

UNIT! D STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

MAR 3 | 1988

OFFICE OF AIR AND RADIATION

MEMORANDUM

SUBJECT: Revised Asbestos NESHAP Strategy

FROM:

Stationary Source Compliance Division
Office of Air Quality Planning and Standards

Michael S. Alushir Ellist J. Liller for Associate Enforcement Counsel for Mr

TO:

Air Management Division Directors Regions I, III and IX

Air and Waste Management Division Director Pegion II

Air, Pesticides, and Toxics Management Division Directors Regions IV and VI

Air and Radiation Division Director Region V

Air and Toxics Division Directors Regions VII, VIII and X

Regional Counsels, Regions I-X

Attached is the revised strategy for the implementation and enforcement of the asbestos demolition and renovation requirements. The April 6, 1984 Asbestos Strategy Document was issued concurrently with the repromulgation of the asbestos NESHAP. The goal of the 1984 strategy was to attain 100% compliance through the implementation of an inspection plan. According to the 1984 strategy an inspection plan could consist of inspecting "all sources, all contractors, or any other program consistent with the Agency goal of 100% compliance." Because the annual notification rate has risen dramatically and is expected to be well above 50,000 for FY 88,

NOTE: For the referenced attachments, contact OECM-AED or OAQPS-SSCD.

it is no longer feasible for most agencies to inspect all sites. Inspecting all contractors may be the best alternative for an effective inspection plan, however, the 1984 strategy did not fully describe how such a plan would be implemented. After auditing three Regional asbestos NESHAP enforcement programs, the Inspector General's office remarked that the 1984 strategy "does not provide additional criteria for developing an effective inspection strategy." The revised strategy provides the criteria for targeting inspections among a field of an estimated 5,000 contractors as opposed to selecting inspection sites from over 50,000 notifications. Inspection efforts focused on contractors should result in a more resource-effective enforcement program.

Major changes have been made to the original computer tracking system described in the draft revised strategy. In response to regional comments the national tracking system will be in DBASE III format rather than CDS. This will allow tracking of the number of notifications and associated compliance activity in each state, as opposed to worksite location for each notification. Regions will be expected to send quarterly reports of the data elements contained in APPENDIX A of the revised strategy to Headquarters, preferably through electronic transmission. The aggregated nationwide database information will be used to target inspections and promote enforcement options as described in the strategy.

A new section on outreach has been added to the strategy describing methods of communication with the regulated community. Other additions include new appendices on identifying non-notifiers, EPA technical assistance, generic 113(a) and temporary restraining orders, and finalized guidance on contractor listing. Each originally drafted section of the revised strategy has been modified to accommodate comments from the Regions, OTS, and ALAPCO.

Since the asbestos NESHAP program is primarily delegated to the States, the success of this strategy depends on implementation and cooperation from the States. It is important that the States understand that the tracking system

will contain a nationwide database of contractor compliance histories, and that the States will utilize this tracking system extensively. Any questions or comments should be addressed to Jim Engel of my staff at 382-2877.

Attachment

CC: Air Compliance Branch Chiefs
Asbestos NESHAP Contacts
William Becker
Gerald Emison
John Neylan
David Kling
Sims Roy

TABLE OF CONTENTS

Asbestos Strategy pp 1 - 19
Introduction pp 1 - 3
Strategy Components pp 4 - 19
1. Outreach p 4 2. Contractor Training pp 4 - 5
3. Inspector Training P 5
4. Inspections pp 5 - 8
5. Inspection Targetting pp 8 - 10
6. Program Alternatives
7. Federal Enforcement Options pp 12 - 15
8. Choosing Enforcement Option pp 15 - 16
9. Assessing Penalties p 17
10. Reporting p 17
11. Regional Oversight pp 17 - 18
12. Cross-Program Coordination pp 18 - 19
APPENDIX A
Tracking Asbestos Sources Al - A5
APPENDIX B Asbestos Demolition/Renovation Penalty Policy Bl
Aspestos Demotition/Removacion renatcy rottey
APPENDIX C
Uniform Hazardous Waste Manifest
APPENDIX D 113 Compliance Order/114 Information Request D1 - D11
APPENDIX E
Pre-Referral Settlement Procedures E1 - E36
APPENDIX F
Identifying Non-Notifiers F1 - F19
identifying non-notified victorial
APPENDIX G
SPMS Reporting Format
APPENDIX H
Standardized Inspection Checklist H1 - H3
I MINGLED TW T
APPENDIX I List of State Certification Requirements I1 - I3
List of skafe Calfillestion kadditaments
APPENDIX 🏂
States Covered by Worker Protection Rule J1
APPENDIX K
Contractor Listing Application K1 - K13
APPENDIX L EPA Technical Assistance for Asbestos Control L1 - L12
The reculicat wastardure for wantages confront pr
APPENDIX M
Generic 113(a) order and TRO M1 - M20

Asbestos Demolition and Renovation Enforcement Strategy

Introduction

Asbestos is recognized as a human and animal carcinogen and, combined with cigarette smoking, a powerful co-carcinogen. Malignant diseases caused by asbestos exposure include bronchial carcinoma, lung adenocarcinoma, pleural and peritoneal mesothelioma, alimentary tract carcinoma, and tumors of other sites. Asbestosis, a fibrotic lung disease caused by asbestos fibers, is also associated with long-term exposure.

These diseases are linked to ambient environmental exposures as well as to occupational exposures. To reduce ambient exposures and the accompanying health risk, EPA regulated asbestos under the National Emission Standards for Hazardous Air Pollutants (NESHAPS). This enforcement strategy document has been prepared in order to ensure compliance with the NESHAP standard. By specifying actions to be taken and a procedure to follow, this strategy will provide effective and uniform enforcement of the standard by Regions and delegated States. This strategy document is also intended to provide emphasis and assurances to Regional Offices and States that asbestos occupies a high priority and that EPA is totally committed to a strong enforcement posture.

Background

Parts of the standard were in the form of work practice (nonnumerical) requirements. The Supreme Court held, in Adamo Wrecking Company v. United States, 434 U.S. 275 (1978) that these were not emissions standards within the meaning of the 1970 Clean Air Act. Since EPA, at the time the asbestos regulations were promulgated, had authority to promulgate and enforce only emissions standards, the Court upheld dismissal of the criminal enforcement action brought against Adamo for violations of \$112(c)(1)(B) of the 1970 Act.

On August 7, 1977, \$112(e) was added to the Act to specifically authorize design, equipment, work practice, and operational standards. Although regulations promulgated since that time could contain work practice standards, there was doubt as to the way of dealing with regulations promulgated prior to that time. EPA repromulgated many of the asbestos work practice standards on June 19, 1978. However, some work practices were not repromulgated, and were not

considered enforceable by EPA. This led to confusion and greatly hindered litigation efforts. In an attempt to end this confusion and ensure all aspects of the asbestos NESHAP are enforceable, EPA repromulgated the entire asbestos standard in April of 1984.

The strategy document presented here addresses training, inspection techniques, judicial and administrative enforcement mechanisms, and other aspects essential for a successful program of compliance with the repromulgated regulations. Flexibility is provided so that the enforcing authority, be it the EPA Regional Office or the delegated State or local agency, may select other options, provided a high level of compliance is achieved. The strategy also is designed to ensure coordination between EPA Regions and their delegated States. Since 38 States presently have asbestos enforcement delegation, it is essential these States feel a part of the process and have the capability and desire to successfully enforce the standard.

An EPA Compliance Data System analysis showed that the number of demolition and renovation sources is greater than that of all other asbestos source categories combined, and the compliance status much worse. The strategy is thus limited to the renovation and demolition category. An additional reason for this limitation is that since renovations and demolitions are transitory operations, they are more difficult to inspect and require specific enforcement guidance. This limitation does not mean other asbestos sources should be ignored, but means rather that EPA believes the States have sufficient knowledge of these other sources to do a satisfactory job without additional guidance.

Summary of Regulations

Before discussing the components of an effective strategy, it is necessary to briefly outline the requirements of the demolition and renovation provisions. These provisions are found at 40 CFR Part 61 Subpart M. The owner/operator of a demolition or renovation is exempt, pursuant to \$61.145(b) and (d), from emission reduction requirements if less than 80 linear meters (260 linear feet) of friable asbestos materials covering pipes or less than 15 m² (160 ft²) of friable asbestos material pipes or less than 15 m² (160 ft²) of friable asbestos material covering other facility components is involved, and notification provisions of \$61.146(a),(b), and (c)(1)-(5) are met for demolitions.

Section 61.147 concerns the wetting, stripping and removal of friable asbestos. It provides that friable asbestos materials used on any pipe, duct, boiler, tank, reactor, turbine, furnace or structural member shall be adequately wetted during stripping, and then removed from the building. When prior authorization is obtained from EPA upon the appropriate demonstration made pursuant to \$61.147(c)(1) and (2) of unavoidable equipment damage, a local exhaust ventilation and collection system may be used to prevent emissions to the outside air. Section 61.147(e) requires that stripped or removed asbestos materials be wet during all stages of demolition or renovation and related handling operations, and §61.147(f) allows alternatives to wetting during freezing temperatures. Section 61.145(c) exempts demolition operations, pursuant to a State or local order, on structurally unsound buildings from all requirements except those enumerated in the subsection.

In addition, §61.152 prohibits any visible emission from the collection, packaging, transporting, or depositing of asbestos from any demolition or renovation, and requires that asbestos waste be deposited at acceptable waste disposal \$61.156 prohibits visible emissions from an active waste disposal site except under specified and limited conditions. Because of regulatory limitations this strategy concentrates on asbestos removal operations as opposed to asbestos waste transportation and disposal. When the asbestos NESHAP is revised to allow for more attention to asbestos waste disposal requirements, Regions and states should increase their oversight of those requirements. In the interim the strategy should include a program of inspecting each disposal site to determine what are the usual practices with respect to waste handling. After these initial inspections, perform random multi-day inspections to observe the actual disposal of waste at each site, and determine who put waste into the landfill during the period of surveillance so that responsibility could be assigned to contractors if improper disposal practices are noted at the landfill.

Strategy Components

1. Outreach - EPA and the delegated agencies could approach enforcement of the asbestos NESHAP by devoting resources entirely to catching owners/operators in the act of violating NESHAP requirements and taking appropriate enforcement measures. However, enforcement of the NESHAP could be easier and more effective if it is directed towards a regulated community aware of EPA requirements rather than a regulated community unsure of those requirements. By now owners/operators should be familiar with the NESHAP, but sometimes they could benefit from EPA guidance such as past EPA applicability determinations.

There are many methods of developing a compliance assistance component to an enforcement program. A pamphlet containing easy-to-understand explanations of the regulations and phone numbers of appropriate agency personnel who can provide further assistance can be distributed to removal contractors and anyone else concerned with the hazards involved with asbestos removal. Another way for EPA and delegated agencies to provide compliance assistance is to meet the regulated community in person. Seminars and demonstration workshops presented to contractors and owners and managers of commercial buildings can be greatly In addition, discussion forums with school effective. district administrators, architects, lenders, real estate groups, and insurance agency representatives can create a general public awareness of asbestos hazards and EPA regulatory requirements. Radio talk shows concerning asbestos hazards will produce the same effect. Hazard Abatement Assistance Branch (HAAB), formerly Asbestos Action Program, of the Office of Toxic Substances (OTS) offers technical assistance to the public through training seminars, telephone contact with the public, guidance documents, and other means which are all described in APPENDIX L. EPA and the delegated agencies should make a significant commitment to public education and outreach to create increased awareness and understanding of the regulations among the regulated community and an atmosphere of agency-contractor cooperation.

2. Contractor Training - Most states have established some type of contractor certification or training program for asbestos removal. Further, the Model Accreditation Plan under the Asbestos Hazard Emergency Response Act (AHERA) requires that all states establish accreditation programs for persons who inspect, develop management plans, or design or conduct response actions in schools. APPENDIX I lists the status of the state certification requirements for all states. States which have not yet adopted certification requirements for asbestos removal workers may have to make greater use of the

outreach methods described in Section 1 to educate contractors as to what inspectors expect to find at a removal site in order to verify compliance with the NESHAP. HAAB asbestos removal training is provided by the Office of Toxic Substances (OTS) in response to legislation enacted for the Asbestos in Schools program. The HAAB training centers and the training they provide are discussed on pages 4 - 6 of Appendix L. In addition to providing training on campus, some of these institutions schedule training sessions at other locations nationwide.

Regions should encourage states to adopt contractor certification requirements for NESHAP removal activity. Considering that contractors already need to be certified for removal work under the Asbestos Hazard Emergency Response Act (AHERA), a logical way for states to require certification under the NESHAP is by expanding the AHERA certification requirement to all demolition/renovation contractors.

3. Inspector Training - Inspector effectiveness at finding violations and documenting evidence at subject demolition and renovation sources is the basis for EPA's asbestos NESHAP enforcement program. The only way to ensure this effectiveness is to provide inspectors with training on inspection procedures and safety, and to familiarize them with the NESHAP and other pertinent regulations. To help accomplish this, SSCD has established the Asbestos NESHAP Inspection Workshop - a classroom training program available to the Regions and states. In light of the many changes in EPA asbestos enforcement since the Inspection Workshop began, SSCD is currently revising the Workshop Manual and will periodically review and update the revised manual in the future. This manual should be published in April 1988 for distribution to the Regions and delegated agencies.

Agencies should also consider sending their asbestos inspectors to one of the HAAB training centers identified in APPENDIX L so that their inspectors will be aware of what certified removal contractors are being taught about complying with the asbestos NESHAP. Because most asbestos NESHAP inspections are conducted by state and local inspectors, it is important to encourage the delegated agencies to send their inspectors to both the SSCD and HAAB training, as well as any contractor certification training provided at the state level.

4. Inspections - Inspections provide the foundation for all asbestos NESHAP enforcement actions for substantive violations, and are therefore of primary importance in enforcing the NESHAP. In most cases, it is necessary for the inspector to enter active removal areas both to determine compliance and to collect evidence of any non-compliance.

The following is a list of positive inspection techniques:

- Bring copies of the NESHAP regulations to the inspection site to leave with owner/operators and for the inspector's own reference;
- To the extent possible assess the site to be inspected, in compliance with Section 114 and 4th Amendment requirements, prior to making your presence known;
- Along with presenting credentials, provide a calling card for future reference by the facility owner/contractor;
- Clearly identify the line of authority between all parties involved, i.e., subcontractor, oversight contractor, general contractor, owner, etc.;
- Use a standard checklist and complete as much information as possible before tering a contaminated area in order to minimize the time in the contaminated area;
- In addition to asking the appropriate representative if he or she is aware of the regulations, ask them to verball describe their understanding of the regulation;
- Carry only essential items into the contaminated area, items such as a clipboard can be left outside;
- Samples should be taken at every site inspected.
 When samples are taken, label immediately and log number onto the inspection checklist and log onto a chain-of-custody form;
- Photograph with waterproof automatic cameras;
- Estimate the amount of asbestos in linear or square feet by pacing off or using a tape measure;
- Always conduct a quick to-the-point wrap-up meeting and inform the owner/operator of findings, but do not interpret the regulation or make compliance determinations;
- To the extent possible reference all discussions to specific requirements in the regulation being enforced;
- Always wear appropriate safety gear.

The inspection techniques referred to three items which are especially important equipment for asbestos NESHAP inspectors - checklist, camera, and safety gear. This equipment, described below, is considered standard inspection gear.

a) Checklist - In order to reliably document evidence of compliance status at each subject worksite, the inspector must enter all pertinent information onto a reasonably detailed checklist while the findings of the inspection are fresh in memory. The inspector should complete as much of the checklist as possible prior to entering the worksite. So as not to make the checklist an item requiring decontamination, the inspector should not bring the checklist inside the removal area, but instead complete the rest of the checklist entries immediately after conducting the inspection. A good checklist such as the example shown in Appendix H will provide the inspector an outline of what to look for during the inspection. In order to complete the checklist the inspector must enter the removal area. This reflects EPA's policy that inspectors should, whenever possible, observe asbestos work practices in progress in order to assess compliance. When the barrier to a containment area is transparent or when asbestos fibers are released outside the containment area, it may not be necessary to enter the removal area to observe work practices. However, because samples are to be taken during each inspection, it may still be necessary to enter such a site to collect samples.

If an inspection reveals NESHAP violations, the inspector should write a report summarizing the inspection and specifying the conditions unique to the work site which could not be entered onto the standardized checklist.

- b) Camera Photographing removal activity can provide some of the strongest evidence of non-compliance. Supplying inspectors with reliable cameras is necessary to ensure that photographic evidence will contribute to the agency's cause should a civil action become necessary. Waterproof automatic cameras are especially useful in the wet environment found at many removal sites, and will endure decontamination showers.
- c) Safety Gear EPA's most recent guidance concerning safety gear for asbestos inspectors is contained in the May 1987 "Interim Health and Safety Guidelines for EPA Asbestos Inspectors." These guidelines should be referenced to ensure inspector protection.

Inspections reported in the computer tracking system outlined in APPENDIX A and subsequently reported into SPMS must consist of sample collection and observation of work Regional and delegated agency practices whenever possible. inspectors should be attentive to the positive inspection techniques and implement them whenever possible as well. Of course, if an inspector arrives at an unfinished removal site when no removal activity is occurring, the inspector will be unable to present credentials and questions to the appropriate representative, observe work practices, and conduct a "wrap-up" meeting to inform the owner/operator of specific violations found, but will still be able to take samples and photographs and complete a standardized checklist as much as possible. It may still be possible to make a compliance determination based on the evidence presented.

5. Inspection Targeting - The number of notifications received by EPA and the delegated agencies has risen from 20,537 in 1985 to 29,087 in 1986, and in 1987 this figure rose to 43,496. Because of this tremendous increase, Regions and their delegated agencies must make more efficient use of inspectors' time by implementing a targeting system which strategically identifies which notifications or contractors to follow up with inspections.

The computer tracking system described in Appendix A is designed to assist agencies in targeting their inspections. The instructions contained in Appendix A establishes conventions for the input and retrieval of contractor records, and because the entire inspector targeting method which follows is based on the use of the computer tracking program, these instructions should be reviewed carefully. It will be required of all delegated enforcement agencies to use the tracking program for inspection targeting. Prioritizing inspections by identifying removal sites where violations are most likely to occur will enable Regions and their delegated agencies to make more efficient use of resources. Inspection priority should be based on a simple evaluation of computer tracking data involving the assessment of contractor compliance history. Table 1 Tables 1 and 2 illustrate this sort of evaluation. lists criteria discerned from the computer system, and criteria found on individual notifications to be prioritized, and gives numerical ratings for each criteria. By assigning numerical ratings to the tracking and notification criteria identified in Table 1, the inspection priority pertaining to each notification received can be determined by comparing the summation of the ratings to the rankings listed in Table 2. This evaluation, or a comparable method of evaluation, should be done for each removal activity to determine the need for inspecting each work site.

TABLE	1	Tracking Criteria	Rating
		Contractor is Listed as Described in Section 7 of this Document Contractor Violated at Least Once	10
		During 3 Most Recent Inspections Contractor has Not Been	10
		Inspected for Two Years	10
		Been Inspected in past year Contractor is Not Certified	7
		by an Approved Accredited Program . Contractor has a Recent	3
		Trend of Notification Violations	7
		Notification Criteria	
		No Notification Received	8
		Late Notice Received	
		Dates and/or Amount of Asbestos	6
		Notice Missing Other Items Worksite in Occupied Building or	
		Area of High Population Density	5
TABLE	2	Priority	Ranking
		TOP Priority	10 or above
		HIGH Priority	5 - 9
		LOW Priority	0 - 4

An inspection targeting evaluation establishes inspection priority based on computer tracking data. It does not limit inspections to the criteria listed in Table 1. Citizen complaints cannot be recorded in the computer tracking system, but they should be followed up with inspections based on agency judgment.

Non-Notifiers

In addition to the criteria listed in Table 1, special attention should be given to removal jobs for which no notification was received. As documented in the Inspector General's asbestos NESHAP audit report, efforts to identify non-notifiers should include:

- * Checking building permits or public works files;
- Reviewing waste disposal site records;
- Discussing consistent underbidders with national demolition contractors;
- Coordinating with state, county, and city departments of building and health, and with Federal offices such as OSHA and Department of Education;
- Reviewing publications such as National Wrecking and Salvage Journal, newspapers, and magazines.

Region 3 has researched the problem of identifying non-notifiers and has documented their findings in a report which has been incorporated as APPENDIX F. Seven licensing and permitting agencies and several landfills in Philadelphia, PA and Richmond, VA were visited and record/file reviews were conducted. In these two cities Region 3 found that reviewing records (e.g., manifests, contracts) at the landfills was the most productive method of identifying non-notifiers.

Because of differing levels of asbestos NESHAP enforcement funding among delegated agencies, some agencies will be capable of inspecting HIGH and TOP priority work sites as well as some LOW priority sites, while other agencies may be limited to inspecting mostly TOP priority sites. When delegated agencies are finding it increasingly difficult to maintain a high level of asbestos NESHAP inspections due to funding limitations, they should adopt cost effective alternative enforcement mechanisms which when combined with modest inspection levels, will allow these agencies to maintain or enhance their present enforcement posture. Such alternatives are discussed in the following section.

6. Program Alternatives - Some states have remarked that maintaining their established inspection levels is difficult because of many changing demands being placed on the program. In order to accommodate these states while maintaining or enhancing their established enforcement posture, Regions should seek an agreement which includes the incorporation of either of the following optional requirements into their state enforcement program coupled with the inspection targeting program outlined previously. When combined with a penalty policy of sufficient stringency for each violation type, the adoption of such requirements would be an acceptable state asbestos NESHAP enforcement program modification.

I. Certification

This alternative entails the adoption of a state-wide contractor certification program, where the following minimum requirements would apply:

At least one supervisor certified in asbestos removal shall be present at each affected NESHAP removal site when removal work is ongoing. Certification shall be attained only by satisfactory completion of training at a state-approved training program, one of the EPA-approved courses identified in APPENDIX L, or any equivalent course. Any state employing this enforcement alternative shall exercise

the authority to revoke the certification of any removal contractor found to be in violation of NESHAP requirements. When a contractor becomes listed as described in Section 6 of this document, certification should be revoked automatically. Certification requirements developed under AHERA, and expanded for all demolition and renovation activities, would meet this requirement. Each certification training course must include the following:

- a) Education about the hazards of asbestos exposure,
- b) Clarification of NESHAP requirements,
- c) Training in removal procedures,
- d) Training in transportation and disposal procedures,
- e) Safety training.

II. Asbestos Manifest

Delegated agencies can implement this alternative by requiring waste shipment manifests for all asbestos waste shipments from affected sources. The manifest should be similar in detail and implementation as the Uniform Hazardous Waste Shipment Manifest (Appendix C), but specifically designated for asbestos containing waste. An asbestos manifest is a waste tracking form used to verify that asbestos waste is deposited at an approved waste site. Each removal operator enters information onto the manifest pertaining to the amount of asbestos waste, and the designated disposal site, for each waste shipment from a removal site. The transporter of the waste then acknowledges on the manifest that he has received the indicated amount of asbestos waste for shipment to the designated disposal site. Before the transporter hauls the waste, the removal operator keeps a copy of the manifest indicating that the transporter has received the waste for shipment to a NESHAP approved disposal site. When the transporter arrives at the disposal site, the disposal site operator acknowledges on the manifest that the asbestos as described by the generator was disposed of at the designated disposal site. At this point the manifest form is complete. Now, the original is sent to the delegated agency informing enforcement personnel that the waste was properly disposed, one copy is sent to the removal operator indicating regulatory compliance, and the other two copies are maintained by the transporter and the disposal site operator.

III. Notification Fees

This alternative would require the owner/operator of a removal site to submit notification with a notification fee in an amount determined by the amount of asbestos containing material involved in the removal operation. For instance, if removal entails over 1000 linear feet or 5000 square feet of asbestos containing material, a \$500 notification fee may be required. For removals

the authority to revoke the certification of any removal contractor found to be in violation of NESHAP requirements. When a contractor becomes listed as described in Section 6 of this document, certification should be revoked automatically. Certification requirements developed under AHERA, and expanded for all demolition and renovation activities, would meet this requirement. Each certification training course must include the following:

- a) Education about the hazards of asbestos exposure,
- b) Clarification of NESHAP requirements,
- c) Training in removal procedures,
- d) Training in transportation and disposal procedures,
- e) Safety training.

II. Asbestos Manifest

Delegated agencies can implement this alternative by requiring waste shipment manifests for all asbestos waste shipments from affected sources. The manifest should be similar in detail and implementation as the Uniform Hazardous Waste Shipment Manifest (Appendix C), but specifically designated for asbestos containing waste. An asbestos manifest is a waste tracking form used to verify that asbestos waste is deposited at an approved waste site. Each removal operator enters information onto the manifest pertaining to the amount of asbestos waste, and the designated disposal site, for each waste shipment from a removal site. The transporter of the waste then acknowledges on the manifest that he has received the indicated amount of asbestos waste for shipment to the designated disposal site. Before the transporter hauls the waste, the removal operator keeps a copy of the manifest indicating that the transporter has received the waste for shipment to a NESHAP approved disposal site. When the transporter arrives at the disposal site, the disposal site operator acknowledges on the manifest that the asbestos as described by the generator was disposed of at the designated disposal site. At this point the manifest form is complete. Now, the original is sent to the delegated agency informing enforcement personnel that the waste was properly disposed, one copy is sent to the removal operator indicating regulatory compliance, and the other two copies are maintained by the transporter and the disposal site operator.

III. Notification Fees

This alternative would require the owner/operator of a removal site to submit notification with a notification fee in an amount determined by the amount of asbestos containing material involved in the removal operation. For instance, if removal entails over 1000 linear feet or 5000 square feet of asbestos containing material, a \$500 notification fee may be required. For removals

the authority to revoke the certification of any removal contractor found to be in violation of NESHAP requirements. When a contractor becomes listed as described in Section 6 of this document, certification should be revoked automatically. Certification requirements developed under AHERA, and expanded for all demolition and renovation activities, would meet this requirement. Each certification training course must include the following:

- a) Education about the hazards of asbestos exposure,
- b) Clarification of NESHAP requirements,
- c) Training in removal procedures,
- d) Training in transportation and disposal procedures.
- e) Safety training.

II. Asbestos Manifest

Delegated agencies can implement this alternative by requiring waste shipment manifests for all asbestos waste shipments from affected sources. The manifest should be similar in detail and implementation as the Uniform Hazardous Waste Shipment Manifest (Appendix C), but specifically designated for asbestos containing waste. An asbestos manifest is a waste tracking form used to verify that asbestos waste is deposited at an approved waste site. Each removal operator enters information onto the manifest pertaining to the amount of asbestos waste, and the designated disposal site, for each waste shipment from a removal site. transporter of the waste then acknowledges on the manifest that he has received the indicated amount of asbestos waste for shipment to the designated disposal site. Before the transporter hauls the waste, the removal operator keeps a copy of the manifest indicating that the transporter has received the waste for shipment to a NESHAP approved disposal site. When the transporter arrives at the disposal site, the disposal site operator acknowledges on the manifest that the asbestos as described by the generator was disposed of at the designated disposal site. At this point the manifest form is complete. Now, the original is sent to the delegated agency informing enforcement personnel that the waste was properly disposed, one copy is sent to the removal operator indicating regulatory compliance, and the other two copies are maintained by the transporter and the disposal site operator.

III. Notification Fees

This alternative would require the owner/operator of a removal site to submit notification with a notification fee in an amount determined by the amount of asbestos containing material involved in the removal operation. For instance, if removal entails over 1000 linear feet or 5000 square feet of asbestos containing material, a \$500 notification fee may be required. For removals

involving less than 1000 linear feet or 5000 square feet but greater than 260 linear feet or 160 square feet a notification fee of \$250 may be required. If the delegated agency's asbestos removal regulation covers removal activities that involve levels of asbestos containing material less than that of EPA's threshold (260 linear feet or 160 square feet), a different fee would be required. By implementing this alternative delegated agencies can fund a significant level of their enforcement program depending on the level of fees required.

While these alternatives are not required as a mandatory part of an acceptable asbestos demolition and renovation enforcement program, they do represent examples of how state and local agencies can improve their knowledge of the regulated community. Although these options may have their own resource demands, implementation of these kinds of activities should ultimately allow state and local agencies to improve their compliance rates while maintaining a reasonable resource commitment.

Concurrent with the implementation of one of the above requirements, states must employ a penalty policy with fines of sufficient stringency for each violation type in order to achieve an acceptable enforcement alternative for maintaining enforcement posture when inspection levels suffer from budgetary restrictions. Enforcement alternatives are to be aggressively implemented by states seeking cost effective enforcement methods, and should not have the effect of diminishing the state enforcement posture. A penalty policy change without implementation is not acceptable. EPA and states must agree on a minimum acceptable level of state inspections and vigorous pursuance of violators.

7. Federal Enforcement Options - EPA has the authority to use administrative and/or judicial enforcement against asbestos NESHAP violators. Administrative actions may be taken when EPA has the opportunity to stop noncompliance and establish NESHAP practices. EPA cannot collect penalties administratively, although several states have that authority. Regions should encourage states which are able to collect administrative penalties to do so liberally.

The only way EPA can collect penalties is through judicial action. Considering that EPA and the delegated states are uncovering increasingly high numbers of violations, judicial actions taken against violators should be expected to increase also. However, nationwide, this has not been the case. The rate of asbestos NESHAP referrals has been relatively stagnant as the rate of violations uncovered continues to rise substantially. An intended effect of this strategy is to induce an increased rate of referrals from the Regions and delegated agencies.

Figure 1 on page 14 illustrates the various enforcement options. Choosing the appropriate option for each demolition/renovation source in violation, for which EPA takes the enforcement prerogative, means using administrative and/or judicial enforcement action, unless the matter can be resolved informally or should be referred to OSHA or another EPA program office.

I. Administrative Actions

EPA can pursue administrative actions through Section 113(a)(3) orders or Section 303 orders, although Section 303 of the Act is seldom used in asbestos NESHAP enforcement. Notices of Violation (NOV) are often issued by EPA to NESHAP violators, although NOVs issued by EPA have legal significance only when issued to violators of State Implementation Plans (SIP). Because the CAA does not require the use of NOVs for NESHAP sources, an NOV issued to a NESHAP source is nothing more than an informal warning.

Section 113(a)(3) orders may be issued to violators when they are found out of compliance with substantive requirements while removal work is ongoing. In order to assist the Regions in this procedure, a generic 113(a)(3) order which can be issued in one day is presented in APPENDIX M. Also included in APPENDIX M is a generic temporary restraining order which can be used if the situation is considered serious enough. Section 113(a)(3) orders can require immediate compliance, and although EPA cannot collect penalties with the order, the issuance of a §113(a)(3) order subjects the source to penalty liability in a judicial action under §113(b). Section 113(a)(3) orders should also be issued to sources which continuously submit deficient notifications. Such an order prohibits further submittal of deficient notifications, and makes the contractor liable for penalties pursuant to the order as well as the NESHAP itself. Issuing an NOV in this situation does comparatively little. An example of a combined Section 113(a)(3) order/Section 114 Information Request is shown in Appendix D.

II. Judicial Actions

Judicial action under the asbestos NESHAP can take the form of a civil action as provided for in Section 113(b), or a criminal action as provided for in Section 113(c). EPA can also pursue a civil action under Section 303, however, no Region has done this to date. The September 28, 1987 memorandum entitled "Procedures for Pre-Referral Settlement of Asbestos Demolition and Renovation Cases" (Appendix E) outlines procedures for negotiated settlement through judicial consent decree. These procedures are designed to facilitate

NOV is used here as a generic term to include letter of violation, finding of violation, notice of deficiency, etc. Formal

Judicial

Report

Administrative

- 303 - 113a

Cross Program

- 17003 of RCRA

VHSO

- 1104, 106(a), 107 of CERCLA!

TOSCA

FIGURE 1

1

the settlement process and enable Regions to increase judicial enforcement without straining resources.

EPA may bring a \$113(b) civil action for injunctive relief requiring compliance with the regulations. EPA may also seek civil penalties of up to \$25,000 per day of violation. EPA's present asbestos NESHAP penalty policy is shown in Appendix B. Although civil actions under 113(b) do not ordinarily seek immediate injunctive relief, the broad grant of authority to "commence a civil action for a permanent or temporary injunction" encompasses temporary restraining orders and preliminary injunctions. In other words, the Government could proceed under 113(b) to seek immediate compliance with the asbestos standards, as well as civil penalties, provided it can satisfy the legal standard for immediate injunctive relief.

EPA can initiate a Section 113(c) criminal enforcement proceeding when there is evidence that a person knowingly violated the asbestos demolition and renovation requirements. A conviction under the criminal provision of the Clean Air Act can result in imprisonment of up to one year and/or a penalty of up to \$25,000 per day of violation, and greater sanctions are faced for a subsequent conviction. The effective use of the criminal provisions can provide a strong message to the regulated community that EPA does not tolerate blatant disregard for the asbestos NESHAP.

III. Contractor Listing

Another useful enforcement option is contractor listing as descibed in 40 CFR \$15.10 - 16. When EPA lists a contractor that contractor cannot be awarded any contract to perform work where Federal funds are involved. Also, a listed contractor cannot be subcontracted to remove asbestos by another contractor under contract with the federal government to perform asbestos removal. Contractors convicted of criminal NESHAP violations under CAA Section 113(c) are automatically listed as provided in \$15.10 (Mandatory Listing). Under \$15.11 (Discretionary Listing) EPA can list contractors which have violated a \$113(a) administrative order, received any form of civil ruling from any court, or are the subject of a civil enforcement action from EPA. Additionally, if any person who owns or supervises a contractor firm is convicted of a criminal offense by any court, that contractor firm can be listed. Appendix K is intended to clarify the application of contractor listing. State certification requirements should require that state certification will be revoked if a contractor becomes listed.

8. Choosing Enforcement Option - When detected, each violation should be entered into the computer tracking system described in Appendix A so as to provide a record of violations listed by contractor. In order to assist in deciding when these records indicate that a particular enforcement action is appropriate, the following tables were constructed.

TABLE 1

Notification Violation	Response
No notification	113(a) order
Submittal of late notification which is not received in time to schedule inspection	113(a) order
Submittal of notification which is missing dates, location and/or amounts of asbestos	113(a) order
Submittal of an incomplete notice of removal (Minor violations)	*Enter deficiency on tracking system
Continued submittal of incomplete notifications (Minor violations)	113(a) order
Violation of Order	Civil Action

^{*} As stated previously, this is done for every violation type.

TABLE 2

Substantive Violations*

Detected during early stages	113(a) Order
of removal	
 Violation subsequently corrected 	Consider Civil Action
ii) Violation continues	Civil Action
iii) Unsure whether or not	Issue 114 Information
violation corrected	Request and Consider Civil Action
Detected after removal or during final stages of removal	Issue 113(a) Order while writing civil referral package

^{*} Substantive violation is a work practice violation detected during inspection or from a \$114 information request response.

- 9. Assessing Penalties The Asbestos Demolition/Renovation Penalty Policy (Appendix B) provides the framework for assessing penalties for settlement purposes under the asbestos NESHAP. Consistent with the comprehensive penalty policy, the Region should determine a "preliminary deterence amount" by assessing an economic benefit component and a gravity component. This amount may then be adjusted upward or downward by consideration of other factors, such as degree of willfulness and/or negligence, history of noncompliance, and ability to pay. As stated by the Inspector General's office, when resolving litigated cases contractors should be required whenever appropriate to provide a list of asbestos removal jobs for which the contractor did not get the bid, and the names of the successful contractors. Also, delegated agencies should be required to document any mitigating factors that result in penalty waivers or reductions.
- 10. Reporting The format for SPMS reporting has been revised. The SPMS form shown in Appendix G provides the format which will now be required for SPMS reporting. Violations will be reported in terms of substantive violations (work practice violations dicovered during inspection or from a \$114 information request response) and notification violations (late notices, notices lacking dates, location and/or amount of asbestos in proper units). Also, the number of sources inspected will be reported. When reporting the number of referrals, include only those civil and criminal litigation actions initiated in the same Quarter as the SPMS report indicates. Collection referrals are not to be included.

Regions must ensure that there is no double-counting of notifications. The practice of reporting two notifications (one reported by the Region, and the other by the delegated agency) for one removal activity makes it impossible to correctly assess the number of removal jobs for which notification was submitted. The number of inspections reported from the delegated agencies should consist of only those inspections meeting the criteria for a reportable compliance inspection as described in Section 4 of this document.

11. Regional Oversight - Regional Offices should implement an oversight program to ensure that the delegated agencies are performing acceptable compliance inspections, and resolving violations appropriately. Performing joint EPA-state inspections is the best method to review delegated agency inspections and establish the criteria which constitute an acceptable compliance inspection. Each delegated state's program should be evaluated to assess inspector training and safety as well. For Regions with both delegated and undelegated states, Regional inspections should be concentrated in the undelegated states. Regions should construct written reviewable inspection programs which incorporate the inspection

criteria documented in Section 4 of this document as well as the targeting system established in Section 5 of this document. Regions should also ensure that delegated states do likewise. A written assessment of each delegated agency's compliance with grant conditions including the verification of program results should be made semi-annually by the Regions.

12. Cross-Program Coordination - In addition to being regulated under the NESHAP program, asbestos is regulated under OSHA provisions, the EPA Toxic Substances Control Act (TSCA) Title I, and TSCA Title II. Under TSCA Title I, the TSCA Worker Protection Rule regulates any asbestos abatement work (removal, encapsulation, or enclosure) performed by persons employed by state, county, or local government in those states without an OSHA delegated program or an EPA approved exempt program. These states are listed in Appendix J. The Office of Toxic Substances expects to extend coverage of its Worker Protection Rule to service personnel who, in the course of operations and maintenance activities, receive exposures comparable to those experienced by private sector service workers performing work subject to OSHA.

The OSHA provisions require an 8-hour time-weighted average airborne employee exposure of not greater than 0.2 fibers per cubic centimeter of air. Engineering controls, wet methods, respirators and special clothing are required. The Worker Protection Rule imposes the same major requirements of the OSHA provisions, but differs in that the Worker Protection Rule applies solely to activities involved in asbestos abatement, in contrast to the OSHA standard which applies generally to any construction activity involving exposure to asbestos. NESHAP inspectors can help OSHA's enforcement efforts by reporting the absence of required OSHA safety measures at inspected NESHAP removal sites. To help implement such an effort the standardized NESHAP inspection checklist (Appendix H) has a section for recording the presence or absence of required OSHA measures. When the negligence of OSHA requirements are noted by NESHAP inspectors, OSHA should be notified as soon as possible. When the negligence of OSHA requirements are observed at a NESHAP site where removal work is being done by state or local government employees at one of the states listed in Appendix J, in addition to notifying OSHA, the inspector should ensure that the TSCA Regional Asbestos Coordinator (RAC) is notified as well for possible violations of the Worker Protection Rule.

Under TSCA Title II, the Asbestos Hazard Emergency Response Act (AHERA) requires local educational agencies (LEAs) to inspect school buildings for asbestos containing material, and develop and implement managerial plans. Persons designing and conducting response actions (i.e., removal, encapsulation, enclosure, or repair) in a school building must be accredited under AHERA for that activity.

EPA NESHAP and TSCA programs in the Regions should be coordinated to maximize information collection and sharing, consolidate compliance assistance efforts, and unify enforcement activities among all the Agency's asbestos programs. Pilot programs should be initiated to formally or informally coordinate NESHAP and TSCA activities in the field. In Region VII, a full-time technical assistant under the Senior Environmental Employment program of the American Association of Retired Persons (AARP) acts as liason between NESHAP and TSCA efforts. In Region X, the NESHAP coordinator and the TSCA RAC voluntarily coordinate program activities to maximize resources and provide a more unified presence to the affected public.

When a NESHAP inspector inspects a renovation taking place at a school, the inspector should ascertain whether or not site supervisors and removal workers are accredited under the EPA Model Plan required by AHERA. If AHERA accredidation requirements have not been met, this should be reported to the TSCA RAC. Considering that most TSCA inspections are performed by AARP personnel who are restricted from entering removal sites when work is ongoing, TSCA can benefit greatly from any pertinent information obtained by the observations of NESHAP inspectors inside the removal area. If the TSCA program develops a pamphlet describing AHERA record-keeping and clearing response action requirements, NESHAP inspectors can hand these out at schools they inspect. NESHAP inspectors can also verify if transportation and disposal of asbestos wastes from these schools is in accordance with NESHAP/DOT requirements. Also, NESHAP personnel should inform the TSCA section when a notification is received from a school.

EPA TSCA inspectors should notify the NESHAP Regional Asbestos Coordinator (RAC) whenever apparent violations of wetting, bagging, no visible emissions, and/or disposal requirements at NESHAP removal sites are observed by their inspectors. TSCA inspectors can also provide the NESHAP RAC with a list of known removals based on records inspections. OSHA inspectors should also notify the NESHAP RAC when potential NESHAP violations are observed.

As members of the Federal Asbestos Task Force established in June 1983, EPA and OSHA are mandated to develop a unified federal approach for the regulation of asbestos. The preceding coordination recommendations are examples of objectives which should be agreed to in writing by the EPA offices and OSHA to memorialize that this type of cooperation will take place.