



CHAPTER 8

CLEANUP, DISPOSAL, AND CLEARANCE

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Learning objectives

In this chapter you will learn

- the importance of good cleanup
- what cleanup materials to use
- how to do daily cleanup
- how to do final cleanup
- what the clearance levels are
- how to handle waste
- how to dispose of hazardous waste.

Instructor's notes

The purpose of this chapter is for trainees to understand that a successful lead abatement job depends on quality cleanup work. The housing unit must be able to pass clearance dust levels.

An instructor with work experience in lead abatement will give credibility to the importance of cleanup. The instructor also needs to know the regulations for hazardous waste and be able to explain them in everyday language.

Make sure you also cover any additional information that may be required in your state on cleanup and waste disposal.

On the next page is a menu of options for teaching the session on cleanup and disposal. It is suggested that you allow one hour to teach this chapter.

Training methods

It is recommended that you do all of the following:

- | | |
|------------------------|------------|
| A. Skit and Discussion | 20 minutes |
| B. Lecture/Slides | 20 minutes |
| C. Video Segments | 20 minutes |

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**Skit and discussion****(20 minutes)**

Purpose: This exercise allows the class to discuss safe work methods when conducting lead abatement work.

Materials: Use the skit on page 8-4 in the student manual (reprinted below).

Directions: Ask for two volunteers from the class to do the skit. Give them a little time to review it before doing it. (Review your role as a facilitator on page Intro-14.) Discussion questions are on the next page.

Skit: A home abatement job

It's 4:30 in the afternoon, and Paul and Pam are just finishing cleaning up for the day.

Pam: Hey, I can see a little bit of dust left on the floor. I'll bring in the shop vacuum and clean it up.

Paul: Don't do that. Use the HEPA vacuum.

Pam: Didn't you hear that the HEPA vacuum broke this morning? Besides, we already did a thorough vacuuming yesterday.

Paul: Why don't we spray it down and then sweep it up?

Pam: That will take too much time. I've got a date tonight and I want to get out of here before the next shift comes in and removes the poly. Don't worry about it. I'm gonna vacuum and when I'm done it'll look really good.



Discussion questions

1. Is it okay to use a regular shop vacuum to clean up the lead dust as long as you're inside the contained area?

No. It doesn't matter that you are inside the contained area. The shop-vacuum will just blow the lead dust out without capturing it. The lead dust is too small to be caught by a shop-vacuum.



2. If you are inside of the enclosed area, do you need to worry about kicking up the lead dust?

Yes. The lead dust will settle on more surfaces and will also be in the workers' breathing zone.

3. What makes lead-paint dust and chips so hard to clean up?

Lead dust tends to stick to surfaces and is not always visible to the naked eye. It is small in size and yet heavy enough so it will settle downwards.

4. If Pam uses the shop vacuum, how could it affect the people on the next shift?

The next shift plans on taking up the poly. They will assume that proper, daily cleanup has occurred. Because cleanup wasn't done properly, they may spread the lead dust around as they remove the poly.

How could it affect the next person who uses the shop vacuum?

The shop vacuum is contaminated with lead dust. The next person who uses it will get exposed to lead dust and may also spread the lead dust to other areas.

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Lecture/Slides

Purpose: To provide information on daily and final cleanup, the use of dust levels for final clearance and how to dispose of waste safely.

Materials: Slide projector, slides, flip chart and markers

Directions: Before starting the slides on a flip chart, write the question, “What are the characteristics of lead dust?” Let the class brainstorm answers with you writing them down. (Responses include: very fine, may not be visible, sticks to surfaces, needs to be rubbed off, and collects and packs into cracks.)

Another question you can write on the flip chart is “What materials are needed for cleanup?” (Answers are listed in the Student Manual on page 8-6.) Review what cleaning is done before, during, and after abatement.

Make sure you involve the class in the slide presentation. Ask questions of the class to keep them involved.

Try not to read from the supplied notes about each slide. Using your own words will make it more interesting for the class. You can add any personal experience that you may have that is relevant. Notes are supplied for slides that are a part of this training kit. The notes include a copy or description of each slide.

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Hands-on: final cleanup

Preparation

Final cleanup is the most important part of the lead abatement job. Time must be provided for the students to practice final cleanup.

Setup

1. The hands-on area, including the decontamination areas
2. Table
3. Tools, equipment, and materials

Tools and equipment

Whatever remains in the hands-on area after the daily cleanup will be there for this exercise. Removing these objects will be a part of the set up for final cleanup.

HEPA vacuum

3 Buckets

all-purpose cleaner (or lead-specific cleaner) and wash container

Rags

Mops

Resealing materials

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**Hands-on practice****Objectives**

By the end of this rotation, trainees will

- state why final cleanup is so important;
- choose the most appropriate method for final cleanup and identify how tracking; of lead dust will be minimized;
- identify and put on the proper protective gear;
- demonstrate appropriate set up for the clean up;
- demonstrate appropriate sequence of HEPA vacuuming;
- demonstrate proper wet wash sequence;
- demonstrate second HEPA vacuum sequence;
- demonstrate appropriate waste disposal;
- state the clearance levels required.

Directions

1. Have trainees state why the final cleanup is important.
2. Have the trainees design a plan for final cleanup.

Make sure that they address the problem of tracking lead dust in the plan. Have the trainees discuss the plan which they have designed. Make sure that their plan coincides with Chapters 5 and 8 in the student manual.

3. Provide MSDSs for the cleaning product used and have the students choose the required protective gear for lead and the cleaning agent.
4. Have the trainees break into two groups.

Each group should pick a foreman. Have one group be responsible for cleaning the tools and station areas while the other group sets up for the final cleanup. Any waste that remains is to be separated and thrown out in sealed poly bags or wrapped in poly.

5. Stage 1 of final cleanup: special cleaning

Have trainees demonstrate the appropriate sequence of using a HEPA vacuum. They should vacuum all surfaces.

Have the trainees wash all surfaces with lead cleaner and then rinse them. Have them use the four-step system. Make sure trainees follow the proper sequence of steps. (See Chapter 5 in the student manual on “Special Cleaning.”)



Tell the trainees that the washed surfaces would need to dry before the next step of final cleanup. Ask the trainees what the next step would be. (Answer: A second round of HEPA-vacuumping all surfaces.) Have the trainees do the final HEPA vacuumping in the proper sequence of areas.

Have trainees throw away cleaning items in sealed poly bags. This completes stage 1. After the first stage of final cleanup, you may have to perform dust wipe clearance tests.

6. Stage 2 of Final Cleanup: Painting and resealing

Discuss “visual inspections.” Discuss the materials used for resealing abated areas.

7. Stage 3 of Final Cleanup: Repeat special cleaning

Discuss the need to repeat the “HEPA-vacuum, wet wash with cleaner, HEPA vacuum” process after all abated areas are resealed.

8. Discuss final inspections and clearance dust wipe tests.

Ask them what are the acceptable dust levels for job clearance after final cleanup is completed. (See student manual, Chapter 8, page 8-13.) Remind students that final cleanup is the most important part of an abatement job. Many abatement jobs fail because final cleanup was done poorly. If lead dust is left behind, the families who return to their homes can be lead poisoned. Doing final cleanup well is crucial to preventing lead poisoning.

**Invisible dust/black light demonstration**

There are products on the market that are usually used by police departments to train staff how not to disturb the scene of a crime. It is a dust that can be sprayed or dusted on objects and cannot be seen unless the object is under a black, fluorescent light.

Purpose: These products can be used to demonstrate how lead dust can contaminate our clothes and be brought everywhere without our knowledge. It illustrates how easily lead dust can travel and the importance of protective clothing and proper decontamination procedures.

Materials

“Clue-Spray” (Product # UVA-201) the invisible dust can be ordered from

Sirchie Finger Print Laboratories
100 Hunter Place
Youngsville NC 27596
Phone: (919) 554-2244 or (800) 356-7311
Fax(800) 899-8181
email: Sirchie@mindspring.com
website: www.sirchie.com

MSDS for “Clue-Spray”

Fluorescent black light (available in some hardware stores)

Directions:

1. Spray the product on all hand tools such as scrapers. (Do not apply it to the heat gun.) You can also sprinkle the product on the surfaces that are abated during the hands-on exercises and on the poly laid on the floor during setup. Do not let the class see you do this. If possible, have it on the tools at each work station.
2. Each instructor should be aware of the work practices of the trainees and note if anyone takes off his or her gloves.
3. After a third of the class has gone through the decontamination process, take them into a separate room. With the lights out, turn on the black, fluorescent light. It will show if any “invisible dust” is on a trainee. It shows up as a color—green, blue, or orange. Places to look are on trainees' faces, hands, and hair.
4. Discuss with the trainees how the “invisible dust” could have gotten there and how lead dust can travel in the same manner.
5. If trainees ask what is in the “invisible dust,” be prepared to share the information on the MSDS.



For more information

These publications have more information on the topics covered in this chapter. You should have a copy of the publications marked with a star (*). You can order your own copies by calling 1-800-424-LEAD.

*EPA, Lead: *Identification of Dangerous Levels of Lead; Final Rule*, 40 CFR Part 745, (January 2001).

*EPA, *Regulatory Status of Waste Generated by Contractors and Residents from Lead-Based Paint Activities Conducted in Households*, Interpretive Memorandum (July 2000).

EPA, *Temporary Suspension of Toxicity Characteristic Rule for Specified Lead-Based Paint Debris*; Proposed Rule; 40 CFR Part 745, Subpart P (December 1998).

*HUD, *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* (June 1995).

RCRA Hotline for information on waste disposal: 1-800-424-9346.

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