ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 763

[OPPTS–62125A; FRL–6493–5]

RIN 2070–AC66

Asbestos Worker Protection

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA proposes to modify a previously published proposed rule to amend the Asbestos Worker Protection Rule (WPR). This modified proposal would protect State and local government employees from the health risks of exposure to asbestos to the same extent as private sector workers by adopting for such employees the Asbestos Standards of the Occupational Safety and Health Administration (OSHA). The modified proposal would expand the WPR's coverage to State and local government employees who are performing construction work, custodial work, and automotive brake and clutch repair work (the WPR now applies solely to asbestos abatement projects, a subset of construction work). The proposed rule would cross-reference the OSHA Asbestos Standards for Construction and for General Industry, so that amendments to these OSHA standards are directly and equally effective for employees covered by the WPR. It would also amend the Asbestos-in-Schools Rule to provide coverage under the WPR for employees of public local education agencies who perform operations, maintenance and repair activities. EPA is proposing this rule under section 6 of the Toxic Substances Control Act (TSCA).

DATES: Comments, identified by docket control number OPPTS–62125A, must be received on or before June 26, 2000. Requests that EPA hold an informal public hearing must be received on or before June 26, 2000. If a hearing is requested, EPA will publish a notice announcing the informal public hearing in the **Federal Register**.

ADDRESSES: Comments may be submitted by mail, electronically, or in person. Please follow the detailed instructions for each method as provided in Unit I. of the **SUPPLEMENTARY INFORMATION**. To ensure proper receipt by EPA, it is imperative that you identify docket control number OPPTS–62125A in the subject line on the first page of your response.

FOR FURTHER INFORMATION CONTACT: *For general information contact:* Barbara Cunningham, Director, Office of Program Management and Evaluation, Office of Pollution Prevention and Toxics (7401), Environmental Protection Agency, Ariel Rios Bldg., 1200 Pennsylvania Ave., NW, Washington, DC 20460; telephone number: (202) 554–1404; e-mail address: TSCA-Hotline@epa.gov.

For technical information contact: Cindy Fraleigh, Attorney-Advisor, National Program Chemicals Division (7404), Office of Pollution Prevention and Toxics, Environmental Protection Agency, Ariel Rios Bldg., 1200 Pennsylvania Ave., NW, Washington, DC 20460; telephone number: (202) 260–1537; fax number: (202) 260–1724; e-mail address: fraleigh.cindy@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this Action Apply to Me?

You may be potentially affected by this action if you are a State or local government entity whose employees work with or near asbestos-containing material. Potentially affected categories and entities may include, but are not limited to:

Categories	NAICS codes	Examples of potentially affected entities
Educational services	61	Public educational institutions, including school districts, not subject to an OSHA-approved State asbestos plan or a State asbestos worker protection plan that EPA has determined is exempt from the requirements of the WPR.
Public administration	92	State or local government employers not subject to an OSHA-approved State asbestos plan or a State asbestos worker protection plan that EPA has determined is exempt from the requirements of the WPR.

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in this table could also be affected. The North American Industrial Classification System (NAICS) codes are provided to assist you and others in determining whether or not this action might apply to certain entities. If you have questions regarding the applicability of this action to a particular entity, consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

B. How Can I Get Additional Information, Including Copies of this Document and Other Related Documents?

1. *Electronically*. You may obtain electronic copies of this document, and certain other related documents from the EPA Internet Home Page at http://www.epa.gov/. To access this document, on the Home Page select ''Laws and Regulations'' and then look up the entry for this document under the ''**Federal Register**—Environmental Documents.'' You can also go directly to the **Federal Register** listings at http://www.epa.gov/fedrgstr/. To access information about asbestos, go directly to the Asbestos Home Page for the Office of Pollution Prevention and Toxics at http://www.epa.gov/asbestos/.

2. *In person*. The Agency has established an official record for this action under docket control number OPPTS–62125A. The official record consists of the documents specifically referenced in this action, any public comments received during an applicable comment period, and other information related to this action, including any information claimed as Confidential Business Information (CBI). This official record includes the documents that are physically located in the docket, as well as the documents that are referenced in those documents. The public version of the official record does not include any information claimed as CBI. The public version of the official record, which includes printed, paper versions of any electronic comments submitted during an applicable comment period, is

available for inspection in the TSCA Nonconfidential Information Center (NCIC), North East Mall Rm. B–607, Waterside Mall, 401 M St., SW., Washington, DC 20460, from noon to 4 p.m., Monday through Friday, excluding legal holidays. The NCIC telephone number is (202) 260–7099.

C. How and to Whom Do I Submit Comments?

You may submit comments through the mail, in person, or electronically. To ensure proper receipt by EPA, it is imperative that you identify docket control number OPPTS–62125A in the subject line on the first page of your response.

1. *By mail.* Submit comments to: Document Control Office (7407), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, Ariel Rios Bldg., 1200 Pennsylvania Ave., NW, Washington, DC 20460.

2. *In person or by courier.* Deliver comments to: OPPT Document Control Office (DCO) in East Tower Rm. G–099, Waterside Mall, 401 M St., SW., Washington, DC. The DCO is open from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the DCO is (202) 260–7093.

3. *Electronically.* You may submit your comments electronically by e-mail to: ''oppt-docket@epa.gov,'' or you can submit a computer disk as described above. Do not submit any information electronically that you consider to be CBI. Avoid the use of special characters and any form of encryption. Electronic submissions will be accepted in WordPerfect 6.1/8.0 or ASCII file format. All comments in electronic form must be identified by docket control number OPPTS–62125A. Electronic comments may also be filed online at many Federal Depository Libraries.

D. How Should I Handle CBI that I Want to Submit to the Agency?

Do not submit any information electronically that you consider to be CBI. You may claim information that you submit to EPA in response to this document as CBI by marking any part or all of that information as CBI. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. In addition to one complete version of the comment that includes any information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public version of the official record. Information not marked confidential will be included in the public version of the official record without prior notice. If you have any questions about CBI or the procedures for claiming CBI, please consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

E. What Should I Consider as I Prepare My Comments for EPA?

You may find the following suggestions helpful for preparing your comments:

1. Explain your views as clearly as possible.

2. Describe any assumptions that you used.

3. Provide copies of any technical information and/or data you used that support your views.

4. If you estimate potential burden or costs, explain how you arrived at the estimate that you provide.

5. Provide specific examples to illustrate your concerns.

6. Offer alternative ways to improve the proposed rule.

7. Make sure to submit your comments by the deadline in this document.

8. To ensure proper receipt by EPA, be sure to identify the docket control number assigned to this action in the subject line on the first page of your response. You may also provide the name, date, and **Federal Register** citation.

F. How and to Whom Do I Submit an Informal Public Hearing Request?

You may request that EPA hold an informal public hearing, at which interested persons or organizations may present oral comments, by contacting the technical person listed under **FOR FURTHER INFORMATION CONTACT**. Requests for an informal hearing must be received on or before June 26, 2000. If EPA decides to hold an informal hearing, it will publish a notice in the **Federal Register** announcing the time, place, and date of the hearing, explaining how interested persons or organizations can request to participate in the hearing, and describing the hearing procedures. EPA conducts informal hearings in accordance with the procedures in 40 CFR part 750, subpart A.

II. Background

OSHA has published comprehensive requirements for protecting against the health effects of exposure to asbestos in the workplace. However, these requirements apply to employers in the private sector. OSHA has never had the authority to impose worker protection measures directly on State and local government employers. While a State has the authority to protect State and local government employees under a State plan approved by OSHA under section 18 of the Occupational Safety and Health Act (OSH Act), 27 States do not do so. (Information regarding OSHA-approved State plans can be found at http://www.osha-slc.gov/fso/osp.) EPA's WPR, 40 CFR part 763, subpart G, protects State and local government workers in States that do not have OSHA-approved State plans.

EPA determined when it first proposed the Worker Protection Rule in 1985 that asbestos exposures pose an unreasonable risk of harm to unprotected State and local government employees who conduct asbestos abatement projects, and that EPA has the authority under TSCA section 6 to establish asbestos worker protection standards for these employees (Ref.1). In finalizing that proposal, EPA considered several options for protecting these workers from the risks of asbestos, including providing public information and technical assistance; deferring to the States; promulgating a regulation that provided greater protection than the then-current OSHA Asbestos Standard; and promulgating a regulation that followed the OSHA Standard to maintain consistency among Federal programs. EPA selected the last option, and implemented this selection in the WPR by setting out the OSHA requirements in full at 40 CFR part 763, subpart G (Ref. 2). In keeping with its policy of maintaining a consistent level of protection between the WPR and the OSHA Asbestos Standard, EPA amended the WPR in 1987 to incorporate recent changes to the Asbestos Standard that lowered the permissible exposure limit (PEL) to 0.2 fibers per cubic centimeter (f/cc) and that instituted new requirements for engineering and work practice controls and worker training (Ref. 3).

In response to further revisions to the OSHA Asbestos Standard for Construction (OSHA Construction Standard) (Refs. 4 through 6), EPA published proposed amendments to the WPR in the **Federal Register** of November 1, 1994 (Ref. 7). EPA's 1994 proposal would have made the WPR consistent with the 1990 version of the OSHA Construction Standards, and would have broadened the scope of the WPR to cover State and local government employees engaged in any form of construction work and in automotive brake and clutch repair. Shortly before EPA published its 1994 proposal, OSHA published major revisions to the OSHA Construction Standard and the OSHA Asbestos Standard for General Industry (OSHA

General Industry Standard) (Ref. 8). EPA responded to OSHA's new revisions by stating in its proposed amendments to the WPR that it intended to publish a separate rule to make the WPR consistent with OSHA's 1994 changes. Commenters on the 1994 EPA proposal generally disfavored this approach, suggesting that EPA propose all the changes necessary for consistency between the WPR and the OSHA Construction Standard in one rulemaking.

EPA agrees with the commenters and is therefore modifying its 1994 proposal to make the WPR consistent with the current OSHA Construction Standard, 29 CFR 1926.1101, including all revisions to that standard from 1994 through the present (Refs. 9 through 16). This proposal would also apply the current requirements of the OSHA General Industry Standard, 29 CFR 1910.1001, to State and local government employers of employees engaged in brake and clutch repair work, as did EPA's 1994 proposed rule. In addition, this proposal would extend the requirements of the General Industry Standard to general custodial activities that are not associated with construction projects.

In developing this proposal, EPA considered the comments submitted on its 1994 proposal and incorporated them where appropriate. A Response to Comments Document addresses these comments more fully (Ref. 17). It is included in the public version of the official record in the NCIC Docket described in Unit I.B.2.

A. What Action is the Agency Taking?

EPA is proposing to implement its long-standing policy of consistency between EPA's WPR and the OSHA Asbestos Standards by incorporating the 1994 revisions to the OSHA General Industry and Construction Standards into the WPR. Currently, employees working for some State and local governments are exposed to greater asbestos-related hazards in the work place than are employees working for private employers or other State and local governments. These additional hazards are not trivial, but instead expose these State and local government employees to meaningful additional risks that their colleagues working elsewhere are not asked to face. Fairness and equity dictate the same level of protection for all persons who work with asbestos-containing material (ACM), whether those persons are employed by the private sector or by a State or local government. Currently, all private sector workers, as well as State and local government employees in the 23 States that have OSHA-approved State plans, are protected by the more stringent OSHA regulations. The amendments in this proposed rule would create equity for the remaining State and local government workers by making the new, more stringent, OSHA requirements applicable to those workers.

This proposal would create that equity for the present and for the future by amending the WPR to cross-reference the OSHA General Industry and Construction Standards set out at 29 CFR 1910.1001 and 29 CFR 1926.1101 respectively, rather than by setting out the OSHA requirements in full at 40 CFR part 763, subpart G. Cross-referencing the OSHA Asbestos Standards in the WPR would mean that amendments to the OSHA General Industry or Construction Standard would have the effect of changing the requirements under the WPR as well. As such, State and local government employees would benefit from new OSHA provisions protecting workers against the risks of asbestos at the same time as private sector employees. Maintaining the same requirements for all workers dealing with asbestos would also avoid potential confusion and mistakes by allowing all workers and their supervisors to learn a single standard and know the requirements that apply to their work without additional training if such workers or supervisors move from the public sector to the private sector or vice-versa.

EPA invites comment on its policy that all State and local government employees be protected from the health risks of exposure to asbestos to the same extent as private sector workers. EPA also invites comment on whether it should use cross-referencing to achieve equitable protection for State and local government employees. Cross-referencing has the advantage of ensuring that changes in workplace standards take effect at the same time for both groups of workers. Without it, revisions to the OSHA Asbestos Standards could not take effect for State and local government employees until EPA had proposed and finalized amendments incorporating those revisions into the WPR. This would have the undesirable effect of creating a period in which the requirements of the WPR and of the OSHA Asbestos Standards would be inconsistent. Cross-referencing also has the advantage of deferring to OSHA's singular expertise in establishing standards in the field of worker protection.

It is within EPA's statutory authority and substantive expertise to find, under TSCA section 6, that the current amount of exposure to asbestos in State and local government workplaces during use or disposal in construction, custodial, and brake and clutch repair work presents an unreasonable risk of injury to human health (see Unit II.B.1. for a detailed discussion of the basis for this finding), and to establish a policy of equitable protection from asbestos risks for State and local government employees. Moreover, TSCA section 9(d) requires EPA to consult and coordinate with other appropriate Federal agencies so as to achieve the maximum enforcement of TSCA while imposing the least burdens of duplicative requirements on regulated entities. EPA has therefore chosen to defer to OSHA's expertise and experience in setting workplace standards to protect workers from the risks of asbestos.

OSHA may, in the future, revise the Asbestos Standards. Cross-referencing would eliminate the need for a separate EPA rulemaking to amend the WPR, but State and local governments would still have the opportunity to participate in the rulemaking process. State and local governments with comments on specific worker protection measures could submit those comments directly to OSHA. State and local governments could also address comments to EPA asking that the Agency not adopt any new OSHA standard by filing a petition under TSCA section 21 requesting that EPA amend 40 CFR part 763, subpart G, to revise the cross-referencing structure. The petition should explain why EPA should depart from its longstanding policy of consistency and equity between the OSHA Asbestos Standards and the WPR, and should address EPA's rulemaking obligations under TSCA sections 6 and 9(d). In this context, adoption of the OSHA standard with the safeguard of the TSCA section 21 petition process allows the Agency to comply with the congressional intent evidenced in TSCA section 9 that EPA coordinate its activities under TSCA with the activities of other Federal agencies. When a TSCA section 21 petition is filed, EPA must respond within 90 days, either granting the petition and promptly initiating a rulemaking, or denying the petition and explaining its reasons for the denial.

Under the cross-referencing structure of this proposal, if you are a State or local government employer whose employees perform the construction and building maintenance activities identified in 29 CFR 1926.1101(a), and associated custodial work, you must comply with the OSHA Construction Standard, 29 CFR 1926.1101; if you are a State or local government employer

whose employees perform general custodial work or repair, cleaning, or replacement of asbestos-containing clutch plates and brake pads, shoes, and linings, or removal of asbestos-containing residue from brake drums or clutch housings, you must comply with the OSHA General Industry Standard, 29 CFR 1910.1001. This proposal would effectively alter State and local government employer obligations as follows:

1. *Expanded scope of coverage*. The current (1987) WPR applies solely to friable asbestos abatement projects. EPA has determined that there are substantial numbers of State and local government employees performing other construction, building maintenance, custodial, and brake and clutch repair activities. EPA has also determined that these employees will be exposed to unacceptably high levels of airborne asbestos fibers if they are not protected by an OSHA-approved State plan. See the Proposed WPR Economic Analysis (Economic Analysis) (Ref. 18). Therefore, as in 1994, EPA is proposing to expand the scope of the WPR to include all construction activities and custodial work involving ACM. This means that State and local government employees who remove non-friable ACM from buildings or perform building operations and maintenance tasks would be covered by the WPR. In addition, EPA is proposing to expand the scope of the WPR to include all brake and clutch repair work.

2. *Specific differences between the 1994 OSHA Standards and the current WPR*—a. *Classification scheme for asbestos construction projects*. In general, all of the requirements of the 1986 OSHA Construction Standard applied to all of the construction activities covered by the Standard. Projects of small-scale, short-duration were exempted from several of the provisions of the 1986 OSHA Standard, including those for negative pressure enclosures, competent person supervision, and decontamination areas. The current WPR likewise exempts small-scale, short-duration friable asbestos abatement projects from these requirements.

This proposed rule would amend the current WPR by cross-referencing the OSHA Construction Standard, which creates a classification scheme for all asbestos construction projects and related custodial activities except for the installation of new asbestos-containing materials (29 CFR 1926.1101(b)). This classification scheme reflects the fact that many different kinds of asbestos projects are regulated by the OSHA Construction Standard, and worker protection needs may vary according to the type of project. The revised OSHA Construction Standard establishes the following four classes of asbestos projects, in descending order of risk:

- *Class I projects, involving removal of asbestos-containing, or presumed asbestos-containing, thermal system insulation (TSI) and surfacing materials*. Surfacing materials are materials that are sprayed or troweled or otherwise applied to surfaces. These materials include, for example, decorative plaster, acoustical material on decking, and fireproofing on structural members. TSI includes material applied to pipes, boilers, tanks and ducts. According to OSHA, these projects require the most stringent of controls, due to the prevalence of these materials and the likelihood of significant fiber release when disturbing them. Class I projects are regulated by the current WPR because they involve friable ACM.
- *Class II projects, involving removal of all other ACM or presumed ACM*. These projects involve materials such as floor or ceiling tiles and wallboard, which are referred to as ''miscellaneous ACM'' in EPA's Asbestos-in-Schools Rule (40 CFR 763.83), and other ACM on the exterior of buildings such as siding and roofing. Most Class II projects are not covered by the current WPR, since they involve non-friable ACM. This proposal would extend coverage of the WPR to all Class II projects.
- *Class III projects, repair and maintenance activities involving the intentional disturbance of ACM or presumed ACM*. Removal of ACM or presumed ACM under Class III is limited to the incidental removal of a small amount of material, for example, in order to repair a pipe or to access an electrical box. Class III projects involving friable ACM are generally regulated under the current WPR as small-scale, short-duration asbestos abatement projects.
- *Class IV activities, maintenance and custodial activities where employees contact ACM and presumed ACM*. These projects involve activities such as the repair or replacement of ceiling tiles, repair or adjustment of ventilation or lighting, dusting of surfaces, mopping of floors, or vacuuming of carpets. Class IV activities may also include sweeping, mopping, dusting, or vacuuming incidental to a Class I–III regulated project. Most Class IV projects are not covered by the current WPR because they are not considered to be asbestos abatement projects.

Some of the requirements (for example, the PELs, specified work practices and engineering controls, supervision by a competent person, and, in certain circumstances, regulated areas and training) apply to all construction projects and related custodial activities covered by the standard, including installation of new asbestos-containing materials. Work practices and engineering controls applicable to all projects include the use of wet methods (where feasible), HEPA vacuums, and, if necessary, ventilation systems to achieve compliance with the required PELs. All projects must be supervised by competent persons, but the training requirements for Class III and Class IV supervisors are much less stringent than for those persons supervising Class I and Class II projects.

Beyond these basic requirements, the current OSHA work practice and engineering control requirements are specific to each class of project and, for Class II projects, specific to the type of material being removed. These requirements are discussed in more detail under the heading ''Methods of compliance for construction projects and associated custodial activities'' in Unit II.A.2.h.

b. *Hazard communication*. This proposal would adopt the provisions from the OSHA General Industry and Construction Standards for the identification of asbestos hazards by building owners and employers and the communication of hazard information among building owners, employers, employees, and tenants (29 CFR 1910.1001(j), 29 CFR 1926.1101(k)). Under these Standards, building owners and employers must identify the presence, location, and quantity of ACM in the worksite before work begins. Any TSI and surfacing materials in buildings constructed earlier than 1981 must be presumed to contain asbestos, unless a person with the appropriate qualifications determines, in accordance with recognized sampling and analytical methods, that the material does not contain asbestos.

If the material to be analyzed is in a school or a public or commercial building, then EPA's Model Accreditation Plan (MAP) requires the sampling to be done by a person accredited as an inspector under the MAP (40 CFR part 763, subpart E, Appendix C). If the material is not in a building regulated by the MAP, e.g., it is on an outdoor installation, either a MAP-accredited inspector or a Certified Industrial Hygienist may perform the sampling. Resilient floor covering installed prior to 1981 must also be presumed to contain asbestos unless an industrial hygienist or a MAP-accredited inspector determines through

recognized analytical techniques that it does not contain asbestos. Again, if the material to be sampled is in a building regulated by the MAP, then the sampling must be done by a MAP-accredited inspector.

Results obtained during an inspection that complies with the Asbestos-in-Schools Rule requirements at 40 CFR 763.85(a) are sufficient to rebut the presumption that TSI, surfacing material, or resilient floor covering contains asbestos. Although not required by the OSHA Standards or the EPA MAP, bulk samples taken from school buildings regulated by the Asbestos Hazard Emergency Response Act (AHERA) must be analyzed by laboratories accredited by the National Institute of Standards and Technology (NIST). For a fuller discussion on the hazard communication provisions, see the OSHA preamble in the **Federal Register** of August 10, 1994 (Ref. 8, p. 41013).

Under these proposed amendments to the WPR, State and local government entities whose employees perform asbestos-related construction, custodial, or brake and clutch repair work would be required to determine the presence, location and quantity of ACM or presumed ACM in the worksite. Although EPA recommends that State and local governments make this determination based upon a full building inspection done by a MAP-accredited inspector, the minimum requirement is to identify three types of building materials (TSI, surfacing material, and resilient floor covering) that must be presumed to contain asbestos. EPA believes that the identification of types of building materials does not require the expertise of a MAP-accredited inspector, since no judgment as to asbestos content is being made. However, if there is some reason to suspect that other materials in the worksite may contain asbestos, or the employer wishes to rebut the presumption of asbestos content, and the project will be taking place within a public or commercial building, then the services of a MAP-accredited inspector will be required.

This proposal would then require State and local government employers to provide their own employees, and other on-site public and private employers, with information on the presence, location and quantity of ACM and presumed ACM in the worksite, along with specific details on the nature of the activity to be performed, requirements pertaining to regulated areas, and the measures that will be taken to prevent exposure to adjacent workers.

Although the hazard communication provisions of the OSHA Standards apply to building owners as well as employers, EPA is not proposing to extend these requirements to State and local government building owners who are not also employers. EPA believes that, in most cases, the employer and the building owner will be the same, i.e., both will be State agencies, or City agencies. If the building owner and the employer are the same, then a separate provision imposing identification and communication obligations on the building owner is unnecessary. EPA requests comment on the extent to which this assumption may be incorrect.

c. *Project notifications*. EPA is proposing to remove the current requirement that employers who plan an asbestos abatement project notify EPA at least 10 days in advance (40 CFR 763.124). In 1994, OSHA considered and rejected a requirement for employers to report all asbestos projects, except those of small-scale, short-duration, in advance. OSHA's decision was based on the fact that, since there are other existing Federal and State reporting requirements, additional reporting requirements in the OSHA Construction Standard would be burdensome for the employer without enhancing compliance. For a comprehensive discussion of OSHA's reasoning, see the **Federal Register** of August 10, 1994 (Ref. 8, pp. 40970–40971). EPA agrees with this logic, since it is easily able to use reports received under the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations, 40 CFR part 61, subpart M, to target worker protection inspections. Two commenters on the 1994 proposed amendments to the WPR argued that EPA should be consistent with OSHA on this subject. In addition, several other commenters noted that the notification requirement would become extremely burdensome with the increased number of projects covered by the expansion of the scope of the rule to non-friable removal projects and maintenance (Ref. 17). EPA would, however, adopt the OSHA reporting requirements for Class I alternative control methods as discussed under the heading ''Methods of compliance for construction projects and associated custodial activities'' in Unit II.A.2.h.

d. *Permissible exposure limits*. This proposed amendment to the WPR would lower the PEL of 0.2 f/cc to 0.1 f/cc as an 8-hour, time-weighted average, OSHA's current PEL for all covered activities. 29 CFR 1910.1001(c), 29 CFR 1926.1101(c). In 1994, OSHA lowered its PEL from 0.2 f/cc to 0.1 f/cc. For a comprehensive discussion of OSHA's findings see the **Federal Register** of August 10, 1994 (Ref. 8, pp. 40978–40982). This proposal also retains a provision included in the 1994 proposed WPR amendments under which employees would be protected by a short-term excursion limit of 1.0 f/cc for a 30 minute sampling period. EPA did not receive any comments on this proposed excursion limit. Finally, EPA proposed in 1994 to allow employers to use an alternative PEL based upon results of Transmission Electron Microscopy (TEM). Several commenters stated that the proposed alternative PEL was not adequately supported by science (Ref. 17), so EPA is withdrawing that portion of its 1994 proposal.

e. *Multi-employer worksites*. The current WPR requires State and local government employers to communicate information about the nature of asbestos work and regulated area requirements to other employers, whether public or private, on multi-employer worksites (40 CFR 763.121(d)). This proposal would adopt by cross-reference the requirements of 29 CFR 1926.1101(d) of the OSHA Construction Standard for multi-employer worksites where construction and related custodial work is being performed. The OSHA Construction Standard requires employers whose employees are performing construction and associated custodial activities within regulated areas to provide other on-site employers with information concerning the nature of the asbestos-related work, information on regulated areas, and information on the specific measures that will be taken to prevent exposure to other employees. In addition, this provision of the OSHA Construction Standard clarifies that while the employer who creates an asbestos hazard must abate it, other on-site employers are responsible for protecting their employees from the hazard by removing them from the area or conducting an exposure assessment and providing personal protective equipment if warranted.

f. *Regulated areas*. Under the current WPR, employers must establish a regulated area where employee exposures on asbestos abatement projects exceed, or are expected to exceed, the PEL, and all persons entering regulated areas must wear respirators (40 CFR 763.121(e)). This proposal, by cross-referencing the OSHA General Industry Standard, would make these requirements applicable to State and local governments who employ brake and clutch repair workers (29 CFR 1910.1001(e)).

This proposal, by cross-referencing 29 CFR 1926.1101(e) of the OSHA Construction Standard, would also require all Class I–III asbestos construction work to be conducted within a regulated area. This requirement is based upon OSHA's assessment of the construction activities most likely to produce exposures in excess of the PEL, as well as OSHA's concern with the significant risk that still remains for workers exposed to the PEL. OSHA's reasoning is discussed in the **Federal Register** of August 10, 1994 (Ref. 8, p. 40982). Although this proposal would require State and local government employers to establish, demarcate, and control access to regulated areas for most asbestos construction work, construction employees working within regulated areas would not automatically need to wear respirators unless otherwise required by the regulation.

g. *Exposure monitoring.* The current WPR requires employers to perform initial employee exposure monitoring for each covered activity, unless the employer has historical data from similar operations showing exposures below the PEL, or the employer can produce objective data showing that the material involved cannot release asbestos fibers in excess of the action level of 0.1 f/cc (40 CFR 763.121(f)). With respect to employees performing construction activities and associated custodial work, this proposal, by cross-referencing the OSHA Construction Standard, would modify the requirements for initial and periodic monitoring to reflect increased awareness that numerous factors influence employee exposure on construction jobs and that initial monitoring alone may not be the best predictor of future exposures. For more information on these considerations, see the **Federal Register** of August 10, 1994 (Ref. 8, pp. 40983–40984).

The OSHA Construction Standard requires a competent person to make an initial exposure assessment (29 CFR 1926.1101(f)). This assessment involves a review of initial monitoring data, previous monitoring data from the same workplace or employer, and other factors such as the training and experience of the employees who will perform the work, the work practices they will use, and the degree and quality of supervision that will be provided. In many cases, the competent person will be able to make a negative exposure assessment, a determination that employee exposures will be consistently below the PELs, based upon one of three things:

- Objective data which demonstrate that the product or activity involved is incapable of producing airborne asbestos concentrations in excess of the PELs.
- Recent monitoring data from previous asbestos jobs which closely resemble the current activity with respect to processes, material types, control methods, work practices, environmental conditions, and employee training and experience.
- Initial monitoring data from the current asbestos job.

Unless a negative exposure assessment can be made, the employer must conduct daily exposure monitoring to ensure compliance with the exposure limits.

For general custodial work and brake and clutch repair activities, this proposal would, by cross-referencing the OSHA General Industry Standard, require air monitoring only for activities where exposures exceed, or can reasonably be expected to exceed a PEL, and the employer does not have historical data from similar operations or objective data concerning the material which indicates that exposures will be below the PEL (29 CFR 1910.1001(d)).

h. *Methods of compliance for construction projects and associated custodial activities.* This proposal cross-references the OSHA Construction Standard requirements for engineering controls and work practices (29 CFR 1926.1101(g)). Where necessary to achieve the PEL, the current WPR requires one or more of the following: HEPA vacuums, wet methods where feasible, and prompt cleanup and disposal of asbestos-containing waste and debris. These three general control processes would become mandatory under this proposal for all asbestos construction work. The remaining control processes mentioned in the existing 40 CFR 763.121(g), local exhaust ventilation, general ventilation systems, and enclosure/isolation of dust-producing processes, are only required by the OSHA Construction Standard where necessary to achieve the PELs.

Under the current WPR, employers are required, if feasible, to use negative pressure enclosures for all projects that are not of small-scale, short-duration (40 CFR 763.121(e)(6)). For Class I projects, this proposal would cross-reference the OSHA Construction Standard, which gives employers the flexibility to choose, depending upon the type of project, from several different engineering control systems, including negative pressure enclosures, glove bags, negative pressure glove bag systems, negative pressure glove box systems, water spray process systems, or mini-enclosures (29 CFR 1926.1101(g)). Alternative control methods may be used, so long as a competent person is able to certify that the methods would be adequate to reduce employee exposures below the PEL and that asbestos contamination beyond the regulated area will not occur. If the Class I project involves more than 25 linear or 10 square feet of ACM, this determination must be made by a certified industrial hygienist or a licensed professional engineer who is also qualified as a project designer, and the Director, National Program Chemicals Division, Office of Pollution Prevention and Toxics, EPA, must be notified in advance. Additional requirements for Class I projects include critical barriers, or other methods to prevent the migration of fibers off-site, impermeable drop cloths for surfaces, and sealing of the HVAC system.

Class II projects are generally not covered by the current WPR unless they involve friable ACM or previously non-friable ACM which has become damaged to the point that it can be considered friable. This proposal, like the 1994 proposal, would extend coverage of the WPR to all construction work involving ACM, whether friable or non-friable. This proposal would cross-reference the OSHA Construction Standard which, in addition to the basic control requirements for all construction work, requires employers to follow specific work practices and use specific engineering controls for different types of ACM, including resilient floor coverings, roofing material, cementitious siding and transite panels, and gaskets. For example, with respect to the removal of resilient floor coverings, 29 CFR 1926.1101(g)(8)(i) prohibits sanding of flooring or backing, rip-up of resilient sheet material, and dry sweeping/scraping. In addition, mechanical chipping of resilient floor covering is prohibited unless it is performed in accordance with the requirements for Class I projects. For all specified Class II projects, critical barriers or other isolation methods must be used, and the surfaces must be covered with impermeable drop cloths. As with Class I projects, Class II projects may be conducted with alternative control methods, as long as a competent person evaluates the project area and certifies that the alternative controls are sufficient to reduce employee exposure below the PELs. For Class II projects, however, the employer is not required to notify the Agency.

Many Class III activities are currently covered by the WPR as small-scale,

short-duration asbestos abatement projects. Several of the control methods required by 29 CFR 1926.1101(g)(9) of the OSHA Construction Standard for Class III projects (wet methods, local exhaust ventilation as feasible, and, under specified circumstances, impermeable drop cloths and isolation methods) are essentially the same as the current WPR requirements in 40 CFR 763.121(g). If, for a particular Class III project, the employer is unable to produce a negative exposure assessment or monitoring results show the PEL has been exceeded, the OSHA Construction Standard requires the employer to use impermeable drop cloths and plastic barriers or their equivalent or one of the listed Class I control methods, such as a negative pressure enclosure or a glove bag.

Class IV activities are not currently covered by the WPR. This proposal would extend the scope of the WPR to cover Class IV activities. In addition, this proposal would cross-reference the OSHA Construction Standard, which requires employers conducting Class IV activities to use general control measures, such as wet methods, HEPA vacuums, and prompt cleanup (29 CFR 1926.1101(g)(10)). However, employees performing Class IV activities must be provided with respirators if they are performing housekeeping activities in a regulated area where other employees are wearing respirators.

i. *Methods of compliance for brake and clutch repair activities.* This proposal would require State and local government employers whose employees perform brake and clutch repair activities to comply with the OSHA General Industry Standard. In addition to general worker protection provisions, such as PELs, exposure monitoring, and respiratory protection, the OSHA General Industry Standard requires employers to use one of two primary methods for controlling employee exposure to asbestos during brake and clutch repair (Appendix F to 29 CFR 1910.1001).

The Negative Pressure Enclosure/HEPA Vacuum System method requires the work to be performed within a sealed enclosure similar to a glove bag, with impermeable sleeves through which the worker may handle brake and clutch components. Negative pressure must be maintained within the enclosure while the work is being performed. This method is virtually identical to the Enclosed Cylinder/HEPA Vacuum method in EPA's 1994 proposal, but OSHA changed the name of this method to reflect the fact that the enclosure does not necessarily have to be in the shape of a cylinder. The Low Pressure/Wet Cleaning method requires the brake and clutch components to be kept adequately wet, using a low pressure water flow and a catch basin, while repair activities are taking place. Employers whose employees perform 5 or fewer brake and clutch repair jobs per week may use less complex wet methods to control employee exposures during the projects. An employer could use an alternative control method if the method was demonstrated to control employee exposures at least as well as the Negative Pressure Enclosure/HEPA Vacuum method.

j. *Methods of compliance for general custodial activities.* This proposal would require State and local government employers whose employees perform custodial activities not associated with construction projects to comply with the OSHA General Industry Standard. In addition to general worker protection provisions, such as PELs, exposure monitoring, and respiratory protection, the OSHA General Industry Standard and Construction Standard contain identical specifications for resilient floor covering maintenance. The Standards ban sanding, allow stripping only using wet methods with a low abrasion pad at slow speeds, and prohibit dry buffing unless the finish on the floor is sufficient to prevent the pad from coming into contact with the floor material (29 CFR 1910.1001(k)(7), 29 CFR 1926.1101(l)(3)). This is generally consistent with EPA's existing guidance on floor maintenance (Ref. 19).

k. *Respirators.* The current WPR requires employers to supply respirators to employees entering regulated areas (40 CFR 763.121(e)(4)). This proposal would cross-reference the OSHA General Industry and Construction Standards (29 CFR 1910.1001(e), 29 CFR 1926.1101(h)), which require respiratory protection for employees performing the following activities:

- Class I projects.
- Class II projects where ACM is not removed intact.
- Class II–III projects that do not use wet methods.
- Class II–III projects for which a negative exposure assessment has not been made.
- Class III projects involving the disturbance of TSI or surfacing material.
- Class IV work in regulated areas where other employees are wearing respirators.
- Any other activities where asbestos exposure exceeds either of the PELs.
- Emergencies.

OSHA determined that respiratory protection was necessary for employees performing these activities due to the variability in exposures experienced during asbestos work, the need to protect workers who are disturbing ACM with the greatest potential for significant fiber release, and the fact that exposure monitoring results are not always available in a timely fashion. OSHA's findings are discussed in the **Federal Register** of August 10, 1994 (Ref. 8, p. 41010).

In addition, EPA's 1994 proposed amendments to the WPR cross-referenced the relevant portions of 29 CFR 1910.134, the OSHA Respiratory Protection Standard. In 1998, OSHA substantially revised this Standard (Ref. 14). This proposal would adopt by cross-reference the appropriate provisions of the revised OSHA Respiratory Protection Standard. The following is a discussion of requirements of the OSHA Respiratory Protection Standard that are not a part of the current WPR respirator requirements.

Employers who are required to supply their employees with respirators must develop and implement a respiratory protection program. Under 29 CFR 1910.134.(c), the program must be in writing, updated as necessary, with workplace-specific procedures addressing the following major elements:

- Procedure for selecting respirators.
- Medical evaluations of employees required to use respirators.
- Fit testing procedures for tight-fitting respirators.
- Procedures for proper use of respirators in routine and (reasonably foreseeable) emergency situations.
- Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators.
- Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators.
- Training of employees in the respiratory hazards they are potentially exposed to.
- Training of employees in proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance.
- Procedures for regularly evaluating program effectiveness.

Employers must designate a person to administer and evaluate the respiratory protection program (29 CFR 1910.134(c)(3)). This administrator must have training and/or experience commensurate with the complexity of the particular program.

Under 29 CFR 1910.134(d), the employer must provide respirators that are appropriate to the workplace and to

user factors that affect respirator performance and reliability, such as humidity, communication needs, and exertion levels. (See discussion at Ref. 14, p. 1196.) The employer must choose from a sufficient number of respirator models and sizes in order to properly fit the wearer (29 CFR 1910.134(f)).

Currently, the WPR requires an initial fit test, then, for negative-pressure respirators only, fit tests every 6 months (40 CFR 763.121(h)(4)). By adopting the OSHA Respiratory Protection Standard by cross-reference, this proposal would lengthen the interval to a year, but periodic fit test would be required for all tight-fitting respirators, whether positive or negative pressure. As in the current WPR, fit testing would have to be accomplished using one or more OSHA-approved protocols. In addition to the rigorous fit testing requirements, the OSHA Respiratory Protection Standard requires brief, easy-to-perform fit checks each time the respirator is worn (29 CFR 1910.134(g)(1)(iii)). (See discussion at Ref. 14, p. 1239.)

The OSHA Respiratory Protection Standard at 29 CFR 1910.134(h) requires specific respirator cleaning and maintenance practices, although an employer may choose to follow the instructions of the respirator manufacturer if they are sufficient to accomplish the same objectives such as sanitation and proper operation. The specific practices to be incorporated were compiled by OSHA from various sources, including recommendations by the American National Standards Institute (ANSI), the National Institute for Occupational Safety and Health (NIOSH), and the American Industrial Hygiene Association (AIHA).

Employees must be trained in specific elements of proper respirator use and care, including the need for respirators, their limitations, emergency procedures, maintenance, inspection, storage, and medical signs and symptoms that may limit respirator effectiveness (29 CFR 1910.134(k)).

Finally, 29 CFR 1910.134(m) requires employers to keep records of employee fit tests, including the employee's name, the type of test, the specific make/model of respirator tested, the date of the test, and the results of the test. The employer must only retain the most recent fit test records for each employee.

l. *Protective clothing*. The current WPR requires properly maintained and laundered protective clothing for employees exposed above the PEL (40 CFR 763.121(i)). This proposal would adopt the OSHA General Industry and Construction Standards, which require protective clothing to be provided where employees are exposed above the PELs, where the possibility of eye irritation exists, where a negative exposure assessment cannot be made for a particular project, or where employees are performing Class I operations involving the removal of over 25 linear or 10 square feet of TSI or surfacing ACM or PACM (29 CFR 1910.1001(h), 29 CFR 1926.1101(i)). In addition, rather than the periodic inspections required by the current WPR, the Construction Standard requires the competent person to inspect employee worksuits at least once each shift for rips or tears.

m. *Hygiene facilities and practices*. This proposal would adopt the hygiene requirements of the OSHA General Industry and Construction Standards (29 CFR 2910.1001(i), 29 CFR 1926.1101(j)). For Class I construction projects involving more than 25 linear or 10 square feet of ACM, the OSHA requirements are identical to the current WPR provisions for projects that are not of small-scale, short-duration (40 CFR 763.121(j)). OSHA determined in 1994 that such stringent measures were not necessary for smaller Class I projects or other classes of construction work. For smaller Class I projects, and Class II and III projects where exposures exceed a PEL or where a negative exposure assessment is not produced, the employer must provide an equipment room or area where contaminated worksuits are HEPA-vacuumed and then removed. Again, if Class IV workers are performing housekeeping activities within a regulated area, they must follow the same hygiene practices as the other employees working in that area. For general custodial workers and brake and clutch repair workers, the OSHA General Industry Standard, which would be adopted by cross-reference, requires employers to provide clean change rooms, showers, and clean lunch rooms (29 CFR 1910.1001(i)). For all workers, this proposal would also adopt, by cross-reference, OSHA's ban on smoking in work areas that was proposed by EPA in 1994 (29 CFR 1910.1001(i)(4), 29 CFR 1926.1101(j)(4)).

n. *Communication of hazards*. This proposal would adopt by cross-reference the requirement in the OSHA General Industry and Construction Standards that employers determine the presence, location, and quantity of ACM and presumed ACM (TSI, surfacing material, and resilient floor covering) in the worksite before work begins (29 CFR 1910.1001(j), 29 CFR 1926.1101(k)). If ACM or presumed ACM is discovered in the worksite after the project has been started, the employer must inform other on-site employers of the discovery.

Under the OSHA Standards, employers must also post signs at the entrance to mechanical rooms that contain ACM or presumed ACM. These signs must identify the material, its location, and appropriate procedures for preventing a disturbance. As currently required by the WPR at 40 CFR 763.121(k)(1)(i), signs must be posted for regulated areas, but the OSHA Standards language regarding respirators and protective clothing may be omitted if the employees are not required to wear them within that particular regulated area. The OSHA Standards include the requirement proposed by EPA in 1994 that employers ensure their employees comprehend the warning signs and labels, using, if necessary, such techniques as foreign languages, pictographs, graphics, and awareness training (29 CFR 1910.1001(j)(3), 29 CFR 1926.1101(k)(3)).

Also, by cross-referencing the OSHA Construction Standard, this proposal would adopt the different OSHA training requirements for different classes of construction work and associated custodial activities (29 CFR 1926.1101(k)(9)). Under the OSHA Construction Standard, employees performing Class I projects must have MAP worker accreditation or the equivalent. If the project will be undertaken in a school or a public or commercial building, MAP worker accreditation is required. If the project is in an area unregulated by the MAP, such as in an outdoor installation, equivalent training is permitted. Class II work generally involves non-friable ACM, so MAP accreditation is not required unless the project involves friable ACM and is located within a school or a public or commercial building. The OSHA Construction Standard requires Class II workers to receive training in the material-specific work practice and engineering control requirements pertaining to the type of material(s) that they will be disturbing. Class II training must take at least 8 hours and include a hands-on component. Class III workers must have 16 hours of training in a course which meets the requirements of the maintenance and custodial training required under the AHERA regulations at 40 CFR 763.92(a)(2). Class IV workers must have at least two hours of awareness training equivalent to the training described in the AHERA regulations at 40 CFR 763.92(a)(1). Notwithstanding the specific training provisions for each class, the OSHA Construction Standard at 29 CFR 1926.1101(k)(9) requires employers to ensure that employees performing Class I–IV projects and employees who are

likely to be exposed in excess of the PEL are trained in the basic elements currently identified in the WPR at 40 CFR 763.121(k)(3)(iii).

The OSHA Construction Standard also includes the requirements to provide employees with smoking cessation information as well as information concerning posting signs and affixing labels and their meaning that were proposed by EPA in 1994 (29 CFR 1926.1101(k)(9)(viii)(J)). Finally, the OSHA Construction Standard requires employers to teach Class III–IV workers the contents of ''Managing Asbestos In Place'' (the Green Book) (EPA 20T–2003, July 1990), or its equivalent (29 CFR 1926.1101(k)(9)(viii)(D)).

With regard to training for general custodial employees and brake and clutch repair workers, this proposal would adopt the OSHA General Industry Standard, which includes required training elements similar to those found in the current WPR (29 CFR 1910.1001(j)(7), 40 CFR 763.121(k)(3)(iii)).

o. *Housekeeping*. By adopting the OSHA General Industry and Construction Standards by cross-reference, this proposal would establish requirements for resilient floor covering maintenance by State and local government employees. The Standards ban sanding, allow stripping only using wet methods with a low abrasion pad at slow speeds, and prohibit dry buffing unless the finish on the floor is sufficient to prevent the pad from coming into contact with the floor material (29 CFR 1910.1001(k)(7), 29 CFR 1926.1101(l)(3)). The Standards are generally consistent with EPA's existing guidance on floor maintenance (Ref. 19).

p. *Medical surveillance*. The WPR currently requires medical surveillance for persons exposed at or above the action level of 0.1 f/cc for 30 or more days per year (40 CFR 763.121(m)). For general custodial workers and brake and clutch repair workers, this proposal would adopt by cross-reference the OSHA General Industry Standard requirement for medical surveillance for all workers exposed to asbestos concentrations at or above the PELs for any number of days per year (29 CFR 1910.1001(l)). For construction workers, this proposal would require, by cross-reference to the OSHA Construction Standard, medical surveillance for employees who perform Class I, II, or III work on, or who are exposed at or above a PEL for, 30 or more days per year (Class II or III work for an hour or less on intact ACM does not count as a day for the purposes of this requirement) (29 CFR 1926.1101(m)(1)(i)(A)).

q. *Recordkeeping*. The current WPR recordkeeping requirements would not be changed by this proposal, except that data used to rebut the presumption that TSI, surfacing material, or resilient floor covering is ACM must be retained by the employer for as long as the data are relied upon to rebut the presumption (40 CFR 763.121(n); 29 CFR 1919.1001(m); 29 CFR 1926.1101(n)). This proposal would also permit employers to use competent organizations to maintain necessary records.

r. *Competent person*. The current WPR requires a competent person to supervise asbestos abatement projects that are greater than small-scale, short-duration activities (40 CFR 763.121(e)(6)). The OSHA Construction Standard at 29 CFR 1926.1101(o), which this proposal would adopt by cross-reference, extends the competent person supervision requirement to all construction projects and associated custodial work. The Construction Standard also expands and clarifies the responsibilities and required training for competent persons. Competent persons who supervise Class I or Class II projects must be MAP-accredited contractor/supervisors or the equivalent. Equivalent training is permitted unless the project being supervised involves friable material in a school or a public or commercial building. Competent persons who supervise Class III or Class IV activities must have at least 16 hours of training which meets the requirements of 40 CFR 763.92(a)(2) for local education agency maintenance and custodial staff, or its equivalent in stringency, content and length. The competent person must make regular inspections of the worksite, at least once per workshift for Class I projects, and must also be available for inspections upon request. Competent persons are generally responsible for ensuring compliance with the various regulatory requirements, including notifications and initial exposure assessments. The competent person requirements do not apply to brake and clutch repair operations or to general custodial activities not associated with construction projects.

3. *Proposed amendment to the Asbestos-in-Schools Rule*. As in 1994, EPA is again proposing to amend the Asbestos-in-Schools Rule to remove the provisions that extend WPR protections to employees of public school systems when they are performing operations, maintenance and repair (O&M) activities (40 CFR 763.91(b)). The expanded scope of the proposed WPR would make these provisions unnecessary.

The current WPR covers State and local government employees, including employees of public schools who are involved in friable asbestos abatement projects. The Asbestos-in-Schools Rule (40 CFR part 763, subpart E), issued under the authority of AHERA, extends WPR protections to employees of public local education agencies when they are performing small-scale, short-duration O&M activities involving asbestos-containing materials. Appendix B to the Asbestos-in-Schools Rule describes appropriate worker protection practices for these employees.

Since this proposal would provide coverage for all construction work, including O&M activities, to employees of public local education agencies in States without OSHA-approved State plans, the specific provisions at 40 CFR 763.91(b) covering O&M activities by employees of public local education agencies, as well as the provisions of Appendix B, would be unnecessary. EPA is therefore proposing to delete Appendix B and amend § 763.91(b) to refer readers to the WPR.

4. *Plain language*. EPA has drafted the revised regulatory text of the WPR taking into account the June 1, 1998, Presidential Memorandum on Plain Language (available at http://www.plainlanguage.gov/cites/memo.htm), and its implementing guidance. Using plain language clarifies what the WPR requires, and saves the government and the private sector time, effort, and money. EPA has used plain language to give the WPR a logical organization and easy-to-read design features. In the process, EPA has deleted from the proposed rule the current sections on enforcement and inspections (40 CFR 763.125 and 763.126). These sections are unnecessary, as they restate requirements in TSCA sections 11, 15, 16, and 17. Accordingly, EPA will continue to enforce the WPR and conduct inspections.

5. *State exemptions*. The 1994 proposal would have revised § 763.122 to adopt a process of State exclusions from the WPR that was substantively the same as that followed under the Asbestos-in-Schools Rule (40 CFR 763.98). EPA has re-examined its authority under TSCA section 18, and is not including those changes in this proposed rule. Instead, EPA is proposing to revise the current language to conform to TSCA section 18 and to use plain language. This proposal would also redesignate this section as § 763.123 because of other structural changes to 40 CFR part 763, subpart G.

B. What is the Agency's Authority for Taking this Action?

1. *Finding of unreasonable risk.* Under TSCA section 6(a), if EPA finds that the manufacture, processing, distribution in commerce, use or disposal of a chemical substance or mixture, or any combination of these activities, presents, or will present, an unreasonable risk of injury to health or the environment, EPA shall by rule apply requirements to the substance or mixture to the extent necessary to protect adequately against the risk. Asbestos is a chemical substance or mixture that falls within the scope of this authority. In deciding whether to propose this rule under TSCA section 6(a), EPA considered:

- The health effects of asbestos.
- The magnitude of human exposure to asbestos.
- The environmental effects of asbestos and the magnitude of the exposure of the environment to asbestos.
- The benefits of asbestos for various uses and the availability of substitutes for those uses.
- The reasonably ascertainable economic consequences of the proposed rule, after consideration of the effect on the national economy, small business, technological innovation, the environment, and public health.
- The social impacts of the proposed rule.

See 15 U.S.C. 2601(c) and 2605(c)(1). EPA's consideration of these factors in proposing this rule is summarized in this unit. Additional information on many of these factors can be found in the Economic Analysis (Ref. 18).

a. *Health effects of asbestos.* Asbestos is found in building products such as insulation, ceiling and floor tiles, spackling tape for drywall, and roofing products. In general, asbestos contained in such products is considered harmless unless the matrix of asbestos fibers is disturbed or deteriorates. A disturbance occurs when ACM is abraded, cut, torn or penetrated in such a way that fibers are separated from one another and are released into the air where workers and others can inhale them. The primary route of human exposure is through the respiratory system, although other exposure routes (through ingestion or dermal contact, for example) are possible. Five respiratory illnesses are associated with asbestos exposure.

- *Carcinoma of the lung (lung cancer).* Carcinoma of the lung is a term used to refer to several types of cancer of lung tissue. The cancers usually affect the larger airways in the lungs, but may sometimes also appear in the smaller airways and peripheral parts of the lungs. Asbestos-related lung cancer occurs primarily in people with some degree of asbestosis (especially moderate to severe asbestosis) who also smoke. The combination of asbestos exposure and smoking is between additive and multiplicative; some studies cite a 5-fold increase in the risk of lung cancer in asbestos-exposed nonsmokers versus a 60-fold increase in asbestos-exposed smokers. Lung cancer usually occurs many years after asbestos exposure, and is nearly always fatal.
- *Malignant mesothelioma of the pleura and peritoneum.* Mesothelioma is a form of cancer that produces malignancies in the lining of the lung and chest cavity (pleura) and the lining of the abdominal organs and cavity (the peritoneum). The disease appears to be largely or wholly unrelated to smoking. Unlike lung cancer, which occurs in asbestos-exposed and unexposed smokers alike, malignant mesotheliomas occur mainly in asbestos-exposed individuals. Like lung cancer, mesothelioma usually occurs many years after exposure, and is always fatal. Mesothelioma is much less common than lung cancer, representing about 10% of lung cancer incidents.
- *Asbestosis.* Asbestosis is a chronic and progressive lung disease caused by inhaling asbestos fibers, which penetrate and irritate the outer parts of the lungs. This, in turn, causes inflammation and, eventually, increasingly severe pulmonary fibrosis (thickening and scarring of lung tissue). As the tiny airways, air sacs, and related lung tissue become thicker and scarred, there is less space for air to pass through, so lung capacity declines. In addition, the lung tissue stiffens, making it more difficult to push air in and out. In the extreme, extensive fibrosis of the lungs causes the airways and air sacs to become so scarred and stiff that they cannot function well enough to sustain life, and respiratory failure and death ensue. The time from asbestos exposure to onset of asbestosis varies with the level of exposure, with higher exposures reducing the time till onset. Asbestosis will exacerbate other respiratory diseases (e.g., carcinoma of the lung) and will hasten death in individuals with other respiratory risk factors (i.e., smokers).
- *Pleural effusion leading to diffuse pleural thickening.* Inhalation of asbestos fibers can lead to pleural conditions as the fibers become trapped on the pleural membranes. Asbestos-related pleural effusion is an accumulation of fluid between the two pleural membranes caused when asbestos fibers become trapped between the pleural membranes. One pleural membrane lines the lungs, while the other membrane lines the chest cavity. Normally, the two membranes lie very close to each other, sliding gently across each other during breathing. Accumulation of fluid causes the membranes to separate in the area of the fluid, usually making breathing more difficult and painful. Pleural effusion can cause the pleural membranes to thicken from irritation and infiltration of immune cells. Occasionally, the pleural membranes may fold in on themselves, crowding and trapping a piece of lung tissue. The resulting condition, called rounded atelectasis, is more likely to be symptomatic, but nevertheless is fairly benign, although the folding and lung tissue trapping can become larger over time, decreasing lung capacity and leading to shortness of breath. Pleural effusion usually occurs 10 to 15 years after continuous exposure to asbestos, and is rarely fatal.
- *Pleural plaques.* Deposits of asbestos fibers on the pleural membrane can sometimes become calcified, forming asbestos-related pleural plaques. Local areas of pleural thickening resemble pleural plaques and have similar clinical features. Pleural plaques are more common in overweight people, including many smokers. By causing portions of lung tissue to stiffen, they can impair lung function, making it harder to breathe, especially during exertion. In general, though, they are relatively benign and rarely fatal. Pleural plaques occur approximately 10 to 15 years after asbestos exposure.

b. *Human exposure to asbestos.* The proposed rule would provide protection for State and local government employees involved in asbestos-related work in States that do not have OSHA-approved State plans. The activities that would be covered by the proposed rule include the following six categories of work:

- *New construction activities*, which include all projects involving the installation of new asbestos-containing building materials, expected to be predominately asbestos-cement sheet and asbestos-cement pipe.
- *Abatement activities,* which include the removal of asbestos-containing TSI from pipes and boilers and other types of ACM or presumed ACM in buildings.
- *Renovation activities*, which include general building renovation projects. EPA believes that most of these projects will involve the demolition of drywall that has been sealed with asbestos-containing taping materials, and the removal of asbestos-containing roofing felts.

• *Maintenance activities*, which include repair and maintenance of pipes, boilers, furnaces, roofing, drywall, floor and ceiling tiles, lighting, and ventilation, heating, and air conditioning systems.

• *Custodial work*, which includes dusting, sweeping and vacuuming.

• *Brake and clutch repair work*.

The following table summarizes the baseline asbestos exposures for workers performing these activities, as well as the incremental exposure reductions expected to be achieved through this rulemaking. For most activity categories, EPA estimates that worker exposures will decrease by at least one order of magnitude.

EXPOSED POPULATION AND EXPOSURE LEVELS

Activity	Class/category of work	Population exposed in the initial year of the rule (FTEs)	Exposure levels	
			Baseline	Post-rule
New Construction				
A/C pipe installation	NA	8	0.0350	0.0025
A/C sheet installation	NA	100	0.1000	0.0072
Subtotal		108		
Abatement				
Building abatements	I	25	0.1801	0.0104
Boiler/pipe abatements	I	15	0.1801	0.0104
Subtotal		40		
Renovation				
Drywall demolition	II	2,050	0.1130	0.0065
Roofing felt removal	II	89	0.0900	0.0063
Subtotal		2,140		
Maintenance (Class III)				
Repair leaking pipes	III	70	0.1624	0.0014
Repair/maintain furnaces/boilers	III	72	0.1624	0.0094
Repair roofing	III	148	0.0900	0.0063
Repair drywall	III	226	0.1130	0.0002
Repair/replace floor tiles	III	376	0.0240	0.0003
Subtotal		892		
Maintenance (Class IV)				
Repair/replace ceiling tiles	IV	4	0.0714	0.0018
Repair/adjust ventilation/lighting	IV	68	0.0319	0.0008
Repair heating/air conditioning	IV	62	0.0319	0.0008
Other work above drop ceilings	IV	19	0.0492	0.0013
Subtotal		153		
Custodial work	IV	51,752	0.0459	0.0004
Brake and clutch repair				
Low pressure/wet cleaning method	GI	2.032	0.0041	0.0041
Aerosol spray method	GI	1,451	0.0141	0.0041
Wet methods	GI	2,322	0.0122	0.0041
Subtotal		5,805		
Building occupants	NA	4,007,710	0.00008	0.00004
School children	NA	20,781,696	0.00008	0.00004
Totals				
All activities		24,850,296		
All activities, excluding school children.		4,068,600		
All activities, excluding school children and building occupants.		60,890		

See Table 3–3 of the Economic Analysis (Ref. 18).

EPA finds that reducing asbestos worker exposures will also result in reduced exposures for incidentally exposed populations, i.e., individuals who are exposed to asbestos without actually performing work on ACM. These populations are:

• *School children*. The proposed rule covers State and local government employees performing asbestos-related work in States without OSHA-approved State plans. A number of the activities that would be covered by the proposed rule occur in public schools. Thus, one incidentally exposed population that would benefit from the proposed rule would be individuals exposed to asbestos as children while attending public schools in the covered States. EPA expects that these individuals primarily face risks from lung cancer and mesothelioma as adults based on their exposure as children.

• *Building occupants, workers' families, and other individuals who enter buildings covered by the proposed rule*. OSHA has determined that building occupants where asbestos work takes place (e.g., office workers), construction workers performing non-asbestos related work, individuals entering buildings where asbestos work is taking place (e.g., building visitors), and workers' families are at risk of harmful asbestos exposure. NIOSH has determined that workers' families may be at particular risk of developing asbestosis or mesothelioma from the contaminated clothes of asbestos workers in the family. The proposed rule takes steps to reduce asbestos exposure among family members through the use of decontamination units (29 CFR 1926.1101(j)) and the use of protective clothing that remains at the workplace or is disposed of (29 CFR 1926.1101(i)). Except for building occupants, custodial workers and school children, no quantitative estimates are available regarding the number of people that are incidentally exposed or their exposure level. The provisions of the proposed rule would decrease the

potential of harmful exposure for these individuals and consequently decrease the expected incidence of asbestos-related death and disease among family members.

The preceding table also presents the estimated exposure reductions attributable to this rule for school children and other building occupants. EPA believes that the controls that would be imposed by this proposal would reduce the incidental asbestos exposures for these populations by 50%.

c. *Environmental effects of asbestos.* This proposed rule is directed at risks posed by asbestos in the workplace, not in the ambient environment. EPA therefore did not consider the environmental effects of asbestos in proposing this rule.

d. *The benefits of asbestos for various uses and the availability of substitutes for those uses.* This proposed rule would protect workers exposed to asbestos during construction work and during automotive brake and clutch repair work. Some of this work could involve removal of asbestos. This proposed rule would not, however, require any person to remove asbestos from an existing installation. The person responsible for managing existing installations of asbestos must make the decision whether the benefits of retaining or managing that installation exceed the benefits of removing the asbestos and replacing it with another material. As part of that decision, that person will evaluate the cost and availability of substitutes for asbestos. If the person concludes that satisfactory substitutes are not available at an acceptable price, the person is free to decide that the benefits of maintaining the installation exceed the costs of removing it, and on that basis may leave the asbestos in place. EPA therefore did not consider the benefits of asbestos for various uses and the availability of substitutes for those uses in proposing this rule.

e. *Economic consequences of this proposed rule.* This proposed rule would reduce workers' and building occupants' exposure to asbestos, and would thereby reduce the incidence of cancer and other injurious health effects among these populations. The Economic Analysis for this proposed rule (Ref. 18) provides a detailed analysis of the economic benefits associated with the reduced incidence of these diseases. This proposal would also impose new requirements on State and local governments that would require these entities to incur compliance costs. The Economic Analysis also analyzes in detail the incremental costs to State and local governments of complying with the proposed rule. In evaluating these incremental costs, EPA assumes that affected State and local governments are in compliance with requirements of the current WPR, the asbestos National Emission Standard for Hazardous Air Pollutants (40 CFR part 61, subpart M), and the Asbestos-in-Schools Rule (40 CFR part 763, subpart E). These incremental benefits and compliance costs are summarized in this unit.

i. *Economic benefits.* EPA has assessed the economic benefits of the proposed rule and has provided quantitative estimates for some of these benefits.

• *Avoided cases of lung cancer and mesothelioma.* Sixty-five years of exposure reduction under the proposed rule would reduce the number of lung cancer and mesothelioma cases among exposed workers and building occupants by 71.58 cases. A majority of these avoided cases occur among custodial workers, where 58.14 cases (81.2% of the number of cases among exposed workers and building occupants) are avoided. The next largest number of avoided cases, 3.96, occurs among building occupants. The proposed rule would also affect some activities in public schools in States without OSHA-approved State plans. This would result in a reduction in the risk to school children in these States. EPA estimates that 65.3 million students over a 65-year period would benefit from reduced exposure under the proposed rule. EPA estimates that 65 years of exposure reduction under the proposed rule would result in 65.65 avoided cancer cases among individuals exposed as school children.

The Economic Analysis supporting this proposed rule uses a ''value of statistical life'' (VSL) technique to associate a dollar value with these avoided cancer cases. There are several types of economic studies that have attempted to determine the VSL. Of these, most use labor market data to determine workers' trade-offs between wages and risk. In addition, some researchers have used contingent valuation to evaluate willingness to pay to avoid risk. One researcher reviewed a large number of studies, with a range of $2 million to $11 million per statistical life, and recommended use of the entire range. The most recent review of the results of research using these approaches found a range of values from $700,000 to $16.2 million. EPA's Office of Indoor Air selected 26 studies and calculated their mean estimated value of life to be $5.5 million (1994 dollars), with a standard deviation of $3.6 million. The Economic Analysis accompanying this proposed rule uses the Office of Indoor Air estimate, updated to $6.53 million in anticipated 2001 dollars. The Economic Analysis uses the VSL estimate to value avoided risk at the point of exposure reduction, and discounts the value of avoided risk occurring in years beyond 2001 back to 2001, using a discount rate of 3%.

Based on a VSL analysis, this proposed rule would result in $405.45 million in monetized benefits attributable to 137.23 avoided cases of lung cancer and mesothelioma. EPA estimates that the 65-year present monetary value of reducing cancer incidence among exposed workers and building occupants under the proposed rule is $248.09 million. Avoided cancer cases among custodial workers represent the largest share of the total, with a 65-year present monetary value of $202.34 million (81.6% of the total). In addition, EPA estimates the present monetary value of the avoided cancer risk among individuals exposed as school children to be $157.36 million.

• *Avoided cases of asbestosis.* EPA estimates that approximately five cases of asbestosis would be avoided under the proposed rule. EPA does not include this estimate among the quantified benefits of the proposed rule, however, because of the uncertainties about applying the available models to activities involving the relatively low doses to which construction, custodial, and brake and clutch repair workers are exposed. In addition, EPA has determined that many individuals who develop asbestosis also develop lung cancer, so presenting estimates of the number of avoided asbestosis cases in conjunction with estimates of the number of avoided lung cancer cases may result in double-counting (i.e., some of the asbestosis cases may also be cases of lung cancer). EPA considers this estimate of avoided asbestosis cases to be only an indication of the potential magnitude of the number of avoided asbestosis cases.

• *Avoided productivity losses associated with non-fatal diseases.* In addition to lung cancer and mesothelioma, asbestos exposure is associated with numerous other diseases such as pleural plaques and pleural effusion. These conditions are caused by the inhalation of asbestos fibers that eventually become lodged in the lungs and airways of exposed individuals. Reducing asbestos exposure levels, along with the use of protective equipment such as respirators, would reduce the amount of asbestos fibers inhaled by exposed individuals, reducing the risk of developing these conditions. However, EPA was not able to quantify the reduction in these cases.

Although these conditions are not fatal, workers who develop them may need to reduce their work time or retire early, resulting in lost productivity. Lost productivity during the period of illness represents a cost associated with the disease. Exposure models that predict the number of these diseases and conditions are not available, making it impossible to quantify the number of cases and the resulting loss in productivity. Nonetheless, a reduction in asbestos exposure would decrease the incidence of non-fatal asbestos-related disease and thus productivity losses associated with these conditions. The reduced incidence of non-fatal diseases would in turn reduce the number of workers who are out of work due to illness. Thus the proposed rule would reduce the amount of lost productivity due to illness, but by an unknown amount.

• *Avoided medical costs associated with non-fatal diseases.* Medical costs are also incurred by individuals who experience non-fatal asbestos-related diseases (pleural plaques and pleural effusion). Estimates of the costs of treating these illnesses, as well as models that predict their incidence, are not available. A reduction in asbestos exposure will reduce the incidence of asbestos-related disease and consequently the medical costs associated with treating those diseases. Reduced exposures should also decrease the severity of cases of illness not prevented by the proposed rule. Less severe cases will require less medical care and lower medical care costs. Thus this proposal would also reduce medical costs of non-fatal asbestos-related diseases, but by an unknown amount.

• *Decreased risk for exposed individuals not working with asbestos, including workers' families.* Occupants of buildings where asbestos work takes place (e.g., office workers), construction workers performing non-asbestos related work, individuals entering buildings where asbestos work is taking place (e.g., building visitors), and workers' families may be incidentally exposed to asbestos. NIOSH has determined that workers' families may be at particular risk of developing asbestosis or mesothelioma from the contaminated clothes of asbestos workers in the family. The proposed rule takes steps to reduce asbestos exposure among family members through the use of decontamination units and the use of protective clothing that remains at the workplace or is disposed of.

Except for building occupants, custodial workers and school children, no quantitative estimates are available regarding the number of people that are incidentally exposed or their exposure level. The provisions of the proposed rule would decrease the potential of harmful exposure for these individuals and consequently decrease the expected incidence of asbestos-related death and disease among family members.

ii. *Compliance costs.* EPA estimates that the proposed rule would impose first-year compliance costs of $63.34 million. Annually thereafter, the real compliance costs are assumed to decline due to attrition of buildings from the stock of those that contain asbestos (i.e., due to abatements or demolitions). Over the 65-year time frame of exposure reduction, the present value of compliance costs is estimated to be $1.12 billion. The following table provides a summary of the estimated compliance costs (both first-year costs and the 65-year present value of costs) by paragraph of the OSHA Standard, and by the individual requirements for those paragraphs. In the construction sector, the ''Methods of compliance'' paragraph of the OSHA Construction Standard (29 CFR 1926.1101(g)) accounts for the greatest share of compliance costs. This paragraph results in estimated costs of $35.84 million in the first year and $636.16 million over the 65-year period, which represent 56.6% of the total costs of the proposed rule. Within this paragraph, the wet methods requirement accounts for the greatest share of compliance costs. The estimated costs of the wet methods requirement are $21.65 million in the first year and $384.35 million over the 65-year period, representing 34.2% of the total costs of the proposed rule.

SUMMARY OF COMPLIANCE COSTS BY PARAGRAPH AND REQUIREMENT

Requirement	First-year compliance Cost ($millions)	65-year present value of compliance costs ($millions)	Percent of total costs
CONSTRUCTION ACTIVITIES:			
29 CFR 1926.1101(d)—Multi-employer worksites			
Second employer inspections	$0.39	$6.91	0.61%
Paragraph subtotal	$0.39	$6.91	0.61%
29 CFR 1926.1101(e)—Regulated areas			
Signs and tape	$3.10	$55.02	4.89%
Paragraph subtotal	$3.10	$55.02	4.89%
29 CFR 1926.1101(f)—Exposure assessment and monitoring			
Initial exposure assessment	$0.61	$10.75	0.96%
Paragraph subtotal	$0.61	$10.75	0.96%
29 CFR 19261101(g)—Methods of compliance			
HEPA vacuums	$10.31	$183.09	16.28%
Wet methods	$21.65	$384.35	34.18%
Leak-tight containers	$0.37	$6.61	0.59%
Local exhaust ventilation	$0.60	$10.58	0.94%
Impermeable drop cloths	$1.80	$31.96	2.84%
Critical barriers	$0.06	$1.00	0.09%
Plastic around HVAC systems	$0.01	$0.25	0.02%
Negative pressure enclosures	$0.00	$0.00	0.00%
Glove bag systems	$1.03	$18.32	1.63%
Paragraph subtotal	$35.84	$636.16	56.58%
29 CFR 1926.1101(h)—Respiratory protection			
Respirators	$3.63	$64.42	5.73%
Develop respirator programs	$0.76	$13.52	1.20%
Fit testing for respirators	$0.03	$0.53	0.05%
Paragraph subtotal	$4.42	$78.46	6.98%
29 CFR 1926.1101(i)—Protective clothing			

SUMMARY OF COMPLIANCE COSTS BY PARAGRAPH AND REQUIREMENT—Continued

Requirement	First-year compliance Cost ($millions)	65-year present value of compliance costs ($millions)	Percent of total costs
Provide clothing	$0.00	$0.00	0.00%
Inspect clothing	$0.05	$0.80	0.07%
Paragraph subtotal	$0.05	$0.80	0.07%
29 CFR 1926.1101(j)—Hygiene facilities and practices			
Paragraph subtotal	$0.00	$0.00	0.00%
29 CFR 1926.1101(k)—Communication of hazards			
Notify employees	$1.46	$25.99	2.31%
Notify other employees/employers	$1.47	$26.01	2.31%
Training	$2.97	$52.71	4.69%
Paragraph subtotal	$5.90	$104.71	9.31%
29 CFR 1926.1101(l)—Housekeeping			
Paragraph subtotal	$0.00	$0.00	0.00%
29 CFR 1926.1101(m)—Medical surveillance			
Medical exams	$0.75	$13.27	1.18%
Paragraph subtotal	$0.75	$13.27	1.18%
29 CFR 1926.1101(n)—Recordkeeping			
EPA access to records	$2.37	$42.14	3.75%
Employee access to records	$0.26	$4.67	0.41%
Paragraph subtotal	$2.64	$46.81	4.16%
29 CFR 1926.1101(o)—Competent person			
Training	$5.96	$105.76	9.41%
Inspection by competent person	$0.01	$0.22	0.02%
Paragraph subtotal	$5.97	$105.98	9.42%
TOTAL FOR CONSTRUCTION	$59.65	$1,015.68	94.17%
GENERAL INDUSTRY BRAKE AND CLUTCH REPAIR:			
29 CFR 1910.1001(d)—Exposure monitoring			
Establish exemption	$0.40	$7.16	0.64%
Paragraph subtotal	$0.40	$7.16	0.64%
29 CFR 1910.1001(f)—Work practices and controls			
Adopt low pressure/wet cleaning method	$1.24	$21.99	1.96%
Paragraph subtotal	$1.24	$21.99	1.96%
29 CFR 1910.1001(j)—Hazard communication			
Notify employees	$1.72	$30.54	2.72%
Paragraph subtotal	$1.72	$30.54	2.72%
29 CFR 1910.1001(k)—Housekeeping			
Leak-tight containers	$0.32	$5.65	0.50%
Paragraph subtotal	$0.32	$5.65	0.50%
29 CFR 1910.1001(m)—Recordkeeping			
EPA access to records	$0.01	$0.18	0.02%
Employees access to records	$0.001	$0.022	0.00
Paragraph subtotal	$0.01	$0.20	0.02%
TOTAL FOR GENERAL INDUSTRY	$3.69	$108.74	5.83%
GRAND TOTALS	$63.34	$1,124.42	100.00%

See Table 4–11 of the Economic Analysis (Ref. 18).

In the brake and clutch repair sector, compliance costs are highest for the ''Communication of hazards to employees'' paragraph of the OSHA General Industry Standard (29 CFR 1910.1001(j)), which includes one requirement applicable to brake and clutch repair work, namely to notify employees. This paragraph results in estimated compliance costs of $1.72 million in the first year and $30.54 million over the 65-year time period. This represents 2.72% of the total costs of the proposed rule. The ''Methods of compliance'' paragraph of the OSHA General Industry Standard (29 CFR 1910.1001(f)) contains one requirement applicable to brake and clutch work, namely to adopt the low pressure/wet cleaning method. This requirement accounts for $1.24 million in first year compliance costs and $21.99 million over the 65-year period, representing 1.96% of the total costs of the proposed rule.

iii. *Other effects.* TSCA section 6(c)(1)(D) also requires EPA, when considering the economic consequences of the rule, to take into account effects on the national economy, small business, technological innovation, the environment, and public health. The effects of this rule on the national economy are addressed in the Economic Analysis (Ref. 18) and Unit IV. As this rule affects only State and local government employers, there are no anticipated impacts on small businesses. The impacts on small government entities are evaluated in the Economic Analysis (Ref. 18) and Unit IV. With respect to technological innovation, EPA does not believe that this rule will be unduly restrictive, since the underlying OSHA Construction and General Industry Standards allow sufficient flexibility for the development of new technology for asbestos-related work. In addition, this rule's impacts on technology issues in general and the use of technical standards are discussed in Unit IV. As described in Unit II.B.1.c., EPA did not consider environmental effects in this rulemaking as it is directed towards asbestos exposures in the workplace. Finally, the public health effects of this rule are discussed in Units II.B.1.a. and b.

f. *Social and other qualitative effects.* TSCA section 2 requires EPA, when taking any action under TSCA, to consider the social as well as environmental and economic impacts of

the action. EPA considers social and other non-economic beneficial impacts when determining whether a particular level of risk is ''unreasonable'' and requires mitigation under TSCA section 6. In evaluating the reasonableness of the risk posed by occupational asbestos exposures to State and local government workers, EPA considered the following social and other qualitative effects of the proposed rule.

• *Equity*. One important social consequence of the proposal would be the elimination of inequitable legal protections for classes of persons based solely upon the identity and location of their employers. Currently, private sector building maintenance and custodial workers enjoy comprehensive protection from excessive asbestos exposures under the OSHA Construction Standard. State and local government building maintenance and custodial workers in the 23 States with OSHA-approved State Plans already enjoy this same level of protection, since the protection afforded by such plans must be as effective as that provided to workers in the private sector. However, asbestos workers engaged in the same activities in the remaining 27 States are currently unprotected. There is an obvious inequity in offering different levels of protection to employees who are performing the same tasks, or even working side-by-side in a common job space. These inequitable conditions are unreasonable, and the fact that 23 States have already provided equivalent protections for their State and local government employees is evidence of the strong general societal interest in providing State and local government workers with a level of protection similar to that enjoyed by their counterparts in the private sector.

• *Reduced implementation burdens*. Having a uniform set of standards for construction and brake and clutch repair employees would have the added social benefit of easing implementation burdens. The OSHA standards are highly detailed and complex, but many excellent training, guidance, and reference resources are available. See http://www.osha-slc.gov/SLTC/asbestos/. Yet, because of the lack of consistency between the WPR and the OSHA standards, State and local government workers and their employers in 27 States cannot take advantage of these resources. The burden on the regulated community of essentially re-creating these resources to reflect the minor differences between the WPR and the OSHA standards exists only because of the difficulty in amending the WPR to keep pace with changes in the OSHA standards. Adoption of the proposal would also avoid potential confusion and mistakes by allowing all workers and their supervisors to learn a single standard and know the requirements that apply to their work without additional training if such workers or supervisors move from the public sector to the private sector or vice-versa.

• *Environmental justice*. Many of the employees who would benefit from the protections of this proposed rule are members of minority and low-income populations. In testimony before OSHA in 1991, the Service Employees International Union (SEIU) described building maintenance workers as being among the ''least protected members in our society—largely comprised of ethnic minority groups, new immigrants to our country, what economists refer to as the working poor, many forced to work permanent part-time...'' (Ref. 20). As discussed in the Economic Analysis, some minorities are disproportionally represented in certain occupations that would be regulated by this proposal. In addition, EPA's analysis has determined that the median weekly income of workers in most of the occupations that would be covered by this rule is below the median income of all workers nationwide. No segment of the population, regardless of race, color, national origin, or income, should, as a result of EPA's policies, programs, or activities, be more affected by adverse health effects, and all people should live and work in clean, healthy, and sustainable environments.

• *Quality of life*. The health effects of asbestos are discussed in detail in Unit II.B.1.a. Two forms of cancer, carcinoma of the lung and malignant mesothelioma, can result from inhaling asbestos fibers. Another asbestos-related disease, asbestosis, is a chronic and progressive lung disease causing extensive fibrosis of the lungs and, in extreme cases, respiratory failure and death. Exposure to asbestos can cause other respiratory diseases, that, while non-fatal, can significantly impair lung function, reduce lung volume, and cause lung stiffness, making breathing difficult and very painful. Pleural effusion impairs lung function by causing an accumulation of fluid in the lung membranes; and pleural plaques cause a stiffening of the lung tissue that particularly affects breathing during exertion. All these diseases cause physical and psychological pain for the diseased person and psychological pain for friends and family. Reducing the incidence of asbestos-related diseases improves the quality of life for both workers and workers' friends and families by mitigating these negative consequences. The legislative history of TSCA shows that quality of life was an important Congressional concern as the provisions of TSCA were debated and enacted.

• *Children's health*. EPA's analysis indicates that the proposed rule would significantly reduce the incidence of cancer among individuals with childhood asbestos exposures from school buildings. EPA estimates that 65.65 such cases would be avoided under this rule as a result of exposure reductions over a period of 65 years. Children are more vulnerable than adults to the risks of asbestos for a number of physiological reasons. Children have less well-developed defense mechanisms, they breathe more rapidly, and their metabolic rates are different. The smaller respiratory systems of children may be less likely to clear particles than adult respiratory systems. EPA places a high priority on identifying and assessing environmental health risks and safety risks that may disproportionately affect children. By reducing ambient asbestos concentrations in school buildings, this rule would help protect children from the disproportionate asbestos exposure risk they face.

g. *Finding of unreasonable risk*. Therefore, having considered the factors discussed in Unit II.B.1., including the serious and irreversible health effects of exposure to asbestos; the present exposure levels among State and local government employees; the economic benefits of the proposed rule, including avoided cases of lung cancer and mesothelioma; the costs to State and local governments of complying with the proposed rule; and the beneficial social and other qualitative consequences of the proposal, especially that of equity; EPA finds under TSCA section 6 that the current exposure to asbestos among unprotected State and local government employees during use or disposal in construction work, custodial work, and brake and clutch repair work presents an unreasonable risk of injury to human health, and that rulemaking is necessary to provide adequate protection against that risk.

2. *Selection of least burdensome requirements*. Under TSCA section 6(a), once EPA has determined that a chemical substance or mixture presents an unreasonable risk to health or the environment, EPA must use the least burdensome requirements to protect against that risk. This standard requires EPA to consider the alternative regulatory options presented in TSCA section 6(a), and to choose the least burdensome option. The options set out

in TSCA section 6(a), and EPA's analysis of those options, follows.

a. *A requirement prohibiting or limiting the manufacture, processing, or distribution in commerce of asbestos (TSCA section 6(a)(1))*. EPA did not select this option because such a requirement would only protect workers from the risks of future uses of asbestos. This proposal would protect workers from the risks posed by both future asbestos uses and existing installations of asbestos, which have already been manufactured, processed, or distributed in commerce and are now in use. Moreover, prohibiting or limiting the manufacture, processing, or distribution in commerce of particular uses of asbestos would be an unduly burdensome way to protect State and local government construction, custodial and brake and clutch repair workers from the risks of exposure to asbestos. There may still be appropriate uses for asbestos and products containing asbestos. It is not necessary to burden the economy by prohibiting or limiting the manufacture, processing, or distribution in commerce of asbestos in order to protect a small segment of the population from exposure to asbestos from such products.

b. *A requirement prohibiting or limiting the manufacture, processing, or distribution in commerce of asbestos for a particular use or for a particular use in excess of a specified concentration (TSCA section 6(a)(2))*. As with the option under TSCA section 6(a)(1), EPA did not select this option because such a requirement would only protect workers from the risks of future uses of asbestos. This proposal would protect workers from the risks posed by both future asbestos uses and existing installations of asbestos, which have already been manufactured, processed, or distributed in commerce and are now in use. Moreover, prohibiting or limiting the manufacture, processing, or distribution in commerce of particular uses of asbestos would be an unduly burdensome way to protect a small segment of the population from exposure to asbestos from such uses.

c. *A requirement that asbestos and asbestos-containing material be marked or accompanied by a warning and instructions for its use, distribution in commerce, and/or disposal (TSCA section 6(a)(3))*. This proposal would require, in effect, that employers ensure their employees comprehend warning signs, labels, and instructions posted where asbestos is present, using, if necessary, such techniques as foreign languages, pictographs, graphics, and awareness training. Markings, warnings, or instructions by themselves, however, would not adequately reduce State and local government workers' exposure to asbestos. These workers' exposure to asbestos during construction work or brake and clutch repair and service work is dependent on the industrial hygiene practices in the workplace, which are largely in the control of the employer. Therefore, this rule would require employers to provide additional protections to reduce their employees' exposure to asbestos.

d. *A requirement controlling manufacture and processing of asbestos and requiring manufacturers and processors to keep records of their manufacturing or processing processes and monitor those processes (TSCA section 6(a)(4))*. EPA did not select this option because such a requirement would only protect workers from the risks of future uses of asbestos. This proposal would protect workers from the risks posed by both future asbestos uses and existing installations of asbestos, which have already been manufactured, processed, or distributed in commerce and are now in use. Moreover, controlling the manufacture or processing of particular uses of asbestos would be an unduly burdensome way to protect a small segment of the population from exposure to asbestos from such uses.

e. *A requirement prohibiting or otherwise regulating any manner or method of commercial use of asbestos (TSCA section 6(a)(5))*. The asbestos present in buildings and in vehicles was sold as commercial products. Therefore, construction work or brake and clutch repair is commercial activity subject to this section. This proposed rule would regulate the manner and method of use of these commercial products by establishing worker protection, training, and hazard communication requirements for State and local government employers whose employees install and maintain these products.

f. *A requirement prohibiting or otherwise regulating any manner or method of disposal of asbestos by anyone who manufactures, processes, uses, or disposes of asbestos for commercial purposes (TSCA section 6(a)(6))*. The removal of asbestos is disposal for commercial purposes subject to this section. Management of asbestos in place is use for commercial purposes. This proposed rule would regulate the manner and method of disposal of these commercial products by establishing worker protection, training, and hazard communication requirements for State and local government employers whose employees remove these products.

g. *A requirement directing manufacturers or processors of asbestos to notify distributors of asbestos, and others in possession of or exposed to asbestos, of unreasonable risks of injury from asbestos, to give public notice of those risks, and to replace or repurchase asbestos (TSCA section 6(a)(7))*. EPA did not select this option for this proposed rule. As with labeling and marking requirements, notifications by themselves would not adequately reduce State and local government workers' exposure to asbestos. These workers' exposure to asbestos during construction work or brake and clutch repair and service work is dependent on the industrial hygiene practices in the workplace, which are largely in the control of the employer. This proposed rule would require employers to use appropriate engineering controls and work practices, and provide their employees with personal protection equipment to reduce their employees' exposure to asbestos. A requirement for the manufacturers to replace or repurchase asbestos-containing building products would also not protect the State and local government workers who must remove installed building products.

h. *Conclusion*. Therefore, having considered the regulatory options in TSCA section 6(a)(1) through 6(a)(7), EPA finds that the least burdensome option for protecting State and local government employees is a regulation based on TSCA sections 6(a)(3), 6(a)(5), and 6(a)(6). This determination is specific to this rulemaking, and EPA may, if warranted, take additional actions to address asbestos risks in the future. If any commenter believes that there is a feasible, less burdensome alternative to the action proposed here that would sufficiently mitigate the unreasonable risk that is the subject of this rulemaking and outweigh the Agency's strong interest in consistency and equity, the commenter should identify this option in the comments and explain how it would sufficiently mitigate the unreasonable risk in a less burdensome manner than the option proposed by the Agency.

3. *Consideration of other Federal laws*. TSCA sections 6(c) and 9 require EPA to consider whether other Federal statutes and regulations are available to address a risk that would otherwise merit regulatory action under TSCA section 6(a). EPA's consideration of other relevant Federal authorities follows.

a. *Actions under other Federal laws administered by EPA*. Under TSCA section 6(c), EPA may not promulgate a rule under TSCA section 6(a) if EPA

determines that a risk of injury to health or the environment could be eliminated or reduced to a sufficient extent by actions taken under another statute administered by EPA, unless EPA finds it is in the public interest to protect against the risk by action under TSCA. (See also TSCA section 9(b).) EPA has analyzed other statutes administered by EPA and concludes that none provide sufficient authority to eliminate or reduce the risks to State and local government workers from asbestos.

• *Clean Air Act (CAA).* On April 6, 1973, EPA used the authority of the CAA to list asbestos as a hazardous air pollutant, establish a ''no visible emissions'' standard for manufacturers, and ban the use of spray-applied asbestos-containing material as insulation in buildings (Ref. 21). EPA amended this regulation on October 12, 1975, to ban asbestos-containing pipe lagging (Ref. 22), and on June 19, 1978, extended the ban to all uses of sprayed-on asbestos (Ref. 23). Under the CAA, EPA also regulates operations involving the demolition or renovation of buildings containing friable asbestos and the disposal of wastes generated by such operations. However, the CAA does not apply directly to the protection of workers exposed to indoor air. Consequently any possible additional use of that statute could leave many workers inadequately protected from asbestos in indoor air.

• *Resource Conservation and Recovery Act (RCRA).* Under RCRA, 42 U.S.C. 6901–6992k, EPA could list asbestos as a hazardous waste and subject asbestos waste to general requirements designed to protect human health. However, RCRA jurisdiction is limited to those materials that the Agency has determined are wastes. Many of the activities covered by this rule do not involve handling of asbestos as waste. For example, this proposed rule would adopt by cross-reference standards for repair, maintenance and installation of asbestos-containing materials referenced at 29 CFR 1926.1101(a)(3) and (4). While RCRA authority could extend to reduction of worker exposure to the extent activities covered by this proposed rule involve waste handling, it could not cover all the risks these activities pose to workers. Thus, RCRA regulations could not reduce risks to a sufficient extent.

b. *Actions under Federal laws not administered by EPA.* Under TSCA section 9(a), EPA is required to review other Federal authorities not administered by EPA to determine whether action under those authorities may prevent or reduce a given risk. The only statute not administered by EPA that addresses risks from workplace exposure to asbestos is the OSH Act. However, the OSH Act does not apply to State and local government employees. The OSH Act does provide that a State can adopt an asbestos standard as part of its own State worker protection plan, subject to approval by the Secretary of Labor. Twenty-three States have implemented State plans. Twenty-seven States do not have OSHA-approved State plans. EPA has therefore determined that there is no statute administered by another Federal agency that can prevent or reduce the risk of asbestos exposure presented to State and local government employees not covered by OSHA-approved State plans during asbestos-related construction and brake and clutch repair work. EPA's analysis of this issue is discussed in the **Federal Register** of April 25, 1986 (Ref. 2).

c. *Consultation and coordination with other Federal agencies.* TSCA section 9(d) directs that in implementing TSCA, EPA consult and coordinate with other Federal agencies for the purpose of achieving the maximum enforcement of TSCA while imposing the least burdens of duplicative requirements on those who must comply with those requirements. As a result of the close working relationship with OSHA, EPA finds that the most effective way of eliminating duplication and overlap and ensuring consistency between the WPR and the OSHA Asbestos Standards is by cross-referencing the OSHA Asbestos Standards set out at 29 CFR 1910.1001 and 29 CFR 1926.1101.

The goals both of Congress and of the Administration would be advanced by ensuring that the WPR and the OSHA Asbestos Standards offer consistent protections and offer them at the same time to both public and private sector workers. The legislative history of TSCA reflects Congress' concern that some of the greatest risks from exposure to toxic chemicals occur in the workplace. Congress clearly intended that TSCA be available to address those risks, but, at the same time, acknowledged OSHA's expertise in establishing workplace standards. TSCA section 9(d) reflects Congress' desire that EPA and OSHA work together in identifying and protecting against risks to workers from toxic chemicals. Therefore, EPA has, since 1985, exercised its authority under TSCA section 6 to fill the gap in coverage in the OSH Act by protecting State and local government employees from the risks of asbestos, and has done so in a way that imposes the least burden of duplicative requirements by maintaining consistency where possible between the WPR and the OSHA Asbestos Standards.

While it has always been EPA policy to maintain consistency between the WPR and the OSHA Asbestos Standards, prior to this proposal EPA has implemented this policy by reprinting those requirements in full at 40 CFR part 763, subpart G. However, OSHA has frequently revised its standard (the CFR lists thirteen rules revising the Asbestos Standard since 1986). EPA must wait until the OSHA revisions are finalized before initiating conforming changes to the WPR. By the time EPA's conforming changes take effect, OSHA has issued new revisions to the Asbestos Standard. The result is that the WPR has, in fact, rarely been completely consistent with the OSHA Standards, and, as more protective and less burdensome standards have gone into effect for the private sector, protections for State and local government employees have lagged behind. If the WPR cross-referenced the OSHA Asbestos Standards instead of reprinting them in full, revisions to the OSHA standard would take effect at the same time in the WPR, and public and private sector employees would be protected equally against the risks of asbestos.

d. *Conclusion.* Therefore, having considered whether other Federal statutes and regulations are available to address the risks from exposure to asbestos among State and local government employees during use or disposal in construction work and in brake and clutch repair work, EPA concludes that rulemaking under TSCA section 6 is necessary to provide adequate protection against that risk to State and local government employees who are not otherwise covered under an OSHA-approved State plan that is as effective as the OSHA regulations, or a State asbestos worker protection plan exempted from the requirements of the WPR by EPA under 40 CFR 763.123.

4. *Analysis of regulatory alternatives.* EPA considered and analyzed four regulatory alternatives or options in developing this proposed rule:

• *Option A.* Both the PEL and the scope of the proposed rule remain unchanged (i.e., no action).

• *Option B.* The PEL is lowered from 0.2 f/cc to 0.1 f/cc, but the scope of the proposed rule remains the same.

• *Option C.* The PEL remains the same, but the scope of the proposed rule is expanded to include new construction, maintenance, renovation, custodial, and brake and clutch repair activities.

• *The proposed rule.* The PEL is lowered from 0.2 f/cc to 0.1 f/cc, and the

scope of the proposed rule is expanded to include new construction, maintenance, renovation, custodial, and brake and clutch repair activities.

SUMMARY OF REGULATORY OPTIONS

Option	PEL	Scope
A (no action)	0.2 f/cc	Abatement activities only
B	0.1 f/cc	Abatement activities only
C	0.2 f/cc	New construction, abatement, maintenance, renovation, custodial, and brake and clutch repair activities
Proposed rule	0.1 f/cc	New construction, abatement, maintenance, renovation, custodial, and brake and clutch repair activities

See Table 5–1 of the Economic Analysis (Ref. 18). For each of the four options, the State-level coverage would remain the same: The rule (or option) would continue to cover State and local government employees in States without OSHA-approved State plans.

a. *Quantified costs and benefits.* EPA estimated the costs and benefits for Options A, B, C, and the proposed rule. In estimating the benefits for each option, EPA estimated the number of avoided cancer cases among exposed workers, building occupants, and school children, associated with 65 years of reduced asbestos exposure. EPA also placed a monetary value on the avoided risk associated with the 65 years of reduced exposure and then calculated the present monetary value of the avoided cancer risk. EPA estimated compliance costs by calculating the first-year compliance cost of each option. This estimate was extrapolated over 65 years of exposure reduction, assuming building attrition would cause the costs of abatement, renovation, maintenance, and custodial activities to decline over time, while administrative, new construction, and brake and clutch repair activity costs would not be affected by building attrition.

• *Option A—PEL unchanged, scope unchanged (baseline).* Under Option A, the current version of the WPR (40 CFR part 763, subpart G) would remain in effect. The PEL would remain unchanged at 0.2 f/cc and the proposed rule would apply only to abatement activities. This option would result in no incremental costs or benefits.

• *Option B—reduced PEL, scope unchanged.* Under Option B, the PEL would be reduced from 0.2 f/cc to 0.1 f./cc, but the scope of the proposed rule would remain unchanged. Thus, compared to the current rule, Option B would reduce exposure to asbestos among abatement workers and incidentally exposed populations in affected buildings, but would not apply to additional activities. EPA estimates that, over 65 years, Option B would reduce asbestos exposure to a total of 201,275 people, of whom 65 would be exposed workers and the remainder would be building occupants and school children. EPA estimates that this exposure reduction would, over 65 years, prevent 0.36 cases of asbestos-related cancer among this total population, which translates into an estimated present value of $1.07 million. Excluding building occupants and school children, Option B results in 0.17 avoided cancer cases associated with 65 years of exposure reduction, which has an estimated present value of $0.59 million. The estimated 65-year present value of compliance costs for Option B is $24.00 million.

• *Option C—PEL unchanged, expanded scope.* Option C would leave the PEL unchanged from the current WPR at 0.2 f/cc, but would expand the scope of the WPR to include new construction, maintenance, renovation, custodial, and brake and clutch repair activities, in addition to the abatement activities covered by the current WPR. Compared to the current rule, Option C would provide an expanded scope of coverage, but would not increase the level of protection (i.e., the PEL would remain 0.2 f/cc). EPA estimates that, over 65 years, Option C would reduce asbestos exposure for a total population of 71.9 million individuals, 102,700 of whom would be directly exposed workers and the remainder of whom would be incidentally exposed building occupants and school children. EPA estimates that 65 years of exposure reduction would lead to 26.85 avoided cases of asbestos-related cancer among this total population, with an estimated present value of $83.46 million. Among exposed workers, the reduction in cancer incidence is estimated to be 17.2 cases associated with 65 years of exposure reduction, which has an estimated present value of $59.48 million. The estimated 65-year present value of total compliance costs for Option C is $939.53 million.

• *The proposed rule—reduced PEL, expanded scope.* The proposed rule would lower the PEL from 0.2 f/cc to 0.1 f/cc and expand the scope of the asbestos WPR to include new construction, maintenance, renovation, custodial, and brake and clutch repair activities in addition to the abatement activities covered by the current WPR. The proposed rule would provide protection to a total population of 71.9 million over 65 years of exposure reduction, 102,765 of whom are exposed workers. Furthermore, the proposed rule would reduce the number of asbestos-related cancers associated with 65 years of exposure by 137.23 cases, valued at an estimated present value of $405.45 million. Excluding building occupants and school children (i.e., focusing on just exposed workers), the proposed rule results in 67.63 avoided cancer cases associated with 65 years of exposure reduction, with an estimated present value of $234.32 million. The estimated 65-year present value of compliance costs is $1,124.42 million.

b. *Comparison of quantified costs and benefits.* For each option and the proposed rule, EPA estimated the costs, benefits, and net benefits for all populations (exposed workers, building occupants, and school children) and for exposed workers only. The cost, benefit, and net benefit estimates for exposed workers are singled out because the rule is directed at reducing the exposure of this population and because building occupants and school children are only incidentally exposed. EPA compared the four options using six quantitative criteria.

• *Protectiveness.* The proposed rule and Option B would set the PEL at 0.1 f/cc, while Options A and C would set the PEL at 0.2 f/cc. Thus, the proposed rule and Option B are both more protective than Options A and C.

• *Scope.* The proposed rule and Option C would both provide

incremental protection to significantly larger populations than Options A and B. Both the proposed rule and Option C would provide incremental protection to a population of 71.9 million, of which slightly less than 103,000 are exposed workers. Option B would provide additional protection to a population of only 201,275 (0.28% of the population protected by the proposed rule), of which 65 are exposed workers (0.06% of the exposed workers protected by the proposed rule). Option A, which would not change the current asbestos WPR, would not provide additional protection to any populations.

• *Estimated benefits*. The proposed rule would result in significantly more avoided cancer cases and, consequently, a significantly larger level of monetized benefits when compared with the other regulatory options. The proposed rule would reduce the incidence of asbestos-related cancers associated with 65 years of exposure reduction by 137 cases, which would result in a monetary benefit of $405 million. Among exposed workers, the proposed rule would reduce the incidence of asbestos-related cancer associated with 65 years of exposure reduction by 68 cases, valued at $234 million. Option C would reduce the asbestos-related cancer incidence by only 27 cases (19.6% of the proposed rule's total), valued at $83 million (20.6% of the proposed rule's total). Among exposed workers, Option C would reduce the incidence of asbestos-related cancer by 17 cases (25.4% of the proposed rule's total), valued at $59 million (25.4% of the proposed rule's total). Option B would result in approximately $1.0 million in monetized benefits while Option A would result in no incremental avoided cases and thus no incremental monetized benefits.

• *Estimated compliance costs*. Option A is the least costly of the four options, resulting in no ($0) incremental compliance costs because no incremental action would be required. The proposed rule is the most costly option, resulting in a 65-year present value compliance cost of $1.1 billion. For Option B, the 65-year present value of compliance costs is $24.00 million (2.1% of the proposed rule's total), while for Option C, the 65-year present value of compliance costs is $939.53 million (83.6% of the proposed rule's total).

• *Efficiency*. Option A would result in the largest monetized net benefit (monetized benefits minus monetized costs), which is $0. Each of the other options would result in negative net benefits, or a net cost. The proposed rule would result in the second largest net cost, with costs exceeding estimated benefits by $719 million. The estimated costs for Option C exceed its estimated benefits by $856 million (19.1% larger than the net cost for the proposed rule), and the estimated costs for Option B exceed its estimated benefits by $22.93 million (3.2% of the proposed rule's total).

• *Ratio of estimated compliance costs to estimated benefits*. . The following table presents the cost-benefit ratio for each option. The cost-benefit ratio, measured as the ratio of compliance costs to monetized benefits, measures the cost that would be incurred for each dollar of benefits. The proposed rule has the lowest (i.e., most preferable) cost benefit ratio for both all exposed populations (2.77) and exposed workers alone (4.80). Option C has a cost-benefit ratio of 11.26 for all exposed populations (4.07 times the cost-benefit ratio for the proposed rule) and 15.80 for exposed workers alone (3.29 times the cost-benefit ratio for the proposed rule). Option B has a cost-benefit ratio of 22.43 for all exposed populations (8.10 times the cost-benefit ratio for the proposed rule) and 40.68 for exposed workers alone (8.48 times the cost-benefit ratio for the proposed rule). Cost-benefit ratios could not be calculated for Option A because costs and monetized benefits are both $0.

SUMMARY OF ESTIMATED COSTS, BENEFITS, AND NET BENEFITS FOR ALTERNATIVE REGULATORY OPTIONS

Option/section	PEL (f/cc)	Incremental population protected	Estimated benefits		Present value of compliance costs ($millions)	Estimated net benefit ($millions)	Cost-benefit ratio
			Avoided cancer cases	Present monetary value ($millions)			
Proposed Rule—PEL Reduced, expanded scope:							
All populations	0.1	71,887,159	137.23	$405.45	$1,124.42	($718.97)	2.77
Exposed workers	0.1	102,765	67.63	$234.32	$1,124.42	($890.09)	4.80
Option A (baseline)—PEL unchanged, scope unchanged:							
All populations	0.2	0	0.00	$0.00	$0.00	$0.00	.....
Exposed workers	0.2	0	0.00	$0.00	$0.00	$0.00	.....
Option B—PEL Reduced, scope unchanged:							
All populations	0.1	201,275	0.36	$1.07	$24.00	($22.93)	22.43
Exposed workers	0.1	65	0.17	$0.59	$24.00	($23.41)	40.68
Option C—PEL unchanged, expanded scope:							
All populations	0.2	71,886,942	26.85	$83.46	$939.53	($856.07)	11.26
Exposed workers	0.2	102,548	17.20	$59.48	$939.53	($880.05)	15.80

See Table 5–8 of the Economic Analysis (Ref. 18).

Based on these comparisons, EPA has selected the proposed rule as the preferred option for the following reasons:

• The proposed rule would be the most protective (i.e., would result in the lowest PEL).

• The proposed rule would provide incremental protection to the largest population.

• The proposed rule would result in the largest benefits.

• The proposed rule would offer the lowest ratio of costs to benefits.

The proposed rule, however, would also be the most costly and would result in the second largest net cost among the four options. Nevertheless, EPA has determined that the increased cost and net cost are justified by the additional benefits and protection offered by the proposed rule. In moving from Option C to the proposed rule, the compliance costs increase by a factor of 1.2 ($1.1 billion ÷ $939.53 million), but the number of avoided cancer cases increases by a factor of 5.1 (137.23 cases ÷ 26.85 cases). Likewise, in moving from Option B to the proposed rule, the compliance costs increase by a factor of 46.85 ($1.1 billion ÷ $24.00 million), but the number of avoided cancer cases increases by a factor of 381 (137.23 cases ÷ 0.36 cases). EPA does not consider Option A to be a viable option because it does not result in any additional protection.

c. *Comparison of non-quantified benefits.* EPA has identified a number of benefits that could not be quantified (see Unit II.B.1.a.). Included among these benefits are:

• Reductions in the incidence of asbestosis.

• Reductions in the incidence of pleural plaques and pleural effusion.

• Reductions in productivity losses associated with non-cancerous health effects.

• Reductions in medical costs associated with non-cancerous health effects.

• Improved quality of life.

• Decreased risk for individuals who may be incidentally exposed to asbestos, including building visitors and members of workers' families.

As discussed in Unit II.B.1.a., EPA was unable to provide quantitative estimates for the benefit categories listed in this unit. It is possible, however, to compare the four options in terms of their protectiveness and scope, and draw some conclusions with regard to the option that would provide the largest level of benefits for each benefit category. Each of the benefits listed in this unit are positively influenced by the level of protection (i.e., a lower PEL implies more benefits) and by the incremental population covered (i.e., a larger incremental population implies more benefits). Thus, options can be compared and ranked based on these two criteria.

The following table provides EPA's ranking of the proposed rule and the three alternative options in terms of the level of the benefit that each would provide. In the table, a ranking of 1 indicates that EPA expects that option to provide the largest level of benefits among the four options, while a ranking of 4 indicates that EPA expects that option to provide the least benefits among the four options.

These rankings reveal three distinct trends in comparing the four options. First, the proposed rule is always expected to produce the largest level of benefits. The proposed rule is at least as protective (i.e., in terms of value of the PEL) as each of the other options and provides protection to a larger incremental population than the other three options. Based on these two considerations, the proposed rule should provide a larger level of each non-quantified benefit, compared to the other options. This is consistent with ranking of the quantified benefits, where the proposed rule would result in the largest reduction in asbestos-related cancer. Second, Option A would provide the lowest level of benefits in each non-quantified benefit category. This follows from the fact that Option A involves no changes to the current WPR. Thus, since the proposed rule and both Options B and C provide either additional coverage or a reduced PEL, all three options must provide a larger level of benefit compared to Option A. Finally, it is not possible to determine the relative ranks of Options B and C. On the one hand, Option B offers more protection (in terms of a lower PEL) but on the other hand Option C provides incremental protection to a larger population.

RANKING OF PROPOSED RULE AND OPTIONS A, B, AND C FOR THE NON-QUANTIFIED BENEFITS OF REDUCING ASBESTOS EXPOSURE

Non-quantified benefit	Proposed rule	Option A	Option B	Option C
Reductions in the incidence of asbestosis	1	4	2	2
Reductions in the incidence of pleural plaques and pleural effusion	1	4	2	2
Reductions in productivity losses associated with non-cancerous health effects	1	4	2	2
Reductions in medical costs associated with non-cancerous health effects	1	4	2	2
Improved quality of life	1	4	2	2
Decreased risk for individuals who may be incidentally exposed to asbestos, including workers' families	1	4	2	2

Note: These are subjective rankings based on EPA's best professional judgement only.

See Table 5–9 of the economic Analysis (Ref. 18).

d. *Qualitative measures of costs and benefits.* This proposed rule would establish consistency between the protections offered under the WPR to State and local government employees working with asbestos-containing materials and under the OSHA Construction and General Industry Standards to private sector employees working with those materials. Fairness and equity dictate equivalent protection for all persons who work with asbestos-containing materials, whether those persons are employed by the private sector or by a specific State or local government. Currently, all private sector workers, as well as State and local government employees in the 23 States that have OSHA-approved State plans, are protected by the more stringent OSHA regulations. EPA is proposing to achieve equity for the remaining State and local government workers by amending the WPR to adopt recent amendments to the OSHA Asbestos Standards that provide additional worker protections.

The OSHA Asbestos Standards, as amended in 1994, establish a PEL of 0.1 f/cc for all exposed workers. EPA's current asbestos WPR covers only abatement workers and sets a PEL of 0.2 f/cc. Thus, the current EPA rule is less protective (i.e., is based on a higher PEL) and covers fewer exposed workers (i.e., only abatement workers) than the OSHA standards. The proposed rule would eliminate these inequities by providing identical protection and coverage to State and local government employees performing asbestos-related work in States without OSHA-approved State plans.

Options A, B, or C would not provide these State and local government employees with the same protection and

coverage as the OSHA Standards provide to private sector workers. Option A would provide less protection (i.e., a higher PEL) and would cover workers in fewer activities compared to those covered by OSHA. Option B would provide the same level of protection (i.e., the same PEL), but would cover workers in fewer activities compared to those covered by OSHA. Option C would cover the same number of activities, but would provide less protection (i.e., a higher PEL).

Therefore, the proposed rule is preferable to the other three options considered because it would provide equity in terms of protectiveness and coverage between workers in the private sector and State and local government employees.

e. *Summary*. Based on its comparison of the four options' estimated quantified costs and benefits, estimated non-quantified benefits, and qualitative measures of costs and benefits, EPA has determined that the proposed rule provides the greatest net benefits compared to the other three options considered, especially in light of the equity considerations discussed in Unit II.B.4.

- *Estimated quantified costs and benefits*. The proposed rule is the most protective (i.e., lowest PEL), provides incremental protection to the largest exposed population, results in the largest benefits, and offers the lowest ratio of costs to benefits. The proposed rule, however, is the most costly and results in the second largest net cost among the four options (though all options with the exception of Option A result in a negative net benefit). Nevertheless, EPA finds that the increased cost is justified by the additional benefits and protection offered by the proposed rule.
- *Estimated non-quantified benefits*. EPA expects that the proposed rule would result in a larger level of benefits for each unquantifiable category of benefits in comparison with each of the other three options. EPA bases this conclusion on the fact that the proposed rule is at least as protective (i.e., in terms of value of the PEL) as each of the other options and provides protection to a larger incremental population than the other three options.
- *Qualitative measures of costs and benefits*. The proposed rule is the only option that would provide coverage comparable to the OSHA Asbestos Standards. The proposed rule would provide public employees in States without approved OSHA State plans with the same level of protection (i.e., the PEL) and would cover the same set of activities as is covered in the OSHA standards. The other options would provide less protection (Options A and C) or less scope of coverage (Options A and B) compared to OSHA's Asbestos Standards.

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IV. Regulatory Assessment Requirements

A. Regulatory Planning and Review

Under Executive Order 12866, entitled *Regulatory Planning and Review* (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' subject to review by the Office of Management and Budget (OMB), because this action is not likely to result in a rule that meets any of the criteria for a ''significant regulatory action'' provided in section 3(f) of the Executive Order.

EPA has prepared an analysis of the potential impact of this action, which is estimated to cost $63.34 million in the first year of the rule and then decline annually thereafter. The analysis is contained in a document entitled ''Economic Analysis of the Asbestos Worker Protection Rule'' (Ref. 18). This document is available as a part of the public version of the official record for this action (instructions for accessing this document are contained in Unit I.B.), and is briefly summarized in Unit II.B.

B. Regulatory Flexibility Act

Pursuant to section 605(b) of the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.*, EPA hereby certifies that this proposed action, if promulgated as proposed, will not have a significant economic impact on a substantial number of small entities. The factual basis for EPA's determination is presented in the small entity impact analysis prepared as part of the Economic Analysis for this proposed rule (Ref. 18), and is briefly summarized here.

For purposes of analyzing potential impact on small entities, EPA used the definition for small entities in RFA section 601. Under RFA section 601, ''small entity'' is defined as:

1. A small business that meets Small Business Administration size standards codified at 13 CFR 121.201.

2. A small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000.

3. A small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

Of the three categories of small entities, only small governmental jurisdictions are affected by this proposed rule. As such, EPA's analysis of potential small entity impacts assesses the potential impacts on small governmental jurisdictions.

Based on the definition of ''small government jurisdiction,'' no State-level government covered by the asbestos WPR can be considered small. Therefore, the small government entities potentially impacted by the proposed asbestos WPR are local governments (e.g., county, municipal, or towns) and school districts.

The proposed amendments to the asbestos WPR may impact local governments in the 27 States without approved OSHA State plans by imposing incremental compliance costs for asbestos-related maintenance, renovation, and brake and clutch repair. There are 24,495 small government jurisdictions that are potentially impacted by the asbestos WPR. However, the estimated amounts of the impact are all extremely low. In each of the States, the impact for all small local governments is estimated to be less than 0.1% of revenues available for compliance. EPA estimated that the largest impact would occur for small local governments in Arkansas and Delaware, where the upper bound estimate of compliance costs as a percent of available revenues is estimated to be 0.051%. For small local governments as a whole, compliance costs associated with the asbestos WPR are estimated to represent 0.024% of available revenues. Therefore, the Agency has concluded that the asbestos WPR will not have a significant impact on small government entities.

Small school districts are defined as school districts serving a resident population of less than 50,000. In the 27 covered States, there are 17,846 small school districts that are potentially impacted by the asbestos WPR. The estimated impact of compliance costs on all small school districts is estimated to be 0.01% of available revenues. The largest impact is estimated for Mississippi where compliance costs as a percent of available revenues are estimated to equal 0.013%. The Agency has therefore concluded that the proposed asbestos WPR will not have a significant effect on the revenues of small school districts.

Although this proposed rule will not have a significant economic impact on a substantial number of small entities, EPA is interested in comments and suggestions for further reducing the potential impact for small entities. In particular, EPA is interested in how any further reductions might be achieved while ensuring that the WPR remains consistent with the OSHA Asbestos Construction and General Industry Standards. EPA requests comment on opportunities for burden reduction and other issues related to impacts on small entities.

Additional details regarding EPA's basis for this certification are presented in the Economic Analysis (Ref. 18), which is included in the public version of the official record for this action. This information will also be provided to the SBA Chief Counsel for Advocacy upon request. Any comments regarding the impacts that this action may impose on small entities should be submitted to the Agency in the manner specified in Unit I.C.

C. Paperwork Reduction Act

Pursuant to the Paperwork Reduction Act (PRA), 44 U.S.C. 3501 *et seq.*, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations, after appearing in the preamble to the final rule, are listed in 40 CFR part 9, and included on the related collection instrument.

The information collection requirements contained in this proposed rule have been submitted to OMB for

review and approval pursuant to the PRA and OMB implementing regulations at 5 CFR 1320 *et seq*. The burden and costs related to the information collection requirements contained in this proposed rule are described in an Information Collection Request (ICR). This ICR proposes to amend the existing ICR for the current WPR which is approved through September 30, 2001, under OMB No. 2070-0072 (EPA ICR No. 1246.06). A copy of this ICR, which is identified as EPA ICR No. 1246.07, has been included in the public version of the official record described in Unit 1.B.2., and is available electronically as described in Unit I.B.1., at http://www.epa.gov/opperid1/icr.htm, or by e-mailing a request to farmer.sandy@epa.gov. You may also request a copy by mail from Sandy Farmer, Collection Strategies Division, Environmental Protection Agency (2822), Ariel Rios Bldg., 1200 Pennsylvania Ave., NW., Washington, DC 20460, or by calling (202) 260–2740.

As described in Unit II.A.2., this amendment would require employers to collect, disseminate, and maintain information relating to employee asbestos exposures, respiratory protection, medical surveillance, and training. The records maintained as a result of this information collection will provide EPA with the data necessary for effective enforcement of the WPR, as authorized under TSCA sections 6 and 8.

The public reporting burden for this collection of information is estimated to average, on an annual basis, 21.96 hours per respondent, including the time for reviewing instructions, gathering and maintaining the data needed, and completing and reviewing the collection of information. EPA estimates that 25,312 respondents would incur these burdens, for a total annual respondent burden of 555,870 hours.

As defined by the PRA and 5 CFR 1230.3(b), ''burden'' means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

Comments are requested on EPA's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to EPA as part of your overall comments on this proposed rule in the manner specified in Unit I.C. Send a copy of your comments on the ICR to OMB as specified by 5 CFR 1320.11(a), by mailing them to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., NW., Washington, DC 20503, marked ''Attention: Desk Officer for EPA.'' Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after April 27, 2000, a comment to OMB is best assured of having its full effect if OMB receives it by May 30, 2000. In developing the final action, EPA will consider any OMB or public comments received regarding the information collection requirements contained in this proposal.

D. Unfunded Mandates Reform Act

Pursuant to Title II of the Unfunded Mandates Reform Act of 1995, (UMRA), Public Law 104–4, EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. As discussed in the Economic Analysis accompanying this proposed rule, the rule would result in estimated expenditures of at most $63.34 million in any 1 year. In addition, EPA has determined that this proposed rule would not significantly or uniquely affect small governments. For small local governments as a whole, compliance costs associated with the WPR represent 0.024% of revenues assumed to be available for compliance. Moreover, the impact of compliance costs on small school districts as a whole would be 0.01% of available revenues. Thus, this proposed rule is not subject to the requirements of UMRA sections 202, 203, 204, and 205.

E. Federalism

Executive Order 13132, entitled *Federalism* (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure ''meaningful and timely input by State and local government officials in the development of regulatory policies that have federalism implications.'' ''Policies that have federalism implications'' is defined in the Executive Order to include regulations that have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.''

Under section 6 of Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local government officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law, unless the Agency consults with State and local government officials early in the process of developing the proposed regulation.

Section 4 of the Executive Order contains additional requirements for rules that preempt State or local law, even if those rules do not have federalism implications (i.e., the rules will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government). Those requirements include providing State and local government officials notice and an opportunity for appropriate participation in the development of the regulation. If the preemption is not based on express or implied statutory authority, EPA also must consult, to the extent practicable, with appropriate State and local government officials regarding the conflict between State law and federally protected interests within the agency's area of regulatory responsibility.

This proposed rule does not have federalism implications. This proposal would amend the existing WPR to cover additional asbestos-related activities and to bring the WPR into conformance with recent changes to the OSHA Asbestos Standards. The proposed changes are not expected to result in a significant intergovernmental mandate under the UMRA, and thus, EPA concludes that the rule would not impose substantial direct compliance costs. Nor would the rule substantially affect the relationship between the national government and the States, or the distribution of power and responsibilities among the various levels of government. Those relationships have already been

established under the existing WPR, and these amendments would not alter them. Thus, the requirements of section 6 of the Executive Order do not apply to this proposed rule.

This proposed rule would preempt State and local law in accordance with TSCA section 18(a)(2)(B). By publishing and inviting comment on this proposed rule, EPA hereby is providing State and local government officials notice and an opportunity for appropriate participation. Thus, EPA has complied with the requirements of section 4 of the Executive Order.

F. Consultation and Coordination with Indian Tribal Governments

Under Executive Order 13084, entitled *Consultation and Coordination with Indian Tribal Governments* (63 FR 27655, May 19, 1998), EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or EPA consults with those governments.

This rule does not significantly or uniquely affect the communities of Indian tribal governments, nor does it impose substantial direct compliance costs on such communities. Since the OSHA Asbestos Standards cover tribal governments and tribal employees, the WPR does not apply to these groups (Ref. 24.). Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this proposed rule.

G. Environmental Justice

Pursuant to Executive Order 12898, entitled *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 FR 7629, February 16, 1994), the Agency has considered environmental justice-related issues with regard to the potential impacts of this action on the environmental and health conditions in minority and low-income populations. As discussed above in Unit II.B.1.e., many of the employees who would benefit from the protections of this proposed rule are members of minority and low- income populations. By providing protection for currently unprotected State and local government building maintenance and custodial employees and their families, this rule would address the lesser levels of protection in the workplace experienced by minority and low-income populations among State and local government employees. In other words, the proposed rule would not impose disproportionately high and adverse human health or environmental effects on minority or low-income populations, but would actually decrease such effects.

Public participation is an important environmental justice concern. EPA encourages State and local government employees, and organizations representing them, to participate in this rulemaking process by submitting comments (see Unit I.C.). In addition, interested persons or organizations may request that EPA hold an informal public hearing on this proposed rule, at which they may present oral comments (see Unit I.C.3.). If EPA decides to hold an informal hearing, it will publish a notice in the **Federal Register** announcing the time, place, and date of the hearing, explaining how interested persons or organizations can request to participate in the hearing, and describing the hearing procedures.

EPA has considered the comments submitted on its November 1, 1994, proposal in developing this modified proposal. Labor organizations representing State and local government employees were among the commenters. EPA also met with those organizations prior to developing this modified proposal.

H. Children's Health

Executive Order 13045, entitled *Protection of Children from Environmental Health Risks and Safety Risks* (62 FR 19885, April 23, 1997), does not apply to this proposed rule because it is not ''economically significant'' as defined under Executive Order 12866. However, it is EPA's policy to consistently and explicitly consider risks to infants and children in all risk assessments generated during its decisionmaking process, including the setting of standards to protect public health and the environment.

EPA has determined that children are physiologically more vulnerable to asbestos exposures than adults, and that this rule would prevent approximately 65.65 cancer cases among persons with childhood exposures to asbestos from school buildings. EPA also expects that this proposed rule would result in other benefits associated with lower asbestos exposures, such as a reduced incidence of non-cancerous health effects such as asbestosis, pleural plaques, and pleural effusion. EPA expects the proposed rule to substantially benefit children by reducing the incidental exposures children face while attending affected schools. By reducing ambient asbestos concentrations in school buildings, this rule would help protect children from the disproportionate asbestos exposure risk they face. Additional details are contained in Unit II.B.1.f. and in the Economic Analysis (Ref. 18).

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This rulemaking involves several technical standards and EPA has searched for potentially applicable voluntary standards. The results of this search are described in this unit. However, EPA's primary goal in proposing these amendments to the WPR is to achieve consistency with the 1994 OSHA Standards. As noted elsewhere in this preamble, EPA has determined that having different standards for public and private sector workers is inefficient and unfair, and that EPA should generally defer to OSHA's expertise in the matter of worker protection. Therefore, EPA finds that any voluntary consensus standard which is inconsistent with the applicable OSHA Standards is impractical under NTTAA section 12(d)(3).

One of the technical standards in the WPR is the method for analyzing personal air monitoring samples. Under the 1987 WPR, personal air monitoring samples must be analyzed using the method prescribed in Appendix A to 40 CFR 763.121 (phase-contrast microscopy) or an equivalent method. The 1994 OSHA Standards, which this proposal would adopt by cross-reference, contain the identical requirement and analytical method. EPA has performed a search to identify any potentially applicable voluntary consensus standards, but is unable to identify any alternatives to the current method of analysis. In addition, as discussed in Unit II.A.2.d., EPA's 1994 proposal would have allowed an alternative PEL based on personal air monitoring samples analyzed through

transmission electron microscopy. Commenters called into question the scientific basis for setting the alternative PEL and, as a result, EPA is withdrawing that portion of its 1994 proposal.

These amendments to the WPR adopt specific engineering controls and work practices, which could be considered a technical standard for conducting asbestos construction work and brake and clutch repair operations. EPA has identified several voluntary consensus documents that address aspects of the proper performance of asbestos abatement actions and asbestos operations and maintenance activities. The National Institute of Building Sciences (NIBS) has developed two documents to assist building owners and employers who are performing asbestos abatement and operations and maintenance projects. ''Asbestos Abatement and Management in Buildings, Model Guide Specifications'' (Ref. 25), is designed to be used as a guide to developing appropriate contract specifications. In addition to particular provisions for minimizing worker exposure to asbestos, the comprehensive ''Model Guide'' includes specifications for all other aspects of worker safety and fire prevention, as well as general contract language establishing the rights and responsibilities of the contractor and building owner.

NIBS has also developed guidance materials for building operations and maintenance projects that involve asbestos-containing materials. The ''Guidance Manual, Asbestos Operations and Maintenance Work Practices'' (Ref. 26), is designed to help the building owner or employer properly manage in-place asbestos-containing materials. The ''Manual'' contains extensive recommendations, including sample checklists and forms, on the administration of a building operations and maintenance program. The ''Manual''also provides explicit guidance on how to protect workers and building occupants from asbestos exposure during normal building maintenance activities such as pipe repair, wiring installation, and floor cleaning and polishing.

EPA highly recommends the use of these NIBS documents for building owners and employers. Both of these documents were revised in 1996 to reflect the 1994 amendments to the OSHA Standards, and EPA believes that the use of these documents would facilitate compliance with the asbestos abatement and building operations and maintenance requirements in the proposed WPR. However, since each of these documents are extremely detailed and encompass many circumstances beyond the scope of this rulemaking, EPA does not believe that it is practical or appropriate to incorporate these consensus documents into the WPR. In addition, the Preface to the ''Guidance Manual'' explicitly states that this particular document is not intended to be used for regulatory purposes.

The American Society for Testing and Materials (ASTM) has developed two potentially applicable documents: ''Standard Practice for Visual Inspection of Asbestos Abatement Projects'' (Ref. 27), and ''Standard Practice for Encapsulants for Spray-or-Trowel-Applied Friable Asbestos-Containing Building Materials'' (Ref. 28). The ASTM documents also represent state-of-the-art knowledge regarding the performance of these particular aspects of asbestos abatement and operations and maintenance activities, and EPA highly recommends their use. However, as with the NIBS documents, EPA is not proposing to incorporate them into the WPR because, in many instances, the specifications are more comprehensive and rigorous than the requirements of the current OSHA standard. As a result, EPA has determined that adoption of the ASTM and NIBS documents would be impractical under NTTAA section 12(d)(3).

Finally, EPA is proposing to adopt by cross-reference the appropriate provisions of the OSHA Respiratory Protection Standard at 29 CFR 1910.134. As discussed in Unit II.A.2.j., the OSHA Respiratory Protection Standard establishes comprehensive requirements for the selection, use, and maintenance of respirators. When this Standard was amended in 1998, OSHA incorporated nearly all of the provisions of the ANSI Z88.2-1992 respiratory protection standard, a voluntary consensus standard (Ref. 29). OSHA's limited number of departures from the ANSI standard involved instances where OSHA determined on the record that the ANSI standard was either insufficiently protective or unduly burdensome. The preamble to the OSHA Respiratory Protection Standard (Ref. 14, pp.1152-1300) discusses in detail the differences between the OSHA Standard and the ANSI standard. EPA agrees with OSHA's analysis on the incorporation of the ANSI standard. Therefore, by proposing to adopt, by cross-reference, the revised OSHA Respiratory Protection Standard, EPA is incorporating a voluntary consensus standard to the maximum practical extent under the NTTAA.

EPA welcomes comments on this aspect of the proposed rulemaking. The public is specifically invited to identify potentially applicable voluntary consensus standards and to explain why the benefits of using such standards in this regulation would outweigh the problems associated with promulgating a worker protection regulation that differs from the OSHA Standards.

J. Constitutionally Protected Property Rights

EPA has complied with Executive Order 12630, entitled *Governmental Actions and Interference with Constitutionally Protected Property Rights* (53 FR 8859, March 15, 1988), by examining the takings implications of this rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings'' issued under the Executive Order.

K. Civil Justice Reform

In issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct, as required by section 3 of Executive Order 12988, entitled *Civil Justice Reform* (61 FR 4729, February 7, 1996).

List of Subjects in 40 CFR Part 763

Environmental protection, Asbestos, Schools, Hazardous substances, Reporting and recordkeeping requirements, Worker protection.

Dated: April 20, 2000.

Carol M. Browner,

Administrator.

Therefore, it is proposed that 40 CFR chapter I, subchapter R, be amended as follows:

PART 763—[AMENDED]

1. The authority citation for part 763 would continue to read as follows:

Authority: 15 U.S.C. 2605, 2607(c), 2643, and 2646.

2. By revising § 763.91(b) to read as follows:

§ 763.91 Operations and maintenance.

* * * * *

(b) *Worker protection*. See subpart G of this part.

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Appendix B to Subpart E [Removed and reserved]

3. By removing and reserving Appendix B to subpart E.

4. By revising subpart G to read as follows:

Subpart G—Asbestos Worker Protection

Subpart G—Asbestos Worker Protection

§ 763.120 What is the purpose of this subpart?

This subpart protects certain State and local government employees who are not protected by the Asbestos Standards of the Occupational Safety and Health Administration (OSHA). This subpart applies the OSHA Asbestos Standards in 29 CFR 1910.1001 and 29 CFR 1926.1101 to these employees.

§ 763.121 Does this subpart apply to me?

If you are a State or local government employer and you are not subject to a State asbestos standard that OSHA has approved under section 18 of the Occupational Safety and Health Act or a State asbestos plan that EPA has exempted from the requirements of this subpart under § 763.123, you must follow the requirements of this subpart to protect your employees from occupational exposure to asbestos.

§ 763.122 What does this subpart require me to do?

If you are a State or local government employer whose employees perform:

(a) Construction activities identified in 29 CFR 1926.1101(a), you must:

(1) Comply with the OSHA standards in 29 CFR 1926.1101.

(2) Submit notifications required for alternative control methods to the Director, National Program Chemicals Division (7404), Office of Pollution Prevention and Toxics, Environmental Protection Agency, Ariel Rios Bldg., 1200 Pennsylvania Ave., NW., Washington, DC 20460.

(b) Custodial activities not associated with the construction activities identified in 29 CFR 1926.1101(a), you must comply with the OSHA standards in 29 CFR 1910.1001.

(c) Repair, cleaning, or replacement of asbestos-containing clutch plates and brake pads, shoes, and linings, or removal of asbestos-containing residue from brake drums or clutch housings, you must comply with the OSHA standards in 29 CFR 1910.1001.

§ 763.123 May a State implement its own asbestos worker protection plan?

This section describes the process under which a State may be exempted from the requirements of this subpart.

(a) *States seeking an exemption.* If your State wishes to implement its own asbestos worker protection plan, rather than complying with the requirements of this subpart, your State must apply for and receive an exemption from EPA.

(1) *What must my State do to apply for an exemption*? To apply for an exemption from the requirements of this subpart, your State must send to the Director of EPA's Office of Pollution Prevention and Toxics (OPPT) a copy of its asbestos worker protection regulations and a detailed explanation of how your State's asbestos worker protection plan meets the requirements of TSCA section 18 (15 U.S.C. 2617).

(2) *What action will EPA take on my State's application for an exemption*? EPA will review your State's application and make a preliminary determination whether your State's asbestos worker protection plan meets the requirements of TSCA section 18.

(i) If EPA's preliminary determination is that your State's plan does meet the requirements of TSCA section 18, EPA will initiate a rulemaking, including an opportunity for public comment, to exempt your State from the requirements of this subpart. After considering any comments, EPA will issue a final rule granting or denying the exemption.

(ii) If EPA's preliminary determination is that the State plan does not meet the requirements of TSCA section 18, EPA will notify your State in writing and will give your State a reasonable opportunity to respond to that determination.

(iii) If EPA does not grant your State an exemption, then the State and local government employers in your State are subject to the requirements of this subpart.

(b) *States that have been granted an exemption.* If EPA has exempted your State from the requirements of this subpart, your State must update its asbestos worker protection regulations as necessary to implement changes to meet the requirements of this subpart, and must apply to EPA for an amendment to its exemption.

(1) *What must my State do to apply for an amendment*? To apply for an amendment to its exemption, your State must send to the Director of OPPT a copy of its updated asbestos worker protection regulations and a detailed explanation of how your State's updated asbestos worker protection plan meets the requirements of TSCA section 18. Your State must submit its application for an amendment within 6 months of the effective date of any changes to the requirements of this subpart, or within a reasonable time agreed upon by your State and OPPT.

(2) *What action will EPA take on my State's application for an amendment*? EPA will review your State's application for an amendment and make a preliminary determination whether your State's updated asbestos worker protection plan meets the requirements of TSCA section 18.

(i) If EPA determines that the updated State plan does meet the requirements of TSCA section 18, EPA will issue your State an amended exemption.

(ii) If EPA determines that the updated State plan does not meet the requirements of TSCA section 18, EPA will notify your State in writing and will give your State a reasonable opportunity to respond to that determination.

(iii) If EPA does not grant your State an amended exemption, or if your State does not submit a timely request for amended exemption, then the State and local government employers in your State are subject to the requirements of this subpart.

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