

IV. B. 27. Hazardous and Special Waste

- a) Background. Concern about the mitigation of hazardous substance threats to the environment is a direct result of living in the modern industrial era. It is especially strong in the United States because of its historical forefront with the highest chemical technologies. The U.S. Congress has been immersed in the issues since the initial public outpouring of concern with incidents such as the Love Canal where large-scale dioxin contamination was determined to be negatively impacting human health in nearby residential neighborhoods.



Two workers assemble a napalm bomb at the Rocky Mountain Arsenal, near Denver, Colorado, for the Korean War in 1951.

The U.S. Congress has passed several key pieces of legislation to attack the problems from different angles since the 1970s. Some of the better known Acts include the following:

Resource Conservation and Recovery Act of 1976 (RCRA):

(Established the “cradle-to-grave” concept of hazardous waste stream monitoring and regulation)

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (“Superfund”):

(Established a perpetual Federal fund dedicated to remediating congressionally selected, existing, highly contaminated sites such as the Rocky Mountain Arsenal in Denver, Colorado)

Superfund Amendments and Reauthorization Act of 1986 (SARA):



(Established the concept of “Community Right to Know” in the United States as a follow-up to the 1980s Union Carbide chemical plant disaster in Bhopal, India)

There are many other pieces of Federal legislation, which target: the use of herbicides and pesticides; the oil industry, etc.

“Hazardous waste” and “special waste” (together referred to in this document as “hazardous waste”) fall under the two most restricted categories of wastes as classified by the EPA from most to least immediately detrimental to the environment:

- Hazardous waste: (toxics, ignitables, explosives, corrosives, biological hazards, radioactives, and others)
- Special waste: (certain less hazardous petrochemicals, asbestos, and others)
- Solid waste: (all other waste streams)

Rural Development personnel involved in loanmaking and property disposition actions should endeavor to insure that regulated hazardous waste has been properly identified and mitigated. This would involve the accomplishment of proper “due diligence” actions, as appropriate, such as:

- (1) **Transaction Screen Questionnaires (TSQs):**
(Initial in-house environmental screening utilizing a standard American Society of Testing of Materials [ASTM] multi-page form)
- (2) **Phase 1 Site Assessment (P1SA):**
(Follow-up to a TSQ, if necessary, which would be performed by a contracted environmental professional to initially screen for environmental pollution and disposal hazards)
- (3) **Phase 2 Site Assessment (P2SA):**
(Follow-up to a P1SA, if necessary, which would categorize waste streams, via laboratory analysis, for eventual disposal)



(4) **Phase 3 Site Remediation (P3SR):**

(Follow-up to a P2SA which would accomplish a site clean-up; transportation of hazardous wastes to an EPA-licensed Treatment, Storage, and Disposal [TSD] facility; and ultimate disposal)

Such actions would pertain to properties being considered for lending assistance by Rural Development and would normally be accomplished by the applicant prior to Rural Development's commitment of lending assistance to secure a reasonable "comfort level" by the Agency that such hazards are not present or have been properly mitigated, if present.

Such actions would also pertain to properties being considered for foreclosure by Rural Development and would normally be accomplished by the borrower prior to Rural Development's commitment to resecuring direct title to the subject property to again secure a reasonable "comfort level" by the Agency that such hazards are not present or have been properly mitigated, if present.

The Rural Development State Environmental Coordinator should be contacted, for follow-up, regarding any instance where a TSQ or an already accomplished P1SA has indicated the presence of hazardous materials at a property being considered for loanmaking or foreclosure.

b) Governing Regulations.

(1) Federal.

- (A) Resource Conservation and Recovery Act of 1976, as amended.
- (B) Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended.
- (C) Superfund Amendments and Reauthorization Act of 1986.
- (D) Emergency Planning and Community Right-to Know Act of 1986.
- (E) Federal Insecticide, Fungicide, and Rodenticide Act.
- (F) U.S. Executive Order 11514, Protection and Enhancement of Environmental Quality.
- (G) National Environmental Policy Act, 42 U.S.C. 4321.
- (H) Title 7, Part 1b and 1c, Code of Federal Regulations, U.S. Department of Agriculture's National Environmental Policy Act.

(2) State.



- (A) Title 25, Article 8, Colorado Revised Statutes 1973, as amended, the Colorado Water Quality Control Act.
 - (B) Title 25, Article 1, Colorado Revised Statutes 1973, as amended.
 - (C) Colorado Solid Waste Act, Section 30-20-101 et seq., Colorado Revised Statutes, and implementing regulations, 6 CCR 1007-2.
 - (D) Colorado Hazardous Waste Act, Section 25-15-101 et seq., Colorado Revised Statutes.
- c) Policy. Uncontrolled hazardous and special waste presents serious environmental risks requiring proper management to prevent serious degradation of air, water, soil, etc. as well as extreme danger to plant and animal life. “Hazardous” wastes are termed such within the chemical regulatory industry based on materials bearing certain dangerous characteristics: toxicity, corrosiveness, flammability, and toxicology. Such substances include caustics, pesticides, flammables, corrosives, explosives, herbicides, and biological agents.

“Special” wastes are considered a somewhat less relative risk to the environment, somewhere between solid waste and hazardous waste. Asbestos and crude oil are examples. Special wastes are, therefore, afforded a different protocol for disposal. Special wastes, for instance, must be disposed of in at least an EPA-approved special waste landfill.

Hazardous and special wastes entail special handling, containment, transportation, and disposal procedures, which have traditionally been heavily regulated by federal and state governments.

Federal Objective. The U.S. Environmental Protection Agency has been charged with the primary Federal responsibility for overseeing hazardous and special waste problems primarily under Subtitle C of the Resource Conservation and Recovery Act. EPA has coordinated with other Federal agencies, such as the Occupational Safety and Health Administration (OSHA) and the Department of Transportation (DOT), and has promulgated scientifically derived standards for achieving “safe” levels (sometimes higher than background levels) for tens of thousands of hazardous chemicals with respect to exposure to humans, waste streams, transportation, and disposal. EPA has also been charged with authorizing and monitoring State programs with similar responsibilities.

EPA or authorized states monitor facilities which generate and dispose of hazardous and special wastes in a “cradle to grave” fashion via the Resource Conservation and Recovery Act. EPA identifies and oversees the clean-up of sites with past major pollution incidents via the Comprehensive Environmental Response, Compensation, and Liability Act (commonly referred to as “Superfund”).

The Federal presence appears warranted because such matters easily cross State boundaries with respect to commerce, environments, transportation systems, etc.



State Objective. The State of Colorado is authorized by federal legislation to establish hazardous and special waste control programs within the State in lieu of the federally managed program. This is administered in Colorado by different divisions within the Colorado Department of Public Health and Environment. Ultimately entities involved with these types of substances must obtain special permits from the State of Colorado to operate facilities; store, transport, and dispose in regard to these materials.

Rural Development Objective. Rural Development should not authorize, fund, or carry out any proposed action, which would adversely affect the environment through an illegal procedure of hazardous or special materials management. Whenever a proposed action is determined to have the potential for impacting a Federal or State controlled waste management plan, the Colorado Department of Public Health and Environment should be consulted as early in the environmental impact analysis process as possible to evaluate the possible consequences and protection requirements concerning the action.

A major issue which surfaces with prospective properties with potentially hazardous materials is determining whether or not they are classified as wastes. Generally they should be immediately determined as wastes if they could not practically be immediately used, are releasing unacceptably into the environment, or are targeted for disposal anyway. They should then be correctly classified as hazardous, special, or solid waste and be properly disposed of. This should be done by professional experts and ultimately involves laboratory testing, special containment and packaging, special transportation procedures, and permanent storage and disposal at EPA licensed facilities. Unknown materials are analyzed and classified based on their hazardous characteristics. Crude oil laden with hazardous materials, for example, would be classified as hazardous waste, not special waste, if its hazardous characteristics exceeded EPA established maximum thresholds.

The Rural Development State Environmental Coordinator should be contacted, for follow-up, regarding any instance where a Transaction Screen Questionnaire or an already professionally-accomplished Phase 1 Site Assessment has indicated the presence of hazardous materials at a property being considered for Rural Development loanmaking or foreclosure.

Rural Development personnel also have a responsibility to report hazardous and special waste incidents of releases to the environment, if observed, when they exceed EPA minimum threshold levels which vary from substance to substance. The EPA 24-hour Hotline may be used for such occasions. Such incidents should also be immediately reported to the Rural Development State Environmental Coordinator.

- d) Classification. Federally regulated waste streams fall into four general categories (radioactive waste, hazardous waste, special waste, and solid waste) of which “hazardous and radioactive waste” are considered the most relatively dangerous.

Several federal legislative acts have defined different chemicals as “hazardous” and EPA has developed separate lists of each:



- (1) Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) - defined materials.
- (2) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - defined materials.
- (3) Resource Conservation and Recovery Act (RCRA) -defined materials.

e) Agency Jurisdiction.

- (1) Federal.

The U.S. Environmental Protection Agency (EPA) oversees the State of Colorado’s hazardous waste management activities via the Hazardous Waste Program within its Region VIII office which focuses on specific federal legislation which has been promulgated in this area. An EPA contact is:

U.S. Environmental Protection Agency
Region VIII Office
RCRA Program Management Unit
(8P-HW)
999 18th. Street
Suite 300
Denver, Colorado 80202-2466

Contact: Tom Burns, Chief, RCRA Program Management Unit @
(303) 312-6425 or 1-800-227-8917 ext. 6425

http://www.epa.gov/region08/land_waste/rcra/rcracontact.html

24-Hour Hotline Number for reporting releases to the environment:

1-800-227-8914

- (2) State.

The Hazardous Materials and Waste Management Division regulates solid waste management, treatment, and disposal facilities and hazardous waste generation, storage, transportation, treatment, and disposal. The Division assists in the cleanup of hazardous waste sites under the Superfund Program, and encourages "Brownfields" redevelopment through implementation of the Voluntary Cleanup and Redevelopment Act. The Division also provides technical assistance to the regulated community and to local agencies that must handle waste management issues and releases.

The CDPHE contact is:



Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
Denver, Colorado 80246

Contact: (303) 692-3300
(888) 569-1831 Customer Technical Assistance Line ext. 3320

<http://www.cdphe.state.co.us/hm/hmhom.asp>

Hazardous Materials Public Information Line: (303) 692-3320

- f) Location of Resource. The U.S. Environmental Protection Agency maintains lists of hazardous wastes and special wastes, sites with hazardous and special waste streams, sites storing hazardous and special wastes, sites involved with the destruction of or the recycling of hazardous and special wastes, and sites involved with past pollution incidents (i.e. “Superfund” sites). The list of hazardous materials is ever-growing. The list of sites involved with generation, storage, treatment, and disposal of hazardous substances varies from year to year as old ones are dropped and new ones are added. All lists are available from the Region VIII EPA Office. It is recommended that the EPA 24-hour Hotline number be utilized if a significant release of hazardous or special waste is suspected.
- g) Other References.
- (1) U.S. Environmental Protection Agency. *“Search for Superfund Sites by Name and Location”*

(Web-site)

<http://www.epa.gov/superfund/sites/query/basic.htm>
 - (2) U.S. Environmental Protection Agency. List of RCRA topics

(Web-site)

<http://www.epa.gov/epaoswer/osw/topics.htm>