Checklists for Closure Plans, Closure Cost Estimates, and Financial Assurance

Washington State Department of Ecology
Hazardous Waste and Toxics Reduction Program
Publication #05-04-008
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Closure Plan Checklist

For Dangerous Waste Recyclers and Used Oil Processors

The Closure Plan Checklist is intended to help dangerous waste recyclers and used oil processors prepare closure plans as required by the *Dangerous Waste Regulations*, Chapter 173-303 Washington Administrative Code (WAC). It also will be used by the Department of Ecology (Ecology) to review closure plans submitted by dangerous waste recyclers and used oil processors. The Closure Plan Checklist is intended to help dangerous waste recyclers, used oil processors, and Ecology ensure and evaluate the comprehensiveness and completeness of closure plans. Additional checklists are available for closure cost estimates and financial assurance for closure and liability.

"Closure" is the term used in the *Dangerous Waste Regulations* to refer to the process of taking a unit out of service and properly cleaning up or decontaminating the unit and any areas affected by releases from the unit. When this process is finished, a unit is referred to as "closed." When closure is being carried out, a unit is referred to as "closing" or "in closure."

This Checklist addresses plans for "clean closure." Clean closure refers to closure activities that result in full removal of all waste and full removal or decontamination of all structures, equipment, debris, environmental media (such as soil and ground water), and other materials affected by releases from a unit.

The Closure Plan Checklist is not a substitute for developing a site-specific closure plan. **Recyclers and used oil processors will need to create a site-specific closure plan to meet their site-specific closure needs.** Other guidance available to help you develop your closure plan includes:

- Ecology's guidance on the substantive and administrative requirements for closure, *Guidance for Clean Closure of Dangerous Waste Units and Facilities* (May 2005, Publication #94-111), referred to throughout this template as the "Clean Closure Guidance."

- Ecology's guidance template for closure plan development, *Closure Plan Template for Dangerous Waste Recyclers and Used Oil Processors* (May, 2005, Publication # 05-04-006), referred to throughout this Checklist as the "Closure Plan Template."

The Clean Closure Guidance and the Closure Plan Template can be downloaded from Ecology's website at www.ecy.wa.gov/pubs.shtm.

Who should use this Checklist?

The Closure Plan Checklist applies to dangerous waste recyclers and used oil processors. The Closure Plan Checklist also may be helpful to owners and operators of dangerous waste treatment, storage and disposal facilities, dangerous waste generators, and dangerous waste transfer facilities because the substantive requirements for what must be accomplished during closure are the same for all dangerous waste units/facilities.

"Substantive requirements" define what must be accomplished during closure and include requirements related to: closure performance and constituent concentrations that must be achieved for clean closure; removal of wastes and waste residues; inspecting units after removal of wastes and waste residues; removal and decontamination of debris and contaminated environmental media managed during closure; management of wastes, waste residues, debris, and contaminated environmental media during closure; and sampling and analysis.

For more information on the substantive requirements for closure, other closure requirements, and the types of units and facilities that are required to undergo closure, you should consult Ecology's Clean Closure Guidance.

How should this Checklist be used?

The Closure Plan Checklist can be used to assess whether your closure plan has addressed all of the requirements that typically apply to dangerous waste recyclers and used oil processors. Use of the Checklist does not ensure that your closure plan has adequately addressed those requirements with enough information and detail. Even if all the questions in the Checklist can be answered with a yes, this does not *guarantee* that Ecology will approve your closure plan.

Depending on your operations, not all sections of the Checklist may apply to you. For example, if you have always carried out your recycling or used oil processing inside a building and completely within a well maintained, bermed, sealed concrete containment structure, you might not need to address contaminated environmental media during closure, provided stained concrete or cracks or other openings in the containment structure are not identified during closure.

For more information on the types of information needed in closure plans and the level of detail that Ecology is expecting, refer to the Clean Closure Guidance and the Closure Plan Template. **Please note, this Checklist <u>does not</u> contain all the information you need to ensure an adequate closure plan submittal. It is important that you refer to the Clean Closure Guidance and Closure Plan Template for additional information.**

How is this Checklist organized?

The Closure Plan Checklist is organized according to the main section headings of a typical closure plan for a dangerous waste recycler or used oil processor. These include: meeting the closure performance standard, removing wastes and waste residues from closing units, inspecting units after wastes and waste residues are removed, decontamination, and sampling and analysis. Under each main section heading, specific questions prompt you to consider information that should be included in a typical closure plan. Next to each question there is a column to answer the question yes or no, and another column to write down comments, notes, and additional information. The Yes/No and Notes/Comments columns should be used to evaluate the comprehensiveness of the closure plan and to identify where additional detail or information should be incorporated into the closure plan.

Closure Plan Checklist

	YES	NO	NOTES/COMMENTS
1. Introduction			
■ Does this section introduce Ecology to your facility, especially the dangerous waste recycling or used oil processing activities that are the subject of the closure plan?			
■ Does it cite the proper regulatory requirements? (Regulatory requirements for closure will differ depending on what type of unit your closure plan addresses. For dangerous waste recycling units, cite WAC 173-303-120(3) and (4) and WAC 173-303-610(2) and (12). For used oil processing units, cite WAC 173-303-515(9) and WAC 173-303-610(2) and (12).			
1.1 Facility Contact Information			
■ Did you identify a facility contact, their job title, and contact information?			
■ Did you include information on how to contact the person by email, if possible?			
1.2 Facility Description			
■ Did you describe your facility in detail, emphasizing your dangerous waste recycling or used oil processing activities?			
1.3 Facility History, Function, Location and Layout			
■ Did you describe where your facility is located, what it looks like, and the main activities that you carry-out?			
■ Have you included a plan-view figure or diagram showing the layout of your facility, including the locations of all recycling and used oil processing units and all other dangerous waste management activities?			

	YES	NO	NOTES/COMMENTS
■ Have you described your facility history, such as how long the facility has been in operation, how long you have been the owner or operator, and past operational activities to the extent you know about them?			
1.4 Products and Production Processes			
■ Does this section describe the dangerous wastes and/or used oils you manage, your products, and your production processes?			
■ Did you pay special attention to describing your dangerous waste recycling or used oil processing activities by describing the following?			
How dangerous waste and used oil are received at your facility.			
Where and how you stage, store, or accumulate dangerous waste and used oil.			
The recycling or processing activities that you carry out, including all units used, unit capacity, piping, containment systems, and throughput.			
The products and waste streams that result from recycling and used oil processing.			
1.5 Dangerous Waste and Used Oil Management and Units			
■ Did you list all the dangerous waste recycling and used oil processing units and all other areas where dangerous waste or used oil is managed at your facility?			
■ Did you identify which unit is (or units are) the subject of your closure plan?			

	YES	NO	NOTES/COMMENTS
1.6 Unit Description			
■ Did you describe, in detail, each unit that is the subject of the closure plan?			
■ For recycling units, did you include all waste staging areas and other areas where waste is managed prior to being placed in the recycling process (including load and unload areas and 72-hour staging areas)?			
■ For used oil processing units, did you include associated storage, staging, and load and unload areas?			
■ Did you describe unit design, what components make up the unit, and how the unit works, including the materials that make up all secondary containment structures and the dimensions of the structures?			
■ Did you describe all unit inputs (materials and energy) and outputs (products and wastes)?			
■ Did you describe all dangerous wastes (including waste codes) managed in the unit?			
1.6.1 Maximum Waste Inventory			
■ Did you identify the maximum waste inventory for each unit covered by the closure plan?			
2.0 Closure Performance Standard			
■ Did you describe your understanding of the closure performance standard and cite the standard in the *Dangerous Waste Regulations* at WAC 173-303-610(2)(a)?			
■ Did you describe your objectives for closure, including the following?			
Objectives for removal of waste and waste residues?			
Objectives for removal and/or decontamination of unit structures and equipment?			

	YES	NO	NOTES/COMMENTS
Objectives for removal and/or decontamination of any contaminated soil or other contamination resulting from releases from the unit?			
■ Did you identify the standards for removal and decontamination that you plan to meet during closure, including the following?			
For decontamination of unit components, structures, and equipment the Alternative Treatment Standards for Hazardous Debris or a site-specific decontamination standard?			
For soil and other environmental media, Model Toxics Control Act unrestricted site use cleanup levels?			
3.0 Closure Activities			
3.1 Removal of Wastes and Waste Residues			
■ Removal of wastes and waste residues is always required as a part of clean closure. Did you describe in detail how you will remove wastes and waste residues from the closing unit?			
■ In addition to the residues normally managed from waste recycling or used oil processing (such as tank or distillation unit bottoms), did you address removal of wastes and waste residues that may remain in piping and the recycling or used oil processing equipment?			
■ Did you describe in detail the procedures and equipment you will use to remove as much waste and waste residue as possible from the closing unit?			
■ Did you address how you will manage waste and waste residue removed from the closing unit, including plans to put wastes in containers, label and manage containers, and provide for proper disposal?			

	YES	NO	NOTES/COMMENTS
■ Did you identify the types of off-site dangerous waste management units that will be used, if applicable?			
■ The maximum inventory of waste is the most waste that could ever be present at your facility based on facility capacity, based on how much waste could be managed, not how much waste you think will actually be present. Did you assume that you will have to manage the maximum inventory of waste identified in the closure plan at the time of closure and have to manage the maximum inventory of waste as part of closure activities?			
3.2 Unit Components, Parts, and Ancillary Equipment			
■ After you remove all waste, you have the option of also removing the unit, its components, parts, and associated equipment and piping. If you choose to remove all or part of the unit, did you give a detailed description of how you will accomplish the removal?			
■ Did you describe the procedures and equipment you will use to remove the unit or unit components and parts?			
■ In general, unit parts, unit components and parts that have come into contact with dangerous waste must be managed as dangerous waste unless they are decontaminated. Did you address how you will manage the unit components and parts?			
■ Did you address the waste management requirements that you believe will apply to waste removed from the closing unit and any unit parts, components, or other materials you plan to remove, and how you plan to comply with these requirements?			
■ Did you identify the types of off-site dangerous waste management units that will be used, if applicable?			

	YES	NO	NOTES/COMMENTS
3.3 Inspection of Units before Decontamination			
■ Inspection of units before decontamination but after wastes and waste residues are removed is always required as part of clean closure. Did you describe how you will inspect the unit and the area surrounding after waste removal and before beginning decontamination activities?			
■ Cracks and other openings may indicate the potential for releases from the containment structure. Did you describe how you will look for cracks or other openings in the unit containment structure?			
■ Did you describe how you will keep a record of any indication of the potential for spills or releases at or from the containment structure? Did you describe how this information will be used when determining soil and other sampling needs, if any?			
3.4 Decontamination			
■ Did you identify all the types of materials you will decontaminate (such as metal tanks, and concrete containment systems)? Did you create a separate subsection to describe decontamination procedures for each material?			
■ Did you describe, in detail, how you will decontaminate the inside and outside of each material, including the procedures, methods, and equipment you will use during decontamination?			
■ Did you describe how you will evaluate decontaminated materials to determine if they meet the decontamination standard for clean closure? (Remember, you identified the decontamination standard you plan to use earlier in the closure plan.)			

	YES	NO	NOTES/COMMENTS
■ If you plan to request approval for a site-specific decontamination standard, did you describe in detail the standard you propose and explain why you believe it is appropriate?			
■ Did you describe any adjustments that you believe might be necessary during decontamination? (For example, what you plan to do if decontamination is not successful on the first attempt.)			
■ Did you describe how you will decontaminate any equipment that you use during decontamination?			
■ Did you describe how you will manage all decontamination residuals (such as rinse or waste water and concrete dust)? Did you identify the waste management requirements you believe will apply to decontamination residuals and describe your plans to comply with these requirements?			
■ Did you describe how the independent qualified registered professional engineer will play in overseeing decontamination activities?			
3.5 Identifying and Managing Contaminated Environmental Media			
■ Did you identify any environmental media (soil, ground water, surface water, sediments) that you know is contaminated?			
■ Did you describe in detail why you believe this contamination is present? Did you describe in detail the sampling and analysis you will carry out to fully understand the nature and extent of contamination?			

	YES	NO	NOTES/COMMENTS
■ If you plan to collect soil samples at depth, did you indicate that the subsurface geology will be described in accordance with the Unified Soil Classification System (USCS)? Ecology will use this description to better evaluate your sampling strategy and results, and can consider the potential for any soil contamination to contaminate ground water.			
3.6 Confirming Clean Closure			
■ Did you describe each material (such as decontaminated concrete containment systems, metal tanks, and soil) that you anticipate addressing during confirmation of clean closure? Did you restate the clean closure standard that will applies (Section 2.0 of your closure plan), and describe the procedures you will follow to confirm that clean closure standards are achieved?			
■ Did you describe how you will verify that the Alternative Treatment Standards for Hazardous Debris (or a site-specific debris decontamination standard) are achieved throughout areas you decontaminated?			
■ Did you describe how you will use sampling and analysis or other methods to verify that any contaminated soil is removed to achieve MTCA unrestricted site use cleanup levels?			
■ Did you describe the records and other materials that you will retain so that Ecology can verify your confirmation that clean closure standards were achieved?			

	YES	NO	NOTES/COMMENTS
3.7 Sampling and Analysis and Constituents to be Analyzed			
3.7.1 Sampling and Analysis Plan			
■ A sampling and analysis plan generally will be needed during closure unless Ecology agrees that there is no possibility that environmental media, such as soil, are contaminated. Did you either confirm that you will have a sampling and analysis plan or else describe why you believe a plan is not necessary?			
■ Generally, at a minimum, a sampling and analysis is needed to determine the nature and extent of any soil contamination and to confirm that clean closure levels are achieved in soil. Did you describe when sampling and analysis will be used?			
■ Did you identify each element that will be included in your sampling and analysis plan?			
■ Does your sampling and analysis plan include all of the following?			
A statement of the purpose and objectives of the data collections.			
Organization and responsibilities for the sampling and analysis activities.			
Project schedule.			
General information on selection of types of samples needed (such as, grab or composite).			
General information on selection of sampling locations and methods used to determine where the sampling will occur.			
Specific sampling approach and methods, including:			
▪ Sampling locations and a unique ID number for each location.			

	YES	NO	NOTES/COMMENTS
▪ Protocols for sample collection and handling including labeling and chain of custody.			
▪ Procedures for installation of sampling devices, if needed.			
▪ Procedures for personnel and equipment decontamination.			
▪ Procedures for management of waste materials generated by sampling activities.			
▪ Description and number of quality assurance and quality control samples, including blanks, matrix spikes, surrogate samples, laboratory control samples, and duplicates, as appropriate.			
▪ Provisions for splitting samples with Ecology, when appropriate.			
Sampling and analysis procedures to confirm decontamination of tanks and concrete containment systems and other media or equipment (if required).			
Procedures for analysis of samples and reporting of results, including:			
▪ Selection of an Ecology accredited laboratory to perform analysis.			
▪ Identification and justification of parameters to be sampled and analyzed.			
▪ Physical and chemical properties of the wastes to be sampled.			
▪ Analytical techniques and procedures.			
▪ Practical quantification limits (PQLs) sufficiently low to determine compliance with clean closure standards.			
▪ Quality assurance and quality control procedures.			

	YES	NO	NOTES/COMMENTS
▪ Data reporting procedures and, where appropriate, data validation procedures.			
■ Did you attach the sampling and analysis plan as an appendix to your closure plan?			
3.7.2 Constituents to be Analyzed			
■ Did you identify the constituents you will analyze for during closure?			
■ Did you explain your justification for selection of these constituents? Justification should be based on the types of constituents present during current and historic operations at the facility and the closing unit, and how these constituents might break-down, or decompose, in the environment.			
■ If you have proposed indicator constituents (instead of sampling and analysis for every dangerous constituent ever managed at the facility and all their decomposition products) did you explain how you selected the indicator constituents and why they are appropriate?			
3.7.3 Revisions to the Sampling and Analysis Plan and Constituents to be Analyzed			
■ Did you describe how you will determine if revisions to your sampling and analysis plan or constituents to be analyzed are necessary before you begin closure activities?			
■ If you believe revisions may be necessary, did you describe when and how you will submit a revised plan to Ecology for review and approval?			
3.8 Role of the Independent Registered Professional Engineer			
■ Did you describe that you will retain an independent qualified registered professional engineer to assist with closure certification?			

	YES	NO	NOTES/COMMENTS
■ Did you describe how the engineer will become familiar with your closure activities by reviewing records?			
■ Did you describe the field activities the engineer will oversee? At a minimum, it is generally necessary for the engineer to be present to confirm performance of decontamination technologies.			
3.9 Closure Certification			
■ Did you describe how you will comply with the requirement to certify completion of clean closure to Ecology?			
■ Closure certification must be submitted within 60 days of completion of closure activities. Did you describe when you will submit your closure certification?			
■ Did you describe all the information that you will submit to support your clean closure certification, including at least all of the following?			
All field notes and photographs related to closure activities, including the results of the inspection of the unit and containment system for cracks and other openings prior to decontamination.			
A description of any minor deviations from the approved closure plan and justification for these deviations.			
Documentation of the final disposition of all dangerous wastes and dangerous waste residues, including contaminated media, debris, and all treatment residuals.			

	YES	NO	NOTES/COMMENTS
All laboratory and/or field data, including sampling procedures, sampling locations, quality assurance/quality control samples, and chain of custody procedures for all samples and measurements (including samples and measurements taken to determine background conditions and/or determine or confirm clean closure).			
A summary report that identifies and describes the data reviewed by the independent registered professional engineer and tabulates the analytical results of samples taken to determine and confirm clean closure.			
A description of what the unit area looks like at completion of closure, including a description of what parts of the former unit (if any) will remain after closure.			
■ Did you indicate your understanding of the certification required by reprinting the certification in your closure plan?			
■ Did you describe that both the facility owner/operator and the independent qualified registered professional engineer will sign the certification?			
3.10 Conditions That Will Be Achieved When Closure is Complete			
■ Did you describe what the unit area will look like and what conditions will be achieved when closure is complete?			
■ Did you include a description of what parts of the former unit (if any) will remain after closure?			
4.0 Closure Schedule and Timeframe			

	YES	NO	NOTES/COMMENTS
■ Did you include a schedule for closure of each dangerous waste management unit and for final closure of the facility?			
■ Did you indicate that you will begin closure at the required time?			
■ Did you indicate that Ecology will be notified of your intent to begin closure activities within the appropriate timeframe?			
■ Did you indicate that you will complete closure activities within the time allowed for closure?			
5.0 Closure Costs			
■ Did you describe your closure cost estimate?			
■ Did you describe your financial assurance mechanism for closure?			
■ Did you describe your financial assurance mechanism for liability?			
■ Did you include a copy of your closure cost estimate, financial assurance mechanism for closure, and financial assurance mechanism for liability? (Separate checklists address preparation of your closure cost estimate and financial assurance documents.)			
6.0 Figures and Tables			
■ Did you include copies of all the figures and tables you mention in your closure plan?			

Closure Cost Estimate Checklist

For Dangerous Waste Recyclers and Used Oil Processors

The Closure Cost Estimate Checklist is intended to help dangerous waste recyclers and used oil processors comply with the closure cost estimate requirements of the *Dangerous Waste Regulations*, Chapter 173-303 WAC. The Checklist will help dangerous waste recyclers, used oil processors, and Ecology ensure and evaluate the comprehensiveness and completeness of closure cost estimates. Separate checklists cover related requirements for development of closure plans, financial assurance for closure and liability, and individual financial mechanisms.

"Closure" is the term used in the *Dangerous Waste Regulations* to refer to the process of taking a unit out of service and properly cleaning up or decontaminating the unit and any areas affected by releases from the unit. The Checklists address cost estimates for facilities that will "clean close." Clean closure refers to closure activities that result in full removal of all waste and full removal or decontamination of all structures, equipment, debris, environmental media (such as soil and ground water), and other materials affected by releases from a unit.

The Closure Cost Estimate Checklist is not a substitute for developing a site-specific closure cost estimate. Your site-specific closure cost estimate should be based on carrying out the activities in your site-specific closure plan.

For additional guidance to help you develop your closure plan, cost estimate, and financial assurance documents, see:

- Ecology's guidance on the substantive and administrative requirements for closure, *Guidance for Clean Closure of Dangerous Waste Units and Facilities* (May 2005, Publication #94-111), referred to throughout this checklist as the "Clean Closure Guidance." Sections 12.0 and 13.0 of the Clean Closure Guidance specifically address cost estimating and financial assurance.
- Ecology's guidance template for closure plan development, *Closure Plan Template for Dangerous Waste Recyclers and Used Oil Processors* (May, 2005, Publication #05-04-006), referred to throughout this document as the "Closure Plan Template."
- Ecology's Excel spreadsheet tool, *Closure Cost Estimating Tool and User Guide* (May 2005, Publication #05-04-009), referred to throughout this checklist as the "Closure Cost Estimating Tool and User Guide."

The Clean Closure Guidance, Closure Plan Template, and Closure Cost Estimating Tool and User Guide can be downloaded from Ecology's website at www.ecy.wa.gov/pubs.shtm.

Who should use this Checklist?

The Closure Cost Estimate Checklist applies to dangerous waste recyclers and used oil processors. The Checklist also may be helpful to owners and operators of dangerous waste treatment, storage and disposal facilities because most of the closure cost estimating and financial requirements are the same for all dangerous waste units/facilities.

How should this Checklist be used?

The Closure Cost Estimate Checklist is a way to assess whether you have addressed all of the requirements for closure cost estimates that typically apply to dangerous waste recyclers and used oil processors. Use of the Checklist does not *ensure* that your cost estimate has adequately addressed these requirements. Even if all the questions in the Checklist can be answered with a yes, it does not *guarantee* that Ecology will approve your closure cost estimates. Ecology approval will depend in part on the level of detail you provide in your closure plan and closure cost estimate.

Reminder: the Closure Cost Estimate Checklist does not contain all the information you need to ensure an adequate closure cost estimate submittal. It is important that you refer to the *Clean Closure Guidance* for additional information.

How is this Checklist organized?

Under each main section heading, specific questions prompt you to consider information that should be included in your closure cost estimates. Next to each question there is a column to answer yes or no to the question, and another column to write down comments, notes, and additional information. The Yes/No and Notes/Comments columns should be used to evaluate the comprehensiveness and accuracy of the closure cost estimates.

Closure Cost Estimate Checklist

	YES	NO	NOTES/COMMENTS
■ Did you use the Closure Cost Estimating Tool (Excel spreadsheets) to assist you in developing your cost estimates? (Use of this tool is recommended but not required; see section 12.4 of the Clean Closure Guidance.)			
■ Did you estimate the cost of all closure activities identified in your closure plan, including costs for all of the following?			
Removal of wastes and waste residuals, including transportation and waste management, treatment, and disposal.			
Removal or decontamination of load and unload areas, and secondary containment areas that support waste storage and processing, including all waste management and disposal costs.			
Sampling and analysis.			
Certification of closure by an independent qualified registered professional engineer.			
■ Did you explain in detail the assumptions you used in calculating your closure costs (for example, the number and types of samples you assumed to calculate sampling and analysis costs, and how you determined waste disposal costs)?			
■ Did you use the assumptions required by the closure cost estimating regulations, including all of the following?			

	YES	NO	NOTES/COMMENTS
A third party will be used to conduct closure activities.			
The maximum dangerous waste volume will be present on site and managed during closure.			
Salvage value of recyclable materials, if included, is based on materials stored in dedicated tanks or containers for which only minimal processing is needed to produce a salable product.[1]			
Costs will be incurred for management of waste handled during closure.			
Closure certification activities will be conducted by an independent qualified professional engineer registered in Washington State.			
■ Does your closure cost estimate reflect the cost of conducting closure in the current year, not a future year when facility closure is projected to occur?			
■ Does your closure cost estimate include a 20% contingency cost, or another contingency cost with a justification?			
■ Have you kept a copy of the current closure cost estimate, together with the original (that is, not inflation adjusted) closure cost estimate at your facility?			
■ Have you made arrangements to annually update your closure cost estimate for inflation within the 30- or 60- day windows (depending on the financial assurance mechanism used) specified in WAC 173-303-620(3)(c)?			

[1] The option of excluding salvage value of certain materials applies only to off-site recyclers and used oil processors, see WAC 173-303-620(3)(a)(iii).

	YES	NO	NOTES/COMMENTS
■ Did you include a copy of your closure cost estimate when you submitted your closure plan to Ecology?			
■ If this closure cost estimate is associated with a revision to your closure plan, is it being submitted within 30 days of approval of the modified closure plan and have you made arrangements to adjust your financial assurance for closure within 60 days if closure costs have increased?			
■ If this is an updated closure cost estimate to reflect an annual inflation adjustment, have you made arrangements to adjust your financial assurance for closure within 60 days?			

Financial Assurance Checklist

The Financial Assurance Checklist is intended to help dangerous waste recyclers and used oil processors comply with the financial assurance requirements of the *Dangerous Waste Regulations*, Chapter 173-303 WAC. Two types of financial assurance requirements are addressed: financial assurance for closure and financial assurance for liability.

The purpose of financial assurance is to ensure that, in the event of bankruptcy, corporate dissolution, or abandonment of a facility, or unwillingness to pay, taxpayers do not end up paying for cleanup and closure that rightfully should be paid by facility owners/operators. It is also to ensure that resources will be available in the event of injury or property damage to a third party arising from the operation of the facility.

There are two types of financial assurance needed for dangerous waste recyclers and used oil processors:

- Financial assurance for **closure**, and
- Financial assurance for **liability**.

The amount of financial assurance needed for closure is based on a facility's closure cost estimate. The amount of financial assurance needed for liability is established by regulation (see WAC 173-303-620(8)).

Compliance with financial assurance requirements will involve filing financial assurance documents with Ecology. These documents will show that you have set aside adequate resources for closure and liability or that you have immediate access to adequate resources should the need arise. There are a number of options that facility owners/operators can choose from to comply with financial assurance requirements including trust funds, surety bonds, letters of credit, and insurance. The Financial Assurance Checklist **covers only the general aspects of financial assurance for closure and liability assurance. Once you choose a specific financial mechanism, you should use the more specific, detailed checklists focusing on each mechanism that are available to help you comply with the specific requirements for that mechanism. The specific checklists for each financial mechanism provide important information to help you prepare the mechanism correctly. For example, they list the specific documents that must be submitted to Ecology for that mechanism. A list of the available checklists for specific financial mechanisms is provided at the end of this document. If you have questions about specific financial mechanisms or their requirements, you should contact Kimberly Goetz, Ecology's Financial Assurance Officer at (360) 407-6754 or kgoe461@ecy.wa.gov.**

The Financial Assurance Checklist is not a substitute for developing a site-specific financial assurance mechanism. Your site-specific financial assurance mechanisms should be based on carrying out the activities in your site-specific closure plan and closure cost estimate and on site-specific liability requirements.

For additional guidance to help you develop your closure plan, cost estimate, and financial assurance documents, see:

- Ecology's guidance on the substantive and administrative requirements for closure, *Guidance for Clean Closure of Dangerous Waste Units and Facilities* (May 2005, Publication #94-111), referred to throughout this checklist as the "Clean Closure Guidance." Sections 12.0 and 13.0 of the Clean Closure Guidance specifically address cost estimating and financial assurance.
- Ecology's guidance template for closure plan development, *Closure Plan Template for Dangerous Waste Recyclers and Used Oil Processors* (May 2005, Publication #05-04-006), referred to throughout this document as the "Closure Plan Template."
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The Clean Closure Guidance, Closure Plan Template, and Closure Cost Estimating Tool and User Guide can be downloaded from the Ecology's website at www.ecy.wa.gov/pubs.shtm.

Who should use this Checklist?

The Financial Assurance Checklist applies to dangerous waste recyclers and used oil processors. The Checklist may also be helpful to owners and operators of dangerous waste treatment, storage and disposal facilities because most of the financial requirements are the same for all dangerous waste units/facilities.

How should this Checklist be used?

The Financial Assurance Checklist is a way to assess whether you have addressed all of the requirements for financial assurance that typically apply to dangerous waste recyclers and used oil processors. Use of the Checklist does not *ensure* that your financial assurance mechanism has adequately addressed these requirements. Even if all the questions in the Checklist can be answered with a yes, it does not *guarantee* that Ecology will approve your financial assurance documents. Ecology approval will depend in part on the level of detail you provide in your closure plan and closure cost estimate.

Reminder: the Checklist **does not contain all the information you need to ensure an adequate financial assurance submittal. It is important that you refer to the *Clean Closure Guidance* for additional information.**

How is this Checklist organized?

Under each main section heading, specific questions prompt you to consider information that should be included in your financial assurance documents. Next to each question there is a column to answer yes or no to the question, and another column to write down comments, notes, and additional information. The Yes/No and Notes/Comments columns should be used to determine whether the general aspects of financial assurance have been adequately addressed.

Financial Assurance Checklist

	YES	NO	NOTES/COMMENTS
FOR CLOSURE – General Questions			
■ Have you identified the financial assurance mechanism(s), instrument(s), and financial institution(s) you will use for financial assurance for closure?			
■ Has the financial institution agreed to use the exact language spelled out in the regulations (see 40 CFR 264.151) for the financial instruments you chose?[2]			
■ If you are using multiple mechanisms to cover your closure cost financial assurance responsibilities, are you using only those mechanisms from the following list: trust fund, surety bond for payment, insurance, and/or letter of credit? (Surety bond for performance and financial test/corporate guarantee cannot be used in combination.)			
■ If you were an existing facility as of January 1, 2005, did you establish your financial assurance mechanism for closure no later than January 1, 2008? (Except for partially funded trust fund—see WAC 173-303-620(4).)			
■ If you are a new facility, is your financial assurance fully in place at least 60 days before receipt of your first waste?			
FOR CLOSURE –Questions Specific to Individual Financial Assurance Mechanisms			
■ If you are using *insurance* to cover closure costs:			

[2] Copies of this language are available from Ecology's Hazardous Waste and Toxics Reduction (HWTR) Program. Contact Kimberly Goetz, Financial Assurance Officer at (360) 407-6754 or kgoe461@ecy.wa.gov.

	YES	NO	NOTES/COMMENTS
Does your insurance company meet the financial strength ratings in WAC 173-303-620(4)(c)?			
Did you name Ecology as secondary beneficiary on the policy?			
■ If you are using the *financial test* or *corporate guarantee*: Did you use the Washington State requirement for a tangible net worth of $20 million?			
■ If you are using a *trust fund*, have you established a mechanism to fully fund the trust within 5 years of Ecology's approval of the closure plan and to make payments into the trust at least annually?[3]			
FOR LIABILITY – General Questions			
■ Have you identified the financial assurance mechanism(s), instrument(s), and financial institution you will use for liability coverage?			
■ Has the financial institution agreed to use the exact language spelled out in the regulations (see 40 CFR 264.151) for the financial instruments chosen?[4]			
■ If you are using multiple mechanisms to cover your financial assurance for liability:			
Did you avoid the combination of a financial test with a corporate guarantee if the financial statements of the owner/operator are combined with the financial statements of the corporate guarantor?			

[3] This option is available only to owners/operators of existing dangerous waste recycling and used oil processing units that became subject to the new financial assurance requirements that went into effect January 1, 2005. If you are using a trust fund for closure and your facility is not a dangerous waste recycling or used oil processing facility, Ecology will not approve your closure plan until you have fully funded the trust.

[4] Copies of this language are available from Ecology's Hazardous Waste and Toxics Reduction (HWTR) Program. Contact Kimberly Goetz, Financial Assurance Officer at (360) 407-6754 or kgoe461@ecy.wa.gov.

	YES	NO	NOTES/COMMENTS
Did you designate one mechanism as "primary" and the other(s) as "excess"?			
■ Did you determine the correct liability limits for sudden liability coverage, and, if required by Ecology under WAC 173-303-620(8)(d), non-sudden liability coverage?			
■ Have you ensured that your liability coverage be in place continuously until certification of closure?			
■ Did you include a copy of your financial mechanism/instrument with your closure plan?			
FOR LIABILITY –Questions Specific to Individual Financial Assurance Mechanisms			
■ If you are using *insurance* for liability coverage: does your insurance company meet the financial strength ratings in WAC 173-303-620(4)(c)?			
■ If you are using the *trust fund* mechanism for liability coverage, will it be fully funded immediately?			
■ If you are using the financial test or corporate guarantee: Did you use the Washington State requirement for a tangible net worth of $20 million?			
Reminder: Once you have chosen the specific financial mechanism(s) you plan to use for complying with the financial assurance requirements, see the detailed checklists for that mechanism to be sure that you prepare the mechanism correctly.			

Checklists for Specific Financial Assurance Instruments

Revised May 2005

These checklists are not mandatory. They are provided solely for the convenience of regulated facilities. The checklists are divided into three categories: closure coverage only, liability coverage only, and combined closure and liability coverage.

Facilities using any financial mechanism other than a financial test should use two separate checklists (one for closure and one for liability). The combined checklist should only be used by facilities using the financial test to cover both closure and liability coverage. Facilities have the option of using more than one type of financial mechanism to meet coverage requirements. If using multiple instruments to meet coverage requirements, please use each applicable checklist.

Each financial instrument requires specific language. Examples of mandatory language are available by contacting Kimberly Goetz, the Department of Ecology's Financial Assurance Officer, at (360) 407-6754 or kgoe461@ecy.wa.gov.

These checklists are generic and apply to all regulated facilities. Some provisions or requirements might not apply to every facility. If you have questions about whether a provision applies to your facility, contact the Financial Assurance Officer.

Closure Coverage Checklists

- Ecology Publication #05-04-008(a) – Trust Fund for closure
- Ecology Publication #05-04-008(b) – Surety Bond with Trust Fund for closure
- Ecology Publication #05-04-008(c) – Surety Performance Bond with Standby Trust Fund for closure
- Ecology Publication #05-04-008(d) – Irrevocable Letter of Credit with Standby Trust Fund for closure
- Ecology Publication #05-04-008(e) – Closure Insurance
- Ecology Publication #05-04-008(f) – Financial Test and Corporate Guarantee for closure

Combined Closure and Liability Coverage Checklist

- Ecology Publication #05-04-008(g) – Financial Test for combined coverage

Liability Coverage Checklists

- Ecology Publication #05-04-008(h) – Trust Fund for liability
- Ecology Publication #05-04-008(i) – Surety Bond for liability
- Ecology Publication #05-04-008(j) – Irrevocable Letter of Credit for liability
- Ecology Publication #05-04-008(k) – Liability Insurance Certificate/Endorsement
- Ecology Publication #05-04-008(l) – Financial Test for liability
- Ecology Publication #05-04-008(m) – Corporate Guarantee for liability