

false sense of precision. It is expected that any point estimate of risk reduction or benefits generated by these approaches should be considered as part of a range of potential estimates.

If the final rule is implemented as proposed at all PCWP facilities, annual cancer incidence would be reduced from about 0.09 cases/year to about 0.02 cases/year, while the number of people at or above a cancer risk level of one in a million would be reduced from about 900,000 to 150,000. In addition, the number of people exposed to HI values equal to or greater than one was estimated to be reduced from about 270,000 to about 30,000, and the number of people exposed to HI values of 0.2 or greater was predicted to decrease from about 1,500,000 to about 250,000. (Details of these analyses are available in the docket.)

Based on the results of this rough assessment, if the section 112(d)(4) approach is applied only to threshold pollutants, EPA estimates that few, if any, of the 223 facilities in the plywood source category could obtain an exemption from the rule, since it appears that all or nearly all facilities emit some amount of one or more non-threshold pollutants. If the revised dose-response assessments for formaldehyde and acetaldehyde determine that they are threshold carcinogens, these estimates could increase. This application of the section 112(d)(4) approach is estimated to produce minimal potential cost savings.

The second scenario under the section 112(d)(4) provision would apply to both threshold and non-threshold pollutants. If this interpretation is selected, EPA estimates that, if a HI limit of one and a cancer risk level of 10^{-6} were used, as many as 33 of the 223 facilities in the source category may be exempt from the proposed rule and that, if a HI limit of 0.2 and a cancer risk level of 10^{-6} were used, as many as 26 of the 223 facilities may be exempt. The EPA estimates that the cost of the rule as proposed would be approximately \$142 million per year, resulting in an annual cost savings of about \$9 million per year (for a HI limit of one) or about \$7 million per year (for a HI limit of 0.2) (as compared to establishing a MACT standard for all plants in the industry).

The EPA does not expect the third scenario, which would allow emission point exemptions, to be applicable for the PCWP source category because mixtures of threshold and non-threshold pollutants are co-emitted, and the same emission controls would apply to both. The risk estimates from this rough assessment are based on typical facility configurations (*i.e.*, model plants) and,

as such, they are subject to significant uncertainties, such that the actual risks at any one facility could be significantly higher or lower. Therefore, while these risk estimates assist in providing a broad picture of impacts across the source category, they should not be the basis for an exemption from the requirements of the proposed rule. Rather, facility-specific risks would require site-specific data and a more refined analysis.

For either of the first two approaches described above, the actual number of facilities that would qualify for an exemption would depend upon site-specific risk assessments and the specified hazard index limit. If the section 112(d)(4) approach were adopted, the rulemaking would likely indicate that the requirements of the rule do not apply to any source that demonstrates, based on a tiered approach that includes EPA-approved modeling of the affected source's emissions, that the anticipated HAP exposures do not exceed the specified hazard index limit.

3. Subcategory Delisting Under Section 112(c)(9)(B) of the CAA

The EPA is authorized to establish categories and subcategories of sources, as appropriate, pursuant to CAA section 112(c)(1), in order to facilitate the development of MACT standards consistent with section 112 of the CAA. Further, section 112(c)(9)(B) allows EPA to delete a category (or subcategory) from the list of major sources for which MACT standards are to be developed when the following can be demonstrated: (1) In the case of carcinogenic pollutants, that “* * * no source in the category * * * emits (carcinogenic) air pollutants in quantities which may cause a lifetime risk of cancer greater than one in one million to the individual in the population who is most exposed to emissions of such pollutants from the source”; (2) in the case of pollutants that cause adverse noncancer health effects, that “* * * emissions from no source in the category or subcategory * * * exceed a level which is adequate to protect public health with an ample margin of safety”; and (3) in the case of pollutants that cause adverse environmental effects, that “* * * no adverse environmental effect will result from emissions from any source.”

Given these authorities and the suggestions from the white paper prepared by industry representatives (see docket number A-98-44), EPA is considering whether it would be possible to establish a subcategory of facilities within the larger PCWP

category that would meet the risk-based criteria for delisting. Such criteria would likely include the same requirements as described previously for the second scenario under the section 112(d)(4) approach, whereby a facility would be in the low-risk subcategory if its emissions of threshold pollutants do not result in exposures which exceed the HI limits and if its emissions of non-threshold pollutants do not result in exposures which exceed a cancer risk level of 10^{-6} . The EPA requests comment on what an appropriate HI limit would be for a determination that a facility be included in the low-risk subcategory.

Since each facility in such a subcategory would be a low-risk facility (*i.e.*, if each met these criteria), the subcategory could be delisted in accordance with section 112(c)(9), thereby limiting the costs and impacts of the proposed MACT rule to only those facilities that do not qualify for subcategorization and delisting. The EPA estimates that the maximum potential effect of this approach would be the same as that of applying the section 112(d)(4) approach that allows exemption of facilities emitting threshold and non-threshold pollutants if exemption criteria are met (*i.e.*, as many as 33 of the 223 facilities may be exempt under this approach, if an HI limit of one and a cancer risk level of 10^{-6} are used; or, as many as 26 of the 223 may be exempt if an HI limit of 0.2 and a cancer risk level of 10^{-6} are used).

Facilities seeking to be included in the delisted subcategory would be responsible for providing all data required to determine whether they are eligible for inclusion. Facilities that could not demonstrate that they are eligible to be included in the low-risk subcategory would be subject to MACT and possible future residual risk standards. The EPA solicits comment on implementing a risk-based approach for establishing subcategories of PCWP facilities.

Establishing that a facility qualifies for the low-risk subcategory under section 112(c)(9) will necessarily involve combining estimates of pollutant emissions with air dispersion modeling to predict exposures. The EPA envisions that we would employ the same tiered analytical approach described earlier in the section 112(d)(4) discussion for these determinations.

One concern that EPA has with respect to this section 112(c)(9) approach is the effect that it could have on the MACT floors. If many of the facilities in the low-risk subcategory are well-controlled, that could make the