



WASHINGTON DEPARTMENT OF ECOLOGY

Spill Prevention, Preparedness and Response

OIL-HANDLING TRAINING AND CERTIFICATION GUIDANCE FOR CLASS 1 FACILITIES

Chapter 173-180 Washington Administrative Code (WAC)

The Facility Oil Handling Standards Rule, Ch. 173-180 WAC (the Rule), requires owners and/or operators of Class 1 facilities to prepare and implement a training and certification program. Reducing the risk of oil spills due to human error is the goal.

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Introduction

One of the most effective ways to prevent oil spills during transfer operations is ensuring operators are well-trained in the facility's transfer procedures. Each year, human error is a leading source of oil spills occurring in Washington State and around the world. Errors include:

- Poor knowledge of operations.
- Violations of procedures.
- Poor communication during oil transfers.
- Improper monitoring techniques.
- Inattention.
- Drug or alcohol abuse.
- Overtired or overstressed employees.
- Lack of emergency preparedness.

The Facility Oil Handling Standards Rule, Ch. 173-180 WAC (the Rule), requires owners and/or operators of Class 1 facilities to prepare and implement a training and certification program. Reducing the risk of oil spills due to human error is the goal.

This guidance will help you develop training and certification programs and document training efforts. It will also provide a framework for Ecology reviewers to evaluate those efforts.

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Part 1: The Facility Training Program

What are the key components of an effective oil handling training program?

Your oil handling training program should focus on developing and maintaining your employees' competency in performing oil handling tasks. Additionally, employees should understand:

- Why oil spills happen.
- What their role is in oil spill prevention.
- How to manage abnormal and emergency operations when they occur.

To accomplish this, include the following key components in your program:

- **Management Support.** Emphasize your company's commitment to safety and environmental compliance. Your program should stress that you expect employees to follow the company's oil spill prevention procedures and plans, and properly operate oil transfer equipment.
- **Development of an Environmental Ethic.** Include the environmental and public health consequences of oil spills in your program. This will help foster an attitude that oil spill prevention is a high priority.
- **Clearly Written Operating Procedures.** Your operations manual, as well as any other written procedure for specific oil handling functions, must be written in a clear, accessible style. Your operators will use these written procedures on a daily basis.
- **Clear Training and Performance Objectives.** Your employees should have a clear understanding of your company's training objectives. Include a list of:

- Skills or tasks they are expected to learn and/or perform.
 - The training method and number of hours of training required for each.
- **Ample Content.** Ensure your training program adequately addresses all topics pertinent to transfer, storage, handling, and monitoring oil at your facility. Details should include at least the following:
 - Training on the entire transfer procedure.
 - Knowledge of all equipment and personnel involved.
 - Required preventative maintenance of equipment.
 - **Effective Training Delivery.** Your training program must specify the training methods used to deliver consistent up-to-date material. Some effective training methods include:
 - Classroom instruction.
 - Computer-based training.
 - Videos.
 - Workbooks.
 - Performance-based training.
 - On-the-job training.
 - Mentoring.
 - Competency checking.

Competent and experienced trainers are essential to an effective training program.

- **Drills and Exercises.** Drills and exercises give your employees the chance to practice the entire oil handling process. They also allow employees to practice your facility's procedures and policies for abnormal and/or emergencies situations.
- **Evaluation of Employee Competency.** Your training program should provide a method to determine two things: 1) Is your employee competent in his/her job? 2) Does your employee understand the material presented in the training? For example,

a combination of written testing and hands-on performance review are effective evaluation techniques.

- Judge the written tests against a pass/fail standard.
 - Develop written standards for job performance reviews to ensure evaluations are uniform and comprehensive.
- **Employee Evaluation of Testing.** Your program should include a method to use employee evaluations of their training to improve your company's training process.
 - **Maintenance of Training Records.** Records should be specific and include:
 - The employee's name.
 - Training date.
 - Training content.
 - Hours of training.
 - Signatures of the supervisor, trainer, and employee.

Who should receive Oil Handling Training?

You are responsible for identifying the specific position titles subject to your oil handling training and certification requirements.

Consider these questions as you determine which positions are involved in your oil handling training program:

- What functions involve oil handling, storage, transfer or monitoring at your facility?
- Who performs these functions?
- Who supervises the personnel that perform the functions?
- Who manages these operations?
- Who maintains the equipment used in these operations?

- Do contractors perform any oil handling functions? If so, they are subject to the same oil handling training requirements as facility personnel.

What are the personnel definitions?

- **Key.** Personnel in positions with direct responsibility to perform or oversee oil handling operations at the facility. Or, a job function where typical human errors can cause or increase the risk of oil spills. Examples of key positions are the Facility Person-In-Charge (PIC), point of transfer watchman, and dock supervisor.
- **Operations.** Personnel directly involved in oil handling activities. This could include the PIC, storage tank operators, pipeline operators, and oil transfer watchmen.
- **Supervisory.** Personnel involved in directly supervising oil handling personnel or implementing policies and procedures for oil handling activities.
- **Management.** Personnel directly involved in managing oil handling operations at the facility and/or setting oil transfer operation policies and procedures.
- **Maintenance.** Personnel directly involved in maintaining and repairing the equipment used for oil handling activities.
- **Indirect Operations.** Personnel with involvement in onsite activities which, due to the potential for impacts to nearby oil handling operations may increase the risk of an oil spill. An example would include construction personnel.

What are the requirements for the training program?

Your training program must be developed and maintained in written form. You are encouraged to modify or apply existing training programs to meet the rule requirements. Your program must identify for each position:

- Specific initial classroom training required.
- Hours of instruction required.
- Required on-the-job training.
- Required continuing education and refresher training.

You decide what is appropriate for each position given your facility's training needs and human error risks.

If you have personnel who do not speak English, you must provide training in a way that allows them to understand the material.

What topics are required by the rule?

Your training program for all classes of personnel should focus on building competency in oil handling procedures. Specifically, the following matrix summarizes the minimum required core topics for the different classes of personnel.

Matrix of core topics required for different personnel categories.

	Operations & Supervisory Personnel	Management Personnel	Maintenance Personnel	Indirect Operations	
Overview of all oil handling, transfer, storage, and monitoring/leak detection operations at the facility.	√	√	√	√	
Awareness of local environmental sensitivity and oil spill impacts.	√	√	√	√	
Drug and alcohol use awareness.	√	√	√	√*	
Major components of the facility's oil spill prevention plan, operations manual, and oil spill contingency plan.	√	√	√		
Decision-making for abnormal operating events and emergencies, including safe shutdown conditions, responsibilities, and procedures.	√	√	√		
Overview of applicable oil handling, spill prevention, and response laws and regulations.	√	√	√		
Safe use and handling of response equipment, including but not limited to containment, personal protection, and recovery equipment.	√				
Operating procedures and checklists specific to the trainee's job function.	√				
Problem assessment, including recognition of human factor risks and how they can be minimized.	√				

	Operations & Supervisory Personnel	Management Personnel	Maintenance Personnel	Indirect Operations	
Awareness of preventative maintenance procedures.	✓				
For Class 2 only: Attend a certified 24-hour HAZWOPER training session.	✓				
Recognition of human error risks and how to minimize them.		✓			
Equipment problem assessment and preventative maintenance procedures.			✓		
Notification procedures for emergency spill prevention and response actions.				✓	

*for facility employees

What are the requirements for continuing education and refresher training?

You must identify in writing the specific oil handling continuing education requirements for each position, including the minimum hours of training required. Ongoing training must occur at least once a year and address the following topics:

- Any changes in the core topics, unless personnel have already been informed about the change.
- Refresher awareness of environmental sensitivity and oil spill impacts.

- Review and analysis of oil spills for causal factors that have occurred in the past year, including lessons learned.
- Refresher training on emergency spill prevention and response procedures.
- For key supervisory, operations and management personnel, a practice exercise of the facility's procedures to prevent a spill during a particular abnormal operations event.

Who can train your personnel?

You must develop minimum training standards and/or experience qualifications for your trainers. When you develop these qualifications, you can decide who you consider to be a qualified trainer. The standards and qualifications for trainers and actual names of your trainers should be part of your written training program.

Does the training have to be documented?

All oil handling training must be documented. Keep these things in mind:

- Keep records at the facility in a central, accessible location.
- Keep records for at least 5 years from the completion date of each training event.
- Clearly identify oil handling training from other types of training.
- Include the date, training topic, method of evaluation, name of the person trained, and name of the trainer.

Do existing personnel have to be re-trained?

You can determine if past training covers your requirements after you identify the personnel covered by your oil handling training program

and the training requirements for each position. In some cases, more training will be needed.

There are two ways to show those who entered their positions before the rule was adopted meet your current training program requirements:

- Show documents of past required training attended. This can be in the form of training records.
- Itemize in writing the on-the-job training or other training experience to show it meets your facility's current training requirements. Clearly show how the required competency was acquired, including the type, frequency of past training and the date the training occurred (if known).

What happens if there is an oil spill?

If your facility has an oil spill caused by human error, the personnel involved in the oil transfer are required to receive remedial training, unless they no longer work at your facility in a position that involves oil spill risk. Depending on the spill's cause, this could involve reviewing procedures that may have been performed incorrectly, or changing existing procedures to address the cause of the spill.

Part 2: The Facility Certification Program

How is the Certification Program different from the Training Program?

Your certification program enhances your training program by providing additional training standards. This includes written and practical evaluations of your personnel's knowledge and skills. Certification provides accountability for completing training and achieving competency.

You are responsible to develop and implement a certification program for **key supervisory and operations personnel**. Your certification program ensures your key oil handling, transfer, storage and

monitoring personnel are competent to perform their jobs and trained to your facility's standards.

What written materials are required?

- Written certification procedures include:
 - Minimum competency requirements for certification.
 - Procedures to develop and test competency in key positions.
 - Procedures to issue and track certificates.
 - Policies regarding loss or lack of certified status.
- Written or oral examinations, documented in writing.
- Write-ups of practical evaluations, job competency drills or exercises.

What are the requirements for training?

- Meet your facility's oil handling program training requirements for the position.
- Meet your facility's minimum competency requirements for certification.

What kind of recordkeeping is required?

- Maintenance of a written certificate that documents:
 - The certified person's name and positions.
 - Types and hours of training completed.
 - Name of the trainer.
 - Results of the performance tests and evaluations.
 - Signatures of the trainer AND trainee.
- Certified personnel must carry proof of certification during all oil transfer operations.

- Certification records must be kept for at least 5 years from the date of certification.

What kind of evaluation is required?

- A passing score on a written or oral exam, documented in writing.
- A practical competency evaluation specific to the position's job function, including:
 - Observation of the performance of each oil handling, transfer, storage and monitoring duty assigned to a position before an employee conducts the duty without supervision.
 - Practice exercises involving procedures to prevent a spill during abnormal operations events.

How often is recertification required?

- Key operations and supervisory personnel must be recertified at least **once every 3 years**. Recertification must include:
 - Completion of continuing education requirements of your training program.
 - Re-evaluation of competency based on a written or oral exam and a practical evaluation.

Part 3: Ecology Evaluation and Approval of Your Training and Certification Program

How is your training certification program going to be evaluated?

The rule gives the Department of Ecology (Ecology) the authority to review and approve your training and certification program. Ecology performs the review with an onsite inspection.

An Ecology inspector will schedule a site visit of your facility. During the visit, the inspector will review the written materials related to your training and certification program. The inspector may look at the records of individuals for proof of certification and interview personnel to verify the records. Checklists used by the inspector are included in this guidance as an appendix.

During the review of your training and certification program, the inspector will also consider:

- The volume and type of oils handled at your facility, and number of transfers.
- The number of oil-handling personnel.
- The history and circumstances of spills at similar types of facilities.
- Inspection reports.
- Regulatory history, including past violations.
- The presence of hazards unique to the facility, such as seismic hazards or production processes.
- The sensitivity and value of natural resources that could be affected by a spill from your facility.

The Ecology inspector may approve your program with an expedited review if 1) the program has been approved by another federal or

state agency; and 2) the approval was given under criteria that meet or exceed those in the rule.

You will receive written comments regarding approval status within 30 days of the inspection of your training and certification program. If your program is approved, you will receive a certificate of approval valid for 5 years. The rule also allows periodic unscheduled inspections to verify compliance.

What if your program needs improvement?

If your training and certification program does not meet all of the criteria for approval, Ecology may:

- Conditionally approve your program. You will receive a copy of the inspection report with information about areas that are not in compliance with the rule.

You may be required to operate with specific precautionary measures until your program is brought into compliance.

You have 30 days after you receive notification of conditional approval to make the required changes and notify Ecology. You may ask for a time extension if 30 days is not enough time to implement the required changes.

- Deny approval. The inspection report will list deficiencies noted during the inspection. Your facility will have 90 days to address the deficiencies.

If your training and certification program is not in compliance with the rule requirements, then approval may be denied or revoked. You will receive an explanation in writing. Ecology may take enforcement actions, and your facility may be subject to penalties.

Appendix:

- Appendix: Training and Certification Review Checklist for Class 1 Facilities

APPENDIX:**Oil Handling Training & Certification - Class 1
Compliance Inspection Checklist**

Name of Facility: _____

Facility Representative: _____

Facility Type: _____

Marine Terminal? Y N Transmission Pipeline? Y N

Ecology Reviewer: _____

Inspection Date: _____ Arrival Time: _____

WAC 173-180-510 Training Requirements

- ___ Written materials (training manuals, training records, program requirements, etc.) are available for review.
- ___ Key operational, supervisory and managerial positions required to be certified are identified.
- ___ Training requirements and minimum hours of training for each position are clearly identified, including:
 - ___ Initial Classroom
 - ___ On-the-job training
- ___ Continuing education requirements for each position have been identified.
- ___ Minimum training and/or qualifications for trainers have been specified.
- ___ Training manuals, operations manuals, standard operating procedures, checklists and other appropriate training materials have been developed and are current.
- ___ Training requirements and materials adequately address all of the core topics (see Attachment 1: Core topics).
- ___ Tracking Training: A database or other system is being used to ensure that all positions receive the necessary training and are recertified as needed.

___ Contractors: Any contractors that require training have been identified, and have been trained accordingly prior to working on any oil-handling equipment.

WAC 173-180-520 Criteria for Certification Programs

___ Certification procedures for each position are clearly identified, including:

___ Minimum competency requirements to achieve certification.

___ The process to test competency in key positions.

___ The process to issue and track certificates.

___ Policies regarding the loss or lack of certified status have been developed, including identification of conditions that would require retraining before regaining certification.

___ Written or oral examinations have been developed, and are based on current operations.

___ Passing scores have been identified.

___ Practical competency evaluations are in place.

___ Training materials support competency requirements for certification.

___ Documentation of practical exercises involving procedures to prevent a spill during abnormal events.

___ Certificates or equivalent records are available to document:

___ The certified individual's name and position.

___ The types and hours of training completed.

___ The name of the trainer.

___ The results of tests and evaluations.

___ The signatures of both the trainee and trainer.

___ Certified personnel carry a proof of certification during oil transfer operations.

Comments:

Departure Time: _____

Reviewer Signature: _____