Module Overview
This module covers the safety procedures and considerations for operating hydroblasting equipment for cleaning and surface preparation. Confined space entry and scaffold safety are also covered. The basics of setting up and operating hydroblasting equipment are explained.

Objectives
Upon completion of this module, the trainee will be able to do the following:
1. Know the proper safety procedures for hydroblasting.
2. Explain the requirements for job-site setup for hydroblasting.
3. Perform the basic hookup for cleaning with a hydroblaster.
4. Perform job-site maintenance on dump valves and lances.
5. Identify types of hydroblasting equipment.

Performance Tasks
Under the supervision of the instructor, the trainee should be able to do the following:
1. Explain the proper safety procedures for hydroblasting.
2. Describe the requirements for job-site setup for hydroblasting including assembly of all hoses, valves, lances, and equipment.
3. Demonstrate the correct and effective use of flex and rigid lances, line moles, shotguns, and accessories.
4. Demonstrate the proper care of equipment and proper job site housekeeping and safety.
5. Identify types of hydroblasting equipment and its uses, including 20,000 psi equipment.

Materials and Equipment
Multimedia projector and screen
Computer
Hydroblasting PowerPoint® Presentation Slides
Whiteboard/chalkboard
Markers/chalk
Pencils and paper
Objects for hydroblasting demonstration:
   Dummy with a waterproof suit
   Dummy with body armor
   Wood
   Painted wood
   Concrete
   Metal
Company’s safety manual or other safety materials on hydroblasting
Detection meters
Personal protective equipment (PPE)
Set of armor
Waterproof clothing
Ear protection
Face protection

   Standard PPE for working in a confined space
   Waterproof physician’s card
   Decibel meter
   Company safety policy on confined space entry
   Literature on personnel platforms
   Personnel platform operator’s manual
   Line mole
   Typical pumps
   Typical foot pedal dump valve
   High-pressure hose
   Several types of lances
   Moleing frame
   Jetting heads
   Surface cleaners
   Various types of nozzles
   Pre-task assessment form
   Pictures of typical job sites
   Safety video(s) (optional)
   TV with VCR/DVD player (optional)
   Copies of Quick Quizzes*
   Module Examinations**
   Performance Profile Sheets**

* Located at the back of this module.
** Download these materials from the IRC using your access code.
Safety Considerations

Ensure that the trainees are equipped with appropriate personal protective equipment and know how to use it properly. This module requires trainees to perform hydroblasting. Ensure that all trainees are briefed on safety procedures including how to properly inspect the equipment and job site before operations, how to operate the dump valve and other safety devices, and don the appropriate personal protective equipment.

Teaching Time For This Module

An outline for use in developing your lesson plan is presented below. Note that each Roman numeral in the outline equates to one session of instruction. Each session has a suggested time period of 2½ hours. This includes 10 minutes at the beginning of each session for administrative tasks and one 10-minute break during the session. Approximately 20 hours are suggested to cover Hydroblasting. You will need to adjust the time required for hands-on activity and testing based on your class size and resources. Because laboratories often correspond to Performance Tasks, the proficiency of the trainees may be noted during these exercises for Performance Testing purposes.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Planned Time</th>
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<tbody>
<tr>
<td><strong>Sessions I and II. Hydroblasting Safety</strong></td>
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<tr>
<td>A. Introduction</td>
<td>____________</td>
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<tr>
<td>B. Industrial and Legal Cautions</td>
<td>____________</td>
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<td>C. Confined Spaces</td>
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<td>D. Scaffolds</td>
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<td>E. Laboratory</td>
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<tr>
<td>Have trainees practice explaining proper safety procedures for hydroblasting. This laboratory corresponds to Performance Task 1.</td>
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| Session III. Equipment | |
| A. Hydroblasting Equipment | ____________ |
| B. Hydroblasting Applications | ____________ |
| C. Laboratory | ____________ |
| Have trainees practice identifying types of hydroblasting equipment. This laboratory corresponds to Performance Task 5. | |

| Session IV. Setting Up | |
| A. Personnel | ____________ |
| B. Setup | ____________ |
| C. Laboratory | ____________ |
| Have trainees practice describing the requirements for job-site setup for hydroblasting. This laboratory corresponds to Performance Task 2. | |

| Sessions V through VII. Operating Hydroblasting Equipment | |
| A. Shotgunning | ____________ |
| B. Pipe | ____________ |
| C. Tanks | ____________ |
| D. Cleanup | ____________ |
| E. Laboratory | ____________ |
| Have trainees practice using flex lances, line moles, and shotguns. This laboratory corresponds to Performance Task 3. | |
| F. Variances | ____________ |
| G. Ultrahigh-Pressure Hydroblasting | ____________ |
| H. Laboratory | ____________ |
| Have trainees practice demonstrating the proper care of equipment and job site. This laboratory corresponds to Performance Task 4. | |
Session VIII. Review and Testing

A. Review

B. Module Examination
   1. Trainees must score 70 percent or higher to receive recognition from NCCER.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.

C. Performance Testing
   1. Trainees must perform each task to the satisfaction of the instructor to receive recognition from NCCER. If applicable, proficiency noted during laboratory exercises can be used to satisfy the Performance Testing requirements.
   2. Record the testing results on Training Report Form 200, and submit the results to the Training Program Sponsor.