

	<b>RESOURCE MANAGEMENT DIVISION POLICY AND PROCEDURE</b>	DEPARTMENT OF ENVIRONMENTAL QUALITY
<b>Original Effective Date:</b> October 17, 2011	<b>Subject:</b> Corrective Action Financial Assurance for Type II and Type III Landfills	<b>Category:</b> <input type="checkbox"/> Internal/Administrative <input type="checkbox"/> External/Non-Interpretive <input checked="" type="checkbox"/> External/Interpretive
<b>Revised Date:</b> January 25, 2012	<b>Program Name:</b> Solid Waste and Land Application Section	
<b>Reformatted Date:</b> August 23, 2012	<b>Number:</b> RMD-115-28	

A Department of Environmental Quality (DEQ) Policy and Procedure cannot establish regulatory requirements for parties outside of the DEQ. This document provides direction to DEQ staff regarding the implementation of rules and laws administered by the DEQ. It is merely explanatory; does not affect the rights of, or procedures and practices available to, the public; and does not have the force and effect of law.

#### **INTRODUCTION, PURPOSE, OR ISSUE:**

The purpose of this Policy and Procedure RMD-115-28 is to clarify for staff the applicable corrective action financial assurance requirements for Type II and Type III solid waste landfills.

#### **AUTHORITY:**

Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and Part 201, Environmental Remediation, of the NREPA.

#### **STAKEHOLDER INVOLVEMENT:**

Developed in consultation with the DEQ's Remediation Division, the Solid Waste Advisory Committee, and the Michigan Waste Industries Association.

#### **DEFINITIONS:**

**Bond:** Section 11502(4) of Part 115 defines "bond" as "a financial instrument executed on a form approved by the department, including a surety bond from a surety company authorized to transact business in this state, a certificate of deposit, a cash bond, an irrevocable letter of credit, insurance, a trust fund, an escrow account, or a combination of any of these instruments in favor of the department. The owner or operator of a disposal area who is required to establish a bond under other state or federal statute may petition the department to allow such a bond to meet the requirements of this part. The department shall approve a bond established under other state or federal statute if the bond provides equivalent funds and access by the department as other financial instruments allowed by this subsection."

**Corrective Action:** Section 11502(4) of Part 115 defines "corrective action" as "the investigation, assessment, cleanup, removal, containment, isolation, treatment, or monitoring of constituents, as defined in a facility's approved hydrogeological monitoring plan, released into the environment from a disposal area, or the taking of other actions related to the release as may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or welfare, the

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environment, or natural resources that is consistent with 42 USC 6941 to 6949a and regulations promulgated thereunder."

Financial Assurance: Section 11503(10) of Part 115 defines "financial assurance" as "the mechanisms used to demonstrate that the funds necessary to conduct closure, postclosure maintenance and monitoring, and corrective action will be available whenever they are needed."

Perpetual Care Fund: Section 11504(9) of Part 115 defines "perpetual care fund" (PCF) as "a perpetual care fund provided for in Section 11525."

**POLICY:**

Relationship to Remedial Action Plan (RAP) Review Process

This document is intended to supplement Resource Management Division (RMD) procedures and guidance for the review of RAPs. The cost estimate and financial assurance for corrective action are critical components of the RAP review, and the RMD project manager responsible for the RAP review is encouraged to consult with the Solid Waste and Land Application Section (SWLAS) and RMD Remediation Advisory Team for assistance with reviewing cost estimates, identifying available financial assurance mechanisms, and drafting related conditions to be included in the legally enforceable agreement for the RAP.

**PROCEDURES:**

Applicability

The attached table was developed to highlight the statute and rule requirements for corrective action financial assurance, to explain how the requirements will be administered, and to emphasize the differences in the requirements for Type II and for Type III landfills and preexisting units at Type II landfills (did not receive waste after October 9, 1993). As shown in the table, corrective action financial assurance is required for all landfills coincident with the approval of a RAP. The amount of financial assurance required, and the financial mechanisms that may be used to demonstrate the required coverage, differ between Type II landfills and Type III landfills and preexisting units at Type II landfills.

Cost Estimates

The SWLAS Solid Waste Engineering Coordinator will ensure that cost estimate guidance is developed and maintained and that the SWLAS conducts a final review of all corrective action cost estimates for consistency in the level of detail, types of covered activities, and acceptable ranges in costs. Where cost estimates are questionable, the person proposing the corrective action (e.g., RAP) must be responsible for documenting the basis for them (e.g., third-party bids or quotes).

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Financial Assurance Mechanisms

All financial assurance mechanisms for corrective action must be reviewed and processed by the SWLAS Solid Waste Engineering Coordinator. All original financial assurance mechanisms are to be maintained by the SWLAS and tracked in the Waste Data System.

Questions regarding this document should be directed to the Chief of the SWLAS, RMD.

**APPENDIX:**

Appendix A [Appendix RMD-115-28 Corrective Action Financial Assurance]

DIVISION CHIEF APPROVAL:

Liane J. Shekter Smith  
Liane J. Shekter Smith, Chief  
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8/23/2012  
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CORRECTIVE ACTION FINANCIAL ASSURANCE

Description	Type III Landfill and Preexisting Units at Type II Landfills	Type II Landfill
<p>Trigger for financial assurance for corrective action.</p> <p>Remedial Action Plan (RAP) required under R 299.4319(7) when a constituent is present above appropriate cleanup criteria for groundwater established pursuant to Section 20120a of Part 201.</p> <p>Under a consent order, the remedial investigation under R 299.4319(4)(b) should trigger the establishment of financial assurance for reasonably estimable costs for the investigation, feasibility study, and any interim corrective measures should be required.</p>	<p>The RAP required under R 299.4444(1) when a constituent is present above the groundwater protection standards established under R 299.4441, which can be lower than the cleanup criteria for groundwater established pursuant to Section 20120a.</p> <p>After assessment monitoring confirms a release to groundwater and any alternate source demonstration under R 299.4441(8) fails, financial assurance for reasonably estimable costs for the investigation, feasibility study, and any interim corrective measures can be required under a consent order and no later than renewal of the operating license.</p>	<p>Part 115 requires corrective action to comply with Part 201 [R 299.4444(1)].</p> <p>Section 20115b defers to the response activities required under Part 115 for corrective action of releases from the disposal area that are discovered through the hydrogeological monitoring plan and prior to completion of postclosure.</p>
<p>General relationship to Part 201.</p> <p>Part 115 requires corrective action to comply with Part 201 [R 299.4319(7)].</p> <p>Section 20115b defers to the response activities required under Part 115 for corrective action of releases from the disposal area that are discovered through the hydrogeological monitoring plan and prior to completion of postclosure.</p>	<p>Primarily Part 201.</p> <p>R 299.4319(7) requires a RAP to comply with the provisions of Part 201, which includes financial assurance required under R 299.5532(11)(m). Acceptable financial assurance is necessary for RAP approval.</p>	<p>Primarily Part 115.</p> <p>Sections 11523a(1) and (2) require financial assurance for corrective action at time of licensure.</p> <p>R 299.4444(1) requires a RAP to comply with the provisions of Part 201, which includes financial assurance required under R 299.5532(11)(m). Acceptable financial assurance is necessary for RAP approval.</p>

Description	Type III Landfill and Preexisting Units at Type II Landfills	Type II Landfill
<p>DEQ access to financial assurance for corrective action.<sup>1</sup></p> <p>Financial assurance mechanism (FAM) established under Part 201 is available to the DEQ to conduct corrective action.</p>	<p>Part 115 Perpetual Care Fund (PCF) under Section 11525(9) is available to the Department of Environmental Quality (DEQ) to conduct corrective action.</p> <p>The FAM established under Part 201 is available to the DEQ to conduct corrective action.</p>	<p>Part 115 PCF under Section 11525(9) is available to the DEQ to conduct corrective action.</p> <p>Bonds under Sections 11523 and 11523a are available to the DEQ to conduct corrective action.</p> <p>The FAM established under Part 201 is available to the DEQ to conduct corrective action.</p>
<p>Corrective action cost estimate and corresponding amount of financial assurance required.</p>	<p>Section 20114d and R 299.5532(11)(m) require an annualized estimate of third-party costs for long-term monitoring, operation and maintenance, oversight, and other costs necessary to assure the effectiveness and integrity of the remedial action for limited and site-specific cleanups. When a RAP requires long-term care, 30 years of financial assurance must be maintained, unless a lesser amount of time of long-term care is specified under the RAP.</p>	<p>Section 11523a(2)(c) requires a detailed estimate in current dollars of third-party costs to perform corrective action. This estimate must satisfy R 299.5532(11)(m), which requires an annualized estimate of third-party costs for long-term monitoring, operation and maintenance, oversight, and other costs necessary to assure the effectiveness and integrity of the remedial action for limited and site-specific cleanups.</p> <p>The estimate must also include construction costs (contaminated soil removal, capital costs, installation costs, etc.).</p> <p>Financial assurance is required for the entire corrective action cost estimate.</p> <p>The amount of financial assurance shall not be based on a present worth analysis of corrective action costs.<sup>2</sup></p>

<sup>1</sup> The process for accessing funds under a financial mechanism varies based on the terms and conditions of the mechanism, applicable statutory provisions, and any dispute resolution that may be afforded in a legally enforceable agreement. See applicable forfeiture procedures.

<sup>2</sup> Under Part 201, the amount may be based on a present worth analysis if an interest-bearing mechanism is used and the rate of return on investment exceeds the rate of inflation.

Description	Type III Landfill and Preexisting Units at Type II Landfills	Type II Landfill
<p>Adjustments to the corrective action cost estimate and corresponding amount of financial assurance.</p> <p>The DEQ can agree to reduce the amount of financial assurance required upon a demonstration that the FAM provides funds in excess of those needed for the remaining costs. Reductions for performance of activities must be substantiated with progress reports or other reports specified in the legally enforceable agreement. The DEQ may also require an increase in the amount of financial assurance if it is determined that the FAM is not adequate.</p> <p>The amount of financial assurance should be adjusted as the corrective action process progresses (investigation, evaluation of options, corrective measures implementation).</p>	<p>Part 201 guidance and model postclosure agreement require a long-term cost report and adjustment of the cost estimate every five years.</p> <p>The DEQ may approve reductions in the cost estimate based upon completion of portions of the corrective action. Consistent with Sections 11523a(4) and (6), the revised estimate must be reflected on the financial assurance required worksheet, Form A, and corrective action cost estimate worksheet, Form D, of the License to Operate a Solid Waste Disposal Area Application form, which, along with supporting documentation (e.g., itemized cost estimate), would be the basis for the DEQ to approve a reduction in the overall amount of financial assurance provided.</p> <p>Consistent with R 299.4445(6) and (7), reductions for performance of activities must be substantiated with progress reports or other reports, certified by the owner or operator and qualified groundwater scientist.</p> <p>The DEQ may also require the amount of financial assurance to be increased if it is determined that the FAM is not adequate to cover the updated costs.</p> <p>The amount of financial assurance should be adjusted as the corrective action process progresses (investigation, evaluation of options, and corrective measures implementation).</p>	

<sup>3</sup> The legally enforceable agreement should include a condition that the cost estimate be adjusted for inflation at the same time as the closure and postclosure cost estimates are adjusted (e.g., anniversary of operating license issuance) each year. In situations where the adjustment periods differ, the owner/operator should still be required to reflect the adjusted estimate on Form D, with a note that it was adjusted on a different schedule in accordance with the legally enforceable agreement.

Description	Type III Landfill and Preexisting Units at Type II Landfills	Type II Landfill
Acceptable FAMs.	<p>Part 201 financial assurance mechanisms.</p> <p>The Part 201 financial mechanisms are specified in R 299.5532(11)(m)(i)-(vi) and include:</p> <ul style="list-style-type: none"> <li>• Letter of credit</li> <li>• Environmental escrow</li> <li>• Trust fund</li> <li>• Certificate of deposit</li> <li>• Performance bond</li> <li>• Other mechanisms acceptable to the DEQ.</li> </ul> <p>Part 115 does not include a specific requirement for owners or operators of Type III landfills to provide a bond for corrective action, so there are no Part 115 financial assurance mechanisms considered “other mechanisms acceptable to the department” under R 299.5532(11)(m)(vi).</p> <p>While monies in the PCF required under Section 11525 are available to the DEQ to conduct corrective action, the PCF is not acceptable under R 299.5532(11)(m)(vi) for establishing the additional financial assurance required for a RAP because, under Sections 11523(7) and (8), and 11525(8), the required amount and any adjustments to it are independent of corrective action costs at Type III landfills.</p> <p>Under Part 201, R 299.5532(11)(m)(vi), the DEQ may allow a municipality to forgo obtaining a financial mechanism and instead acknowledge its continuing financial obligation for implementation of the RAP and to make available adequate funds to meet this obligation.</p>	<p>Part 115 financial assurance mechanisms.</p> <p>Under Section 11523a(1), the Part 115 financial mechanisms and PCF must be used to demonstrate financial assurance for corrective action. The Part 115 financial mechanisms defined in Section 11502 through 11504 are “other mechanisms acceptable to the department” under R 299.5532(11)(m)(vi) and provide financial assurance for corrective action, unless the owner or operator successfully petitions the department to allow the use of a bond required under another state or federal statute, as provided in Section 11502(4). The Part 115 financial mechanisms include:</p> <ul style="list-style-type: none"> <li>• Surety bond</li> <li>• Irrevocable letter of credit</li> <li>• Insurance</li> <li>• Trust fund</li> <li>• Escrow account</li> <li>• Financial test (up to 70% only)</li> <li>• Perpetual Care Fund</li> </ul>

<sup>4</sup> The use of a mechanism required under another program is problematic because it complicates the use of a combination of mechanisms to satisfy the financial assurance requirements, as allowed under Section 11523a(1). If a mechanism from another program is deemed acceptable for corrective action, it would need to be considered separately from the PCF and any other mechanisms to ensure that it was not also offsetting amounts that it was not intended to cover (e.g., closure and postclosure).

Description	Type III Landfill and Preexisting Units at Type II Landfills	Type II Landfill
Mechanism for specifying financial assurance requirements.	<p>Section 20114d requires the financial assurance provisions to be specified in a postclosure agreement. Construction permits and operating licenses issued subsequent to entry of the postclosure agreement must reference the postclosure agreement.</p>	<p>Section 11523a(1) requires financial assurance to be in place before issuance of an operating license. The operating license must include a condition specifying the amount of financial assurance required for the approved RAP. This provision does not limit the DEQ to only being able to require financial assurance for corrective action at the time of licensure; it only requires that the financial assurance specified in an approved RAP and associated legally enforceable agreement be in place before licensure. R 299.4444(1) requires a RAP to comply with the provisions of Part 201, which includes financial assurance required under R 299.5532(11)(m), and this requirement is not tied to licensure.</p> <p>Section 201120b requires the financial assurance provisions to be specified in a legally enforceable agreement. Construction permits and operating licenses issued subsequent to entry of the legally enforceable agreement must reference the legally enforceable agreement.</p>
	<p>To obtain a release from the financial assurance requirements for the RAP, the owner or operator must submit the supporting documentation specified in the legally enforceable agreement.</p> <p>Consistent with Section 11525b(2), the RMD has 60 days to agree to termination of the financial mechanism and to disburse funds to the owner or operator, or to notify the owner or operator of the deficiencies.</p>	<p>To obtain a release from the financial assurance requirements for the RAP, the owner or operator and qualified groundwater scientist must certify under R 299.4445(6) and (7) that the corrective action remedy has been completed, including all construction, monitoring, operation and maintenance, and other activities required under the RAP, and obtain the DEQ's approval of the certification.</p> <p>Consistent with Section 11525b(2), the RMD has 60 days to agree to termination of the financial mechanism and to disburse funds to the owner or operator, or to notify the owner or operator of the deficiencies.</p>

Description	Type III Landfill and Preexisting Units at Type II Landfills	Type II Landfill
Relationship to applications for construction permits and operating licenses.	<p>Under R 299.4902(3), a construction permit application for a facility that has been determined to be source of groundwater contamination must include a RAP that is in compliance with Part 201, Part 115, and the Part 115 rules, including financial assurance. An approved RAP is required for an application to be administratively complete.</p> <p>Under Section 11523a(1), financial assurance for corrective action is required prior to issuance of an operating license. The amount of financial assurance for corrective action must be reflected on Form D of the operating license application. The amount of financial assurance required for corrective action is established in an approved RAP and legally enforceable agreement.</p>	<p>Under R 299.4902(3), a construction permit application for a facility that has been determined to be source of groundwater contamination must include a RAP that is in compliance with Part 201, Part 115, and the Part 115 rules, including financial assurance. An approved RAP is required for an application to be administratively complete.</p>