

**Hill, Denise**

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**From:** Knowlton, Sarah B.  
**To:** Hill, Denise  
**Cc:** Mason, Robert W.; Katz, Ted  
**Subject:** Chapter 6  
**Date:** Monday, August 14, 1995 10:42AM

Bob:

I've made some minor edits to the document which Ted revised. I did not add the citations for the two cases in the footnotes as I couldn't find them on Lexis. Remind me - were they from the Occupational Safety and Health reporter? We can easily add them in later.

Deborah is still reviewing the ATSDR part, but there's no need to hold this up for that . We can make any changes to that section later as well.

Sarah<<File Attachment: KNOWLTON.SAR>>

Sarah Kowalton  
8/14/95

## CHAPTER 6. REVIEW OF EXISTING FEDERAL AND STATES LAWS

### CHAPTER SUMMARY

#### FEDERAL LAWS

Statutes and rules are reviewed in this Chapter that grant provide Federal agencies with relatively limited authorityies to prevent and/or control (i.e., ameliorate) remediate workers' home contamination. Table 17 displays, in summary form, the text of those statutes that appear most relevant to this topic, while Table 18 provides a brief explanation of the relevant regulations rules found in the Code of Federal Regulations. Examples of workers' home contamination in which Federal agencies exercised their statutory and regulatory authorityies are presented in the following chapter, as well as Table 19. Seven statutes were identified in the United States Code (USC), and 20 regulationsules (or standards) were found in the Code of Federal Regulations (CFR), that gave federal agencies some authority to prevent and/or control workers' home contamination. The following discussion is a summary of the findings of this review.

Under the Occupational Safety and Health Act of 1970 (OSH Act), the Occupational Safety and Health Administration (OSHA) has little direct authority to develop and promulgate standards for the purpose of preventing workers' home contamination; this authority exists only if workers are required to reside in employer-provided housing as a condition of employment. OSHA can exercise indirect prevention of this problem by promulgating standards that require workers to remove contaminants from their skin and clothing prior to leaving the workplace. OSHA consultations conducted pursuant to 29 U.S.C. 670(c) may also promote prevention of home contamination.

The OSH Act also contains provisions that permit does not provide any specific authority to the National Institute for Occupational Safety and Health (NIOSH) to conduct studies on workers' home contamination, and to make recommendations for the prevention of this problem based on the results of these studies. The same authority is granted to NIOSH with regard to miners (and non-miners involved in mining operations) under the Federal Mine Safety and Health Act of 1977 (MSH Act). However, to the same extent that OSHA regulations and actions intended to protect workers also help assure that families are protected, NIOSH research assessing work hazards enables it to identify the potential for home contamination and make preventive recommendations. While NIOSH has no specific legal authority to evaluate conditions in workers' homes, it can conduct such studies with the cooperation of workers and their families.

The Federal Mine Safety and Health Act of 1977 (30 U.S.C. 801 et. seq) MSH Act also provides the Mine Safety and Health Administration with authority comparable to OSHA's. In addition, it authorizes MSHA to regulate home contamination caused by miners who both own and operate mines in cases where the mine is solely owned and operated by the miner.

The Environmental Protection Agency (EPA) has general authority under the Toxic Substances Control Act to regulate chemicals and to obtain information on the adverse effects of chemicals, thereby permitting EPA, at least indirectly, to prevent workers' home contamination. EPA has specific authority to prevent workers' home contamination under the Asbestos Hazard Emergency Response Act of 1986 and the Residential Lead-Based Paint Hazard Reduction Act of 1992.

Under the Federal Insecticide, Fungicide, and Rodenticide Act, EPA has broad authority to regulate the application and disposal of pesticides; EPA has used this authority, at least to a limited extent, to promulgate standards that prevent workers and farm owners from contaminating their homes with pesticides.

Under the Comprehensive Environmental Responses, Compensation, and Liability Act, and the Superfund Amendments and Reauthorization Act, EPA and the Agency for Toxic Substances and Disease Registry have authority to regard workers' contaminated homes as hazardous waste release sites, thereby allowing these agencies to take those measures necessary to decontaminate workers' homes and to control the sources of workers' home contamination.

#### **STATE LAWS**

~~A comprehensive review of State laws that relate to workers' family protection was not undertaken; rather NIOSH relied on requests to the States for such information. Thirty States and Puerto Rico responded to the requests, most stating that there were no laws relating to workers' home contamination or protection of workers' family members. Thirty States and Puerto Rico responded to the requests from NIOSH for information on State laws. Most indicated there were no laws relating to workers' home contamination or protection of workers' family members. Some states reported on laws requiring the reporting of that cases of elevated BLLs (spell out) and pesticide poisonings be reported to a State agency, and other States reported that there were laws related to CERCLA on work at hazardous waste sites and for emergency responses to releases of hazardous substances. Examination of occupational safety and health laws of States with OSHA-approved occupational safety and health programs,~~

- The Residential Lead-Based Paint Hazard Reduction Act of 1992, ~~(Public Law 102-550, Title X, Subtitle B)~~ ~~{(15 USC § 2681 et seq.)}~~ ~~(1995)}~~.

Details of these statutes are discussed below under the appropriate statute headings.

Other federal statutes have permitted promulgation of requirements pertaining to prevention of workers' home contamination, protection of workers' families, and/or remedial actions should such contamination occur; these statutes include:

- The Occupational Safety and Health Act of 1970, ~~(Public Law 91-596)~~ ~~{(29 USC § 651 et seq.)}~~ ~~(1995)}~~;
- The Federal Mine Safety and Health Act of 1977, ~~(Public Law 95-164)~~ ~~{(30 USC § 801 et seq.)}~~ ~~(1995)}~~;
- The Toxic Substances Control Act, ~~(Public Law 94-469)~~ ~~{(15 USC § 2601 et seq.)}~~ ~~(1995)}~~;
- The Federal Insecticide, Fungicide, and Rodenticide Act, ~~(Public Law 92-516)~~ ~~{(7 USC § 136 et seq.)}~~ ~~(1995)}~~;
- The Comprehensive Environmental Responses, Compensation, and Liability Act of 1980, ~~(Public Law 96-510)~~ ~~{(42 USC § 9601 et seq.)}~~ ~~(1995)}~~;
- The Superfund Amendments and Reauthorization Act of 1986, ~~(Public Law 99-499)~~ ~~{(42 USC § 9601 et seq.)}~~ ~~(1995)}~~.

The sections of these statutes related to workers' home contamination have been extracted from the USC and are presented in Table 17; this table also lists citations for case law that has developed with regard to associated with these sections.<sup>2</sup> The following discussion provides a summary of the manner in which each statute has been used to promulgate rules that address the problem of workers' home contamination.

#### REVIEW OF RELEVANT STATUTES AND RULES

##### Occupational Safety and Health Act of 1970 (OSH Act)

The purpose of the OSH Act is to protect workers while they are at their place of employment. Workers' home

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~~Note, however, that this case law will not be discussed extensively in this review.~~

contamination has been addressed only indirectly by the two principle agencies established under the OSH Act, the Occupational Safety and Health Administration (OSHA, responsible for the promulgation and enforcement of occupational safety and health standards) and the National Institute for Occupational Safety and Health (NIOSH, ~~designated to conduct health hazard evaluations in the workplace, to develop and establish recommended occupational safety and health standards, and to perform~~ responsible for research on new and emerging needed to identify and prevent occupational safety and health problems).

#### OSHA

In general, OSHA appears to have no specific authority under the OSH Act to develop rules for preventing workers' home contamination. While no court has ruled on this regulatory authority directly, OSHA's enforcement authority over employer-provided worker housing was addressed in Frank Diehl Farms v. Secretary of Labor [1983]. In this case, the employer (i.e., Frank Diehl Farms) provided employees, who were seasonal workers, with temporary housing while they were harvesting vegetables; employee use of this housing was voluntary. The housing was readily available, and little or no rent was paid by the employees for the housing; nevertheless, some employees chose to stay elsewhere. On inspecting this housing, OSHA cited the employer under the standard that regulated temporary labor camps; this standard is ~~codified at~~ published under Title 29, Code of Federal Regulations, Section 1910.142 [29 CFR 1910.142]. This enforcement action was based on an OSHA instruction interpreting the standard to apply to any housing provided by employers to employees, whether or not employee use of the housing was voluntary. The federal appellate court that reviewed this case, however, interpreted OSHA's authority differently. Finding that the term "workplace" is commonly and ordinarily defined as "the place where one must be in order to do his job," the court held that OSHA

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~~Section 20(a)(6) of the OSH Act authorizes NIOSH to conduct health hazard evaluations (HHEs). This section requires that HHEs be performed after NIOSH receives "a written request by any employer or authorized representative of employees..." Requests submitted by individual employees, members of their families, or other parties do not satisfy this requirement.~~

could enforce this standard "[only if company policy or practical necessity force workers to live in employer provided housing . . . ." This decision, therefore, implies that OSHA could cite an employer for contamination of workers' homes only if these workers were forced to reside in the housing as a condition of employment or because no reasonable alternative housing was available.<sup>4</sup>

Despite the enforcement limitations implied by the decision in Diehl, OSHA has been successful in promulgating several standards that serve indirectly to protect workers' families, as well as workers themselves. These rules include the substance-specific standards for asbestos, lead, arsenic, and cadmium. While these standards contain provisions that reduce workers' home contamination, the specific purpose of these provisions is to prevent excessive worker exposure to these contaminants (i.e., employers need not comply with these provisions unless workplace contamination exceeds the permissible exposure limits). These standards require, in part, that employers clean or replace contaminated work clothes periodically, train workers to handle and store contaminated work clothes properly, and provide shower and washing facilities for employee use after each work shift. (See Table 18 for a detailed listing of these requirements.)

Several of these standards recognize the importance of preventing workers' home contamination. For example, a statement in the preamble to the cadmium standard, ~~published in volume 57 of the Federal Register at page 42349~~

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~~While injury or death to employees resulting from workplace hazards usually are addressed under state or federal workers' compensation systems, family members who suffer health effects associated with workers' home contamination may, under some circumstances, bring tort actions against culpable employers through the appropriate state or federal courts. Even children who have been injured in utero as a result of their parents' exposure to workplace hazards have brought negligence claims against the responsible employers (see, for example, Widera v. Etteco Wire & Cable Corp. [1994] and Agnew-Watson v. County of Alameda [1994]; the outcome of these cases, however, has been mixed, and appears to depend in large part of the willingness of a court to recognize a child's claims as independent from any cause of action that could be asserted by a parent.~~

~~{57 Fed. Reg. 42349 (1992)}~~, notes that "wearing contaminated street clothing outside the worksite would lengthen the duration of the employee's exposure and could cause cadmium to accumulate in employees' cars and homes, exposing other individuals to the hazard." ~~57 Fed. Reg. 42349 (1992)~~. Later, at 57 Fed. Reg. 42350, the preamble mentions that, to prevent this contamination, the cadmium standard requires employees "to change out of work clothes, which are then segregated from their street clothes, to shower before leaving the plant, and to leave work clothing at the workplace, [which] significantly reduces the movement of cadmium from the workplace." The purpose of this provision is to limit additional worker exposure to cadmium and to "provide added protection to employees and their families."

The preamble to OSHA's asbestos standards ~~{59 Fed. Reg. 49964 (1994)}~~ recognizes the hazard of asbestos to workers' family members, stating at ~~page 41012~~ that "studies have documented that in the past workers have brought asbestos contaminated clothing home with them and thereby caused exposure and asbestos-related disease among family members." ~~59 Fed. Reg. 49964, 41012 (1994)~~. OSHA noted that this situation warranted "special consideration"; therefore, the asbestos standards for construction and shipyards [29 CFR 1926.1101 and 29 CFR 1915.1001, respectively] require that employers control the release of asbestos particles from contaminated work clothing using several different procedures depending on the type (or class) of work being performed by the employees.

OSHA's lead standards [29 CFR 1910.1025; 29 CFR 1915.1025; 29 CFR 1926.62] have similar hygiene requirements. Appendix B of these standards, entitled "Employee Standard Summary," advises that "contaminated work clothing or equipment must be removed in change rooms and not worn home or you will extend your exposure and expose your family since lead from your clothing can accumulate in your house, car, etc."

The OSHA standards addressing hazardous waste operations and emergency response [29 CFR 1910.120; 29 CFR 1926.65] have requirements for wearing protective clothing, decontaminating employees, and decontaminating or disposing of

contaminated clothing and equipment before leaving the worksite. These standards, however, contain no specific advisory information regarding contamination of workers' automobiles and homes.

OSHA's hazard communication standards [29 CFR 1910.1200; 29 CFR 1915.1200; 29 CFR 1926.59] require that employees be advised about hazards with which they work. Information on workers' home contamination may be included in Material Safety Data Sheets that accompany hazardous chemicals and be included in employee training.

#### **NIOSH**

NIOSH research authority to study occupational safety and health hazards (29 U.S.C. 669) enables it to identify instances in which there is potential for home contamination and make preventive recommendations. NIOSH is also authorized to recommend safety and health standards to OSHA (29 U.S.C. 671(c)). Operating under the same limitations as OSHA, the basis of NIOSH recommended standards has to relate directly to the protection of workers, but the recommendations may be equally effective in protecting the workers' families. Under this authority, ~~The broad research and health hazard evaluations provisions of the OSH Act authorize NIOSH to conduct studies on workers' home contamination and to make recommendations for preventing this contamination. Under its authority to develop recommended occupational safety and health standards,~~ NIOSH compiled information regarding workers' home contamination in its criteria documents for asbestos [NIOSH 1972a, 1977], beryllium [NIOSH 1972b], and mercury [NIOSH 1973]). In a ~~later~~ recommended standard on the manufacture and formulation of pesticides, NIOSH recommended that work clothing not be worn or taken home to be laundered and that the clothing be laundered by the employer [NIOSH 1978].

#### **Federal Mine Safety and Health Act of 1977 (Mine Act)**

The Mine Act at 30 USC § 802 and § 803 provides indirect authority for preventing workers' home contamination. These sections require that an employer who also is an employee in his/her workplace (i.e., an owner-miner of a mining operation) must comply with applicable safety and health rules developed under the statute by the Mine Safety and Health Administration



(MSHA). If a mine, for example, is located on the owner's home/family property, and the owner is the only miner involved in extracting minerals from the mine, the owner must provide himself/herself with the safety and health measures prescribed by the appropriate MSHA rules. Under these circumstances, compliance with the MSHA rules will reduce exposure of the owner-miner's family to mineral dusts and other mining contaminants. (Paragraph break) Having more general implications for the protection of miners' families, The Mine Act at 30 U.S.C. § Section 811 of the Mine Act grants MSHA authority to establish rules dealing with the protection of to protect miners from exposure to toxic substances and specifically grants MSHA the authority to establish rules addressing suitable protective equipment. This statute, therefore, recognizes the importance of controlling the release of mining-related contaminants, which As with OSHA, these rules can ultimately protects both the miners and their families.

Additional protection against home contamination by miners is provided implicitly in Section 877 of by the Mine Act at 30 USC § 877. This section authorizes MSHA to require that employers make sanitary and bathing facilities available at the worksite for use by miners in removing mining-related contaminants; also, these facilities must be adequate for miners to change and store their work clothes between work shifts. These requirements have been incorporated into regulations for coal mines [30 CFR 71.400-404; 30 CFR 75.1712].

NIOSH also has authority under Section 951 of the Mine Act at 30 USC § 951 to undertake health hazard evaluations of mining operations upon written request by an employer or authorized representatives of miners. This section allows NIOSH to conduct studies and research on the health effects of exposure to mining operations and to make preventive recommendations; these studies and research may include both miners and non-miners (with non-miners defined as "persons, who although not miners, work with, or around the products of coal or other mines in areas outside of such mines and under conditions which may adversely affect the health and well-being of such persons").

#### **Toxic Substances Control Act (TSCA)**

The Environmental Protection Agency (EPA) has extensive authority under TSCA to regulate chemical hazards. Under 15 USC § 2604 and § 2605, EPA can regulate the manufacturing, processing, use, distribution in commerce, and disposal of new and existing chemicals,

respectively. While another section, 15 USC § 2682, does not refer explicitly to hazards to workers' families of take-home lead, paragraph (a)(1) of this section directs EPA to "promulgate final regulations governing lead-based paint activities to ensure that individuals engaged in such activities are properly trained, that training programs are accredited, and that contractors engaged in such activities are certified." This provision states further that "[s]uch regulations shall contain standards for performing lead-based paint activities, taking into account reliability, effectiveness, and safety." A later provision of this section requires a "Study of Certification," and states that "[t]he Administrator [of EPA] shall conduct a study of the extent to which persons engaged in various types of renovation and remodeling activities in target housing...are exposed to lead and create a lead-based paint hazard on a regular or occasional basis." A subsequent paragraph of this section requires that regulations promulgated under paragraph (a)(1) of this section be amended as appropriate using the results of such a study. Should such a study find hazards to the health of workers' families resulting from the workers' lead-based paint activities, EPA is obligated to establish training and certification requirements to reduce or eliminate the risk of injury to these families.

The following provisions of the TSCA also are useful in reducing the risk of workers' home contamination: 15 USC § 2604 (requiring an evaluation by EPA of the health and environmental effects of new chemicals, and of significant new uses of existing chemicals, prior to the manufacture, or new use, of these chemicals); 15 USC § 2605(a) (mandating that chemical manufacturers and processors provide notice of unreasonable risk of injury resulting from their chemicals); 15 USC § 2607(c) (providing that chemical manufacturers, processors, and distributors maintain records of significant, adverse health effects resulting from chemicals for which they are responsible); and 15 USC § 2607(e) (imposing on chemical manufacturers, processors, and distributors a duty to report immediately information that a substance or mixture for which they are responsible presents substantial risk of injury to health).

Under 15 USC § 2605(a) (i.e., the provision of the TSCA granting EPA authority to regulate hazardous chemical substances and mixtures), EPA promulgated a standard [40 CFR 763.121] that prescribes full-scale

decontamination procedures following asbestos-abatement actions performed by state and local government workers; these asbestos-decontamination procedures are somewhat abbreviated for workers involved in small-scale, short-duration asbestos-abatement actions. Among the asbestos-decontamination procedures specified under this standard is a requirement that workers wear protective clothing, and that this protective clothing be handled appropriately to avoid release of asbestos fibers; this standard, therefore, indirectly prevents asbestos contamination of workers' homes.

#### **Asbestos Hazard Emergency Response Act of 1986**

This Act contains a provision [15 USC § 2646(b)(1)(B)(xi)] which explicitly addresses workers' home contamination. This provision requires implementation of "[h]ousekeeping and personal hygiene practices, including the necessity of showers, and procedures to prevent asbestos exposure to the employee's family." Additionally, the Act specifically requires that state plans for accrediting asbestos-removal contractors contain procedures to prevent asbestos contamination, including contamination of an employee's family. This requirement was implemented by EPA under Appendix C to 40 CFR part 763, subpart E.

#### **Residential Lead-Based Paint Hazard Reduction Act of 1992**

This Act has several provisions that indirectly protect workers' families from lead-contaminated dust in their homes. These provisions include the development of a health-based standard for lead-contaminated household dust, development of a comprehensive, lead-exposure abatement program, and studies of the sources of lead exposure among children, including the occupational contribution to this exposure. In addition to the sections of the Act presented in Table 17, the following sections may be considered relevant to preventing workers' home contamination: 15 USC § 2682(a); 15 USC § 2682(c)(2); and 15 USC § 2682(c)(3).

#### **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)**

Under 7 USC § 136(w), EPA has broad regulatory authority to establish standards that indirectly prevent contamination of workers' homes. This section authorizes the establishment of standards "with respect to the package, container, or wrapping in which a pesticide or device is enclosed for use or consumption, in order to protect children and adults from serious injury or illness resulting from accidental ingestion

or contact with pesticides or devices regulated by this subchapter, as well as to accomplish the other purposes of this subchapter." Using this authority, EPA has promulgated a number of rules that protect workers' families. These standards include: "Child Resistant Packaging," [40 CFR 157]; "Certification of Pesticide Applications," [40 CFR 171]; "Labeling Requirements for Pesticides and Devices," [40 CFR 156]; and the "Worker Protection Standard," [40 CFR 170].

The provisions of the "Worker Protection Standard" contain requirements that, at least indirectly, prevent workers' home contamination. The principal purpose of this standard is to protect workers from exposure to pesticides that are used during normal pesticide operations by the agricultural, nursery, greenhouse, and forestry sectors; with regard to the agricultural sector, this standard also requires prevention of accidental exposure of workers and other persons to pesticides. The phrase "other persons" would include family members (of both workers and the owners of agricultural establishments) who may be in the vicinity of pesticide operations. Another provision of this standard [40 CFR 170.112] requires owners of agricultural establishments to prevent workers from entering pesticide-treated areas until the pesticides have dissipated from these areas. This provision also requires that protective clothing be: worn by workers while applying pesticides; cleaned daily after use according to clothing manufacturers' instructions and instructions provided on pesticide-product labels;<sup>5</sup> cleaned separately from other clothing; and stored, after cleaning, away from contaminated areas and separately from other clothing. In addition, those who launder protective clothing must be informed of the: pesticide-contamination problem; harmful effects of pesticide contamination; correct methods of handling and cleaning protective clothing; and procedures to use in protecting themselves from contamination.<sup>6</sup> While

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~~— The standard entitled "Labeling Requirements for Pesticides and Devices" requires that labels on pesticide containers provide information regarding worker protection. These labels, however, are not required to prescribe decontamination procedures to be used on protective clothing worn after pesticide application.~~

~~— Shirts, short pants, shoes, socks, and other items of ordinary work clothing are not considered protective clothing and, therefore, are not subject to the requirements of this provision.~~

the requirements of this provision will, indirectly, do much to prevent workers' home contamination, prevention is incomplete because the owners of agricultural establishments are not required to provide this protection for themselves or members of their immediate families; the standard does, however, encourage them to do so.

The "Certification of Pesticide Applications" standard [40 CFR 171] requires certification of pesticide applicators, including farm owners and farm workers, who apply restricted-use pesticides; these applicators must be certified for each restricted-use pesticide they apply. To be certified, these applicators must be able to read and understand the pesticide-product label, and have practical knowledge of the correct use, storage, handling, and disposal of pesticides and pesticide containers. Full compliance with these certification requirements would do much to prevent workers' home contamination.

The provisions of 40 CFR part 165, authorized under FIFRA at 7 USC § 136(q), address specifically the storage and disposal of pesticide containers. If these provisions were properly implemented, the incidence of child poisoning resulting from improper disposal of pesticide containers, a serious problem in the agriculture sector, would be substantially reduced.

**Comprehensive Environmental Responses, Compensation, and Liability Act (CERCLA) and Superfund Amendment and Reauthorization Act (SARA)**

CERCLA was enacted in 1980 in response to concerns by Congress regarding hazardous-waste disposal problems [Ways and Means Committee 1980]. These concerns involved sites that contained large quantities of hazardous wastes, unsafe hazardous-waste disposal practices, and the substantial dangers to health and the environment resulting from improper hazardous waste disposal. A primary purpose of SARA, the 1986 Superfund Amendments, was to clean up the worst abandoned hazardous-waste sites and leaking, underground-storage tanks that present the most serious public health and/or environmental hazards [Energy and Commerce Committee 1986].

The primary purpose of CERCLA is to address major hazardous-waste issues and to protect the public from emergency releases of hazardous substances; however as discussed by Zirschky et al. [1987] and Zirschky [1990] several sections of CERCLA and SARA provide, at least

indirectly, protections against workers' home contamination (Table 17). These protections are inferred from: the broad definitions of "facility," "hazardous substance," "release," and "pollutant or contaminant"; the broad authorities assigned to EPA at 42 USC § 9602(a) and to the Agency for Toxic Substances and Disease Registry (ATSDR) at 42 USC § 9604(i) to designate hazardous substances; the authority of EPA and ATSDR to respond to releases of hazardous substances; and the authority of ATSDR to perform health assessments near hazardous-waste sites.

There are two occupational groups relevant to CERCLA for which workers' home contamination can be of concern. Workers who remediate (i.e., "clean up") hazardous waste sites constitute a large and mobile workforce. The nature of remediation work is such that chemical contaminants on workers' clothing can be taken home unless adequate workplace safeguards are in place. The second occupational group is emergency responders. ATSDR surveillance data indicate that chemical emergencies are frequent, resulting from industrial plant mishaps, transportation accidents, and improper disposal of chemicals. Emergency responders can potentially transport chemical contaminants into the home unless clothing changes and other safeguards are effected.

The worker protection standards [29 CFR 1910.120 and 40 CFR 311] required by § 126 of SARA [29 U.S.C. 655 note] have provisions for changing and decontaminating work clothing, providing change rooms, and showering before leaving the hazardous waste site. If these requirements are adhered to, they should prevent contamination of the homes of hazardous waste workers homes.

There are aspects of CERCLA that make it unlikely for incidents of workers' home contamination to be the subject of direct actions by either EPA or ATSDR. These aspects include: in responding to hazard-waste releases, the highest priorities must be assigned to releases that present the largest public health threat [42 USC § 9604]; and specification of strict criteria for determining these priorities [42 USC § 9605]. Criteria to be considered in determining these priorities are: The population at risk; the harmful effects of toxic substances located at hazardous-waste sites; the likelihood that these substance have, or will, contaminate drinking water; and the potential for direct human contact with these substances.

Under these provisions, the following rules have been promulgated: 40 CFR 300, which resulted in the "National Priority List" consisting of 400 high-priority hazardous-waste sites; and 40 CFR 302, which specifies hazardous-waste substances and the reportable-release quantities of these substances (i.e., quantities of hazardous substances that, if released, may be harmful to public health and/or the environment and must, therefore, be reported to EPA). While these aspects may restrict the roles of EPA and ATSDR in prevention and control of workers' home contamination, recent case law indicates that State and Federal Courts may provide an alternate vehicle for addressing this issue under CERCLA and SARA.<sup>7</sup>

Although decontamination of workers' homes is not addressed directly under any of the above-mentioned rules, some hazardous-waste sites (Alaska Battery Enterprises, Anderson Development Company, and Borfos Nobel, Inc.) designated on the "National Priority List" have been identified as sources of workers' home contamination. As EPA and ATSDR conduct studies at other sites on the "National Priorities List," additional cases of workers' home contamination may be found as has occurred previously. Many of the chemicals noted in previous chapters as being involved in workers' home contamination are on the priority list of hazardous substances [40 CFR 302] and have low reportable-release quantities (i.e., 1-10 pounds).

#### REVIEW OF STATE LAWS

In its requests for information (Appendices 2 and 3), NIOSH requested information on State and local laws that were relevant to preventing workers' home contamination. The responses from State agencies to these requests are summarized in Tables 20 and 21. Agencies from thirty States and Puerto Rico responded to the requests for information. Of these, 11 States and Puerto Rico replied that there were no State statutes or rules related to workers' home contamination. Arizona, California, and Idaho reported that

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~~In Vermont Poultney v. Staco, Inc. [1988], the court awarded the plaintiffs (the state of Vermont and the village of Poultney) nearly \$74,000 in decontamination costs incurred by the plaintiffs in responding to a release of mercury from the defendants' thermometer-manufacturing facility into Poultney's sewer system. In finding the defendants liable, the court stated that "the defendants released mercury to the environment through the movement of workers to and from the...facility in [the village of] Poultney."~~

laws existed for reporting BLLs and/or pesticide poisonings. Michigan, Maine, and Pennsylvania reported the existence of laws related to CERCLA on hazardous waste sites and emergency response to releases of hazardous chemicals. Oregon reported that, while it had no laws or regulations dealing directly with workers' home contamination, it had many occupational safety and health regulations that help to prevent workers' home contamination.

About half of the States and Puerto Rico have State Occupational Safety and Health Programs approved by OSHA. To be approved the State's occupational safety and health laws have to be at least as protective as the Federal law. To determine whether any of these laws had more stringent requirements, the Occupational Safety and Health laws of the States with approved programs were obtained and evaluated from this aspect. Most of the State laws were identical to Federal laws in regard to workers' family protection; however, the State OSHA laws apply to State and local government employees. Thus in States that have their own OSHA, families of these employees are benefited by requirements in the State arsenic, asbestos, cadmium, and lead standards, for showering and changing clothes at work, in contrast to State and local government employees in the remaining States.