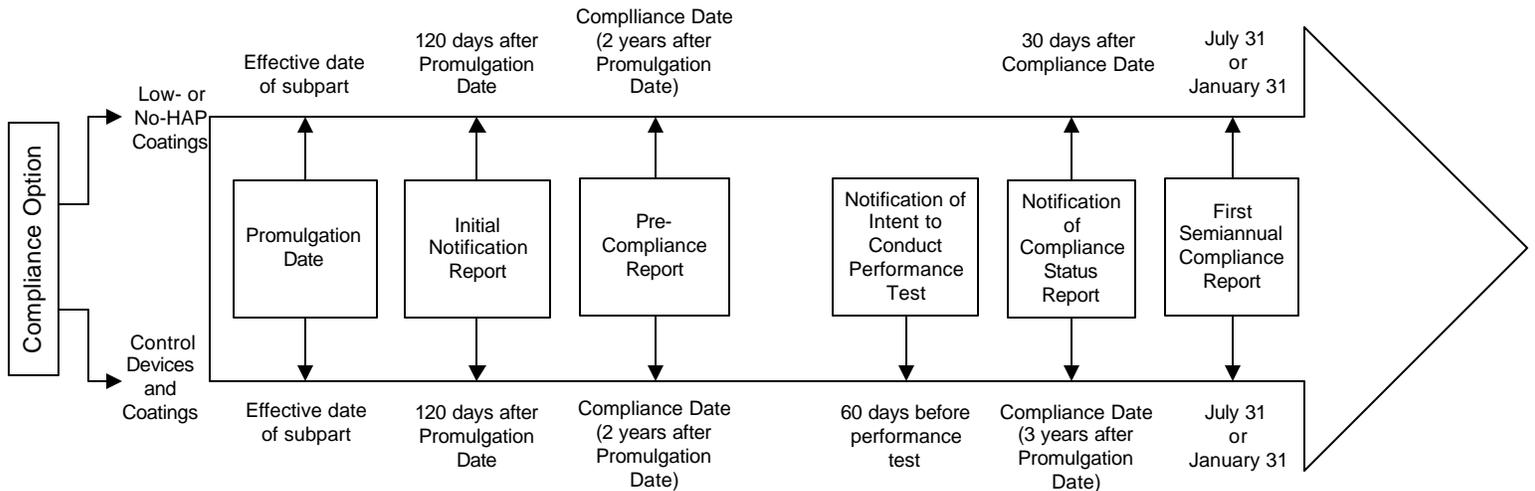


Figure 1. Reporting Timeline for Existing Sources.

WHEN DO AFFECTED SOURCES HAVE TO COMPLY WITH THE FINAL RULE?

Existing affected sources have to be in compliance with the final standards no later than two years after the effective date of the final rule. The reporting timeline for existing sources is shown in Figure 1.

New or reconstructed affected sources have to be in compliance upon initial startup of the affected source or by the effective date of the final rule, whichever is later.

The *effective date* is the date on which the final rule is published in the Federal Register.

WHEN IS THE INITIAL COMPLIANCE PERIOD?

Existing affected sources. The initial compliance period is the total 12-month period beginning 2 years after the effective date of the final rule. Since the standard (e.g., emission limits) are based on 12-month rolling averages, sources are given the entire 12-month period to change their surface coating operations and monitor their monthly HAP emission rates to ensure that their initial 12-month rolling average HAP emission rate complies with the emission limit(s).

New or reconstructed affected sources. The initial compliance period for new or reconstructed affected sources using the compliant materials or emission rate without add-on controls option begins on the first day of the month of initial startup of the affected source or the compliance date, whichever is later, and ends on the last day of the 12th month following initial startup or the compliance date, whichever is later. For new or reconstructed affected sources that use an emission rate with add-on controls options, the initial compliance period begins on the first day of the first month following the initial performance test and ends on the last day of the 12th month following the initial performance test.

After the initial compliance period, each month is considered a compliance period (for all affected sources).

WHAT ARE THE NOTIFICATION, RECORDKEEPING, AND REPORTING REQUIREMENTS?

Each affected source must submit an initial notification stating that the facility is subject to the WBP standards. The initial notification must be submitted within 120 days after the effective date (i.e., the date of startup or the date the promulgated rule is published in the Federal Register, whichever is later). Facilities required to conduct performance tests (e.g., those with add-on control equipment) must submit a notification of intent to conduct a performance test 60 days prior to the test. The performance test would be required no later than 180 days after initial startup or 180 days after publication of the final rule, whichever is later for a new or reconstructed affected source, and no later than the compliance date for an existing affected source. A Notification of Compliance Status (NCS) must be submitted following initial compliance demonstrations. For initial compliance demonstrations involving performance tests, the NCS must be submitted (along with the performance test results) within 60 days after the performance test. For other initial compliance demonstrations, the NCS must be submitted within 30 days after the demonstration. In the notification, you would certify whether the affected source has complied with the proposed standards, identify the option(s) you used to demonstrate initial compliance, summarize the data and calculations supporting the compliance demonstration, and describe how you will determine continuous compliance.

After the initial compliance period each affected source must submit semiannual compliance reports. In addition, a startup, shutdown, and malfunction report must be submitted immediately if there were a startup, shutdown, or malfunction of the control device during the reporting period that is not consistent with the startup, shutdown, and malfunction plan.

Facilities are required to keep records of reported information and all other information necessary to document compliance with the proposed rule for 5 years. As required under the General Provisions, records for the 2 most recent years must be kept on-site; the other 3 years may be kept off-site. Records pertaining to the design and operation of the control and monitoring equipment must be kept for the life of the equipment. Depending on the compliance option that you choose, there may be additional recordkeeping requirements, as described in the proposed rule.

HOW MANY FACILITIES WILL BE AFFECTED, AND WHAT ARE ANTICIPATED EMISSIONS REDUCTIONS AND COSTS?

The EPA has estimated that there are approximately 205 major source facilities in the wood building products (surface coating) source category and has identified these facilities as major sources HAP emissions such as xylene, toluene, ethyl benzene, ethylene glycol butyl ether (EGBE), glycol ethers (not including EGBE), methyl ethyl ketone (MEK), methyl isobutyl ketone (MIBK), methanol, styrene, and formaldehyde.

As proposed, this standard with no delisting impact is estimated to reduce HAP emissions by 3,500 tons per year (tpy) (3,200 megagrams per year (Mg/yr)) or by 61 percent. This standard with EGBE and MEK delisted is estimated to reduce HAP emissions by 2,800 tpy (2,500 Mg/yr) or by 58 percent.

If EGBE and MEK are not delisted, the total annual costs for the approximate 205 existing major sources are estimated at \$27.3 million. According to estimates, recordkeeping and reporting costs will contribute \$5.5 million to the overall cost of this NESHAP, material costs will contribute \$21.6 million, and performance testing will contribute \$246,000.

If EGBE and MEK are delisted, the total annual costs for the approximate 205 existing major sources are estimated at \$21.3 million. According to estimates, recordkeeping and reporting costs will contribute \$5.5 million to the overall cost of this NESHAP, material costs will contribute \$15.5 million, and performance testing will contribute \$246,000.

The economic impacts of the proposed standards are expected to be minimal, with price increases for affected wood building products surface coating facilities of only 0.04 percent.

WHO DO I CONTACT WITH ANY QUESTIONS?

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