

DMM-9 / Technical Guidance for Contained-In Determinations for Environmental Media and Debris Contaminated by Listed Hazardous Waste

New York State Department of Environmental Conservation

DEC Program Policy

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I. Summary:

This program policy, Technical Guidance for Contained-In Determinations for Environmental Media and Debris Contaminated by Listed Hazardous Waste (Contained-in Policy or Policy), provides the procedures and criteria the New York State Department of Environmental Conservation (DEC) will use to determine, on a case-by-case basis, when environmental media or debris or both¹ (predominantly remediation waste) may be managed as a non-hazardous waste. This is referred to as a “contained-in” determination because the medium or debris has been determined to “contain” an inconsequential concentration of one or more listed hazardous wastes. A contained-in determination (CID) pursuant to this Policy and in accordance with Subtitle C of the Resource Conservation and Recovery Act² (42 USC §§ 6921 – 6939a(f) (RCRA-C)) provides a basis for the determination that the environmental media or debris (predominantly remediation waste) is no longer contaminated with listed hazardous

¹ Wherever the term “environmental media or debris” is used herein, it should be read to include environmental media or debris or both.

² The Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), is codified at 42 USC §§ 6901 *et seq.* Subtitle C requirements pertaining to Hazardous Waste Management are contained in sections 6921 through 6939a(f) (RCRA-C). Subtitle D requirements pertaining to State or Regional Solid Waste Plans are contained in sections 6941 through 6949(a) (RCRA-D).

waste. A CID approval allows the facility³ to treat and dispose of these hazardous environmental media and debris as non-hazardous, as the level of contaminants are below standards shown to adversely impact human health and the environment. Without a CID, environmental media and debris containing a hazardous waste, as identified in 6 NYCRR § 371.3(a) through (e) or § 371.4(a) through (d), must be managed as hazardous waste.

The United States Environmental Protection Agency (EPA) has indicated that authorized states may exercise their right to determine when the remediation waste “no longer contains” a listed hazardous waste (See discussion in Section III. “Purpose and Background” below). For a state to reach that conclusion, the state must determine that the material would not represent a threat to human health or the environment when managed in accordance with the conditions set forth in that determination. New York State received its original RCRA-C base program authorization in 1986 and “contained-in” determination authority in June 1989.

This Contained-in Policy provides a strong incentive to remediate contaminated sites. If DEC approves a request for a CID prior to any active management⁴ of waste, remediation of contamination under this Policy should substantially reduce disposal, treatment, and transportation costs because the waste will not be required to be managed as hazardous waste. Pursuant to this Policy, DEC will allow environmental media and debris to be managed under one or a combination of the following:

1. remediation waste may be disposed of in a facility permitted pursuant to 6 NYCRR Part 363 or an out-of-state RCRA Subtitle D (RCRA-D) landfill;
2. remediation waste may be treated at a permitted Part 362 facility or an out-of-state RCRA -D treatment facility,
3. environmental media consisting of aqueous waste associated with remedial activities specified in the CID may be disposed of at a DEC-

³ Wherever “facility” is used herein and not specific to a solid waste facility, it should be read as “facility or site.” These terms are as defined in 6 NYCRR Parts 370 and 375, respectively. A CID request may be submitted by an owner or operator of a facility or other person acting on their behalf.

⁴ Active management means physically disturbing wastes within a waste management unit or disposing of additional hazardous waste in existing units containing previously disposed wastes (57 FR 37194, 37298; August 18, 1992). For example, an F001 waste that was disposed in 1950 became a hazardous waste as of November 19, 1980, the effective date of the F001 listing. However, the waste is not subject to hazardous waste regulation unless the waste is physically disturbed (e.g., exhumed). Once a person excavates the waste, he or she is considered the generator since his or her act first caused the waste to become subject to hazardous waste regulation (refer back to the definition of generator in 40 CFR §260.10) and is subject to all applicable 40 CFR Part 262 requirements. Note that excavation of contaminated soil during routine construction operations, such as pipeline installation, may not be considered active management if the soil is redeposited into the same excavated area. Site-specific situations should be discussed with the implementing agency.

- approved on-site water treatment system or publicly owned treatment works;
4. debris may be transported to a construction and demolition (C&D) handling and recovery facility regulated pursuant to 6 NYCRR Part 361;
 5. environmental media or debris may be beneficially used on-site pursuant to 6 NYCRR § 360.12 Beneficial use; or
 6. fill material may be beneficially used on-site pursuant to 6 NYCRR § 360.13 Special requirements for pre-determined use of fill material.

II. Policy

Pursuant to this Policy, all CIDs approved by DEC will be protective of public health and the environment and consistent with applicable statutes and regulations. The procedures set forth herein are intended to provide guidance on a uniform and consistent process for the determination of disposition requirements for environmental media or debris contaminated by listed hazardous waste to the following persons: DEC staff; remedial contractors; operators of remedial sites; and generator sites or facilities permitted under Part 373 wherein a hazardous waste management unit was cleaned for closure purposes. This guidance is not intended to create any substantive or procedural rights, nor is it enforceable by any party in administrative or judicial litigation with DEC. DEC reserves the right to act at variance with these procedures to address site-specific circumstances.

III. Purpose and Background

EPA originally developed a “contained-in” policy (see the referenced “Contained-in” Policy for Soil and Debris Contaminated with Hazardous Waste. November 30, 1998), (EPA Policy) to address proper management of contaminated environmental media (e.g., investigation derived waste (IDW), soil, sediment and water (groundwater, stormwater, surface water, purge water, well-development water, rainwater, decontamination (decon) water, rinsate)) and debris (also known, individually or collectively, as “waste”). EPA policy states that environmental media or debris contaminated with listed hazardous waste is a listed hazardous waste until the media or debris no longer contains listed hazardous waste. EPA has delegated the determination as to when media or debris no longer contain listed hazardous waste to the individual states. For New York State, listed hazardous wastes are identified in 6 NYCRR § 371.4(a) through (d).

One objective of the EPA policy is to facilitate a strong incentive to remediate contaminated sites. The use of a contained-in policy will reduce disposal/treatment and transportation costs for contaminated environmental media and debris that are not required to be managed in the same manner as hazardous waste.

Environmental media or debris containing hazardous constituents from listed hazardous wastes identified in 6 NYCRR § 371.4(a) through (d), must be managed as hazardous wastes unless or until the hazardous constituent concentrations in the media or debris are at or below contained-in criteria concentrations and the facility receives written approval from DEC.

The purpose of this Policy is to establish the process and procedures to be followed for a facility to receive a written CID from DEC and set minimum criteria for any environmental media or debris containing listed hazardous waste that must be met so it does not require management as hazardous waste.

This Policy provides procedures and criteria for evaluating whether environmental media or debris that contain a listed hazardous waste (see 6 NYCRR § 371.4(a) through (d)) may be managed as a non-hazardous solid waste in accordance with a CID issued by DEC. Environmental media or debris that is not eligible to be managed as a non-hazardous waste will be subject to DEC's hazardous waste regulations in 6 NYCRR Parts 370-374 and 376. DEC may determine, in accordance with this Policy, that debris is no longer contaminated with listed hazardous waste (see 6 NYCRR § 371.1(d)(5)(ii)).

This Policy will ensure that all non-aqueous wastes approved for a CID meet the Land Disposal Restrictions (LDR) listed in 6 NYCRR Part 376.

This Policy is not intended to establish a methodology for developing cleanup levels for contaminated environmental media, e.g., soil and water, nor does this Policy preclude DEC from requiring a facility to implement a remedy that will achieve environmental media cleanup levels which could be more stringent than the concentrations in *Contained in Action Levels Determination Table* (Table 1), a related reference to this Policy. The Soil/Sediment Action Levels included in Table 1 are reevaluated by EPA every five (5) years and may be revised as necessary. If any of these numbers are revised, DEC will update Table 1 to reflect these changes.

Applicability

This Policy applies to environmental media and debris that have been contaminated with listed hazardous waste and, therefore, contain hazardous constituents (see Appendix A). When environmental media and debris have been contaminated from the release of a listed hazardous waste, that listed hazardous waste is considered "contained-in" the environmental media and debris. The environmental media and debris themselves are not considered a listed hazardous waste; however, once waste is actively managed (i.e., removed from place, excavated), it is hazardous waste. Additionally, for environmental media or debris to be eligible for management under this Policy, that environmental media and debris must not exhibit a hazardous characteristic under 6 NYCRR § 371.3.

This Policy applies to the following circumstances:

- A. Environmental media and debris generated during closure or remediation activities at all sites regulated under the following New York State rules and regulations:
- 6 NYCRR Parts 370-374 and 376: RCRA-C Hazardous Waste Management programs, including site corrective action and site closure activities;
 - 6 NYCRR Part 375: Environmental Remediation Programs (State Superfund Program (SSF), Brownfield Cleanup Program (BCP), and Environmental Restoration Program (ERP), including all Site Management Plans); and
 - 6 NYCRR Part 611: Environmental Priorities and Procedures in Petroleum Cleanup and Removal (when petroleum is intermingled with a listed hazardous waste).
- B. Hazardous waste generated from sites administered by other DEC programs or administered by other federal or state programs (e.g., EPA program sites (National Priority List and Emergency Removal Actions), New York City Department of Environmental Protection and other state environmental programs). This Policy will be used to ensure DEC concurrence with determinations made by another state for any media or debris containing listed hazardous waste, as defined in 6 NYCRR § 371.4(a) through (d), that will be managed or disposed of in New York State.
- C. Remediation waste (investigation-derived waste (IDW), soil, sediment, water (groundwater, stormwater, surface water, purge water, well-development water, rainwater, decon water, rinsate), or debris) contaminated with listed hazardous waste as defined in 6 NYCRR § 371.4(a) through (d), that becomes subject to RCRA-C requirements immediately upon active management of waste.
1. Active management⁵ of waste occurs when environmental media or debris contaminated with listed hazardous waste is as discussed below:
 - a. stored (even briefly) in a tank or container;
 - b. removed from the area of contamination and treated ex-situ, either on-site or off-site; or
 - c. removed from an area of contamination and placed onto another separate and distinct area of contamination.

⁵ Stockpiling and consolidation of a 6 NYCRR 371.4(b) or (c) waste (denoted as F or K waste, respectively) has not typically been considered active management provided that the generated soil/sediment is kept adjacent to the excavation site and is not placed on a tarp or in a container.

2. Active management of waste does not occur as a result of environmental media or debris contaminated with listed hazardous waste that is:
 - a. being consolidated (i.e., excavated, temporarily stockpiled, re-deposited, graded, leveled, or any combination thereof) within the same area of contamination. In many cases, an area of contamination at a site with differing concentration levels could be designated as a single, large area of contamination;
 - b. in an area of contamination that is being capped in-place, this includes any grading prior to capping; or
 - c. in an area of contamination that is undergoing in-situ treatment.

- D. Manufactured Gas Plant (MGP) related remediation waste that is mixed with or contaminated by other non-MGP sources (i.e., spent solvents) is regulated pursuant to 6 NYCRR § 371.3(e)(1)(i). Under this regulation, MGP remediation waste may be disposed of as non-hazardous waste, provided it undergoes thermal treatment and does not contain an excess of 3.5% sulfur by weight.

This Policy does not apply to the following:

- A. Remediation waste (IDW, soil, sediment, water (groundwater, stormwater, surface water, purge water, well-development water, rainwater, decon water, rinsate), or debris) which exhibits a hazardous characteristic as defined in 6 NYCRR § 371.3(a) is not eligible for a CID unless the hazardous characteristic is eliminated.
- B. Wastes containing Polychlorinated biphenyls (PCBs) at concentrations greater than 50 parts per million (ppm), which are defined as a hazardous waste in 6 NYCRR § 371.4(e), are not eligible for a CID.
- C. Any material, that is not considered to be environmental media or debris, that has been used, was contaminated as a result of this use, and can no longer serve the purpose for which it was produced and originally intended without processing, is not eligible for a CID.

IV. Responsibility

The responsibility for interpreting, maintaining, and updating this Policy resides in DEC's Division of Materials Management (DMM), Bureau of Hazardous Waste & Radiation

Management (BHWRM). DMM-authorized staff are responsible for implementing this Policy.

The generator of a hazardous waste is responsible for making an accurate and adequate hazardous waste determination and for managing hazardous waste in accordance with applicable regulations. When requesting a hazardous waste determination for contaminated media or debris at a facility pursuant to this Policy, the generator must review all site operations and hazardous waste generation and shipments, past and current. The generator should request assistance from DMM-authorized staff. Generators who wish to receive a CID from DEC must submit a request for a determination to Central or Regional Office DMM-authorized staff, as set forth in the "Procedure" section below. This Policy cannot be self-implemented by the generator of the hazardous waste or by any party other than the specified DMM-authorized staff. EPA has directed that EPA Regions or Authorized States, such as New York State, may determine whether media or debris contains an inconsequential amount of listed hazardous waste on a site-by-site basis.

V. Procedure

DMM-authorized staff may determine that the contaminated environmental media or debris no longer contain hazardous waste if (1) the environmental media or debris does not exhibit a characteristic of hazardous waste as set forth under 6 NYCRR § 371.3; and (2) concentrations of hazardous constituents in the environmental media or debris do not pose a threat to human health or the environment at final disposition.

A generator may choose to manage environmental media or debris containing a listed hazardous waste as identified in 6 NYCRR § 371.4(a) through (d) and not seek a CID from DEC. A generator seeking CID approval must follow the procedures below.

A. "Contained-in" Determinations

A request for a CID must be submitted in writing to Contained-InRequest@dec.ny.gov to initiate the process. Initial review by DMM-authorized staff should verify whether the site meets one of the following criteria:

- The site is currently being overseen by DEC through participation in at least one of the following programs: RCRA Corrective Action; RCRA Operating Unit Closure; SSF; BCP; ERP; or Spill Response.
- The site is being remediated for approval to operate as an independent cleanup site by another New York State entity, EPA, or local government.
- The site is an out-of-state site where remedial cleanup under EPA oversight or the oversight of another RCRA authorized state is being

performed and the environmental media or debris is to be disposed in New York State.

After confirming that one of these criteria has been met, DMM-authorized staff will review the CID request. Any prior approved work plan (see Section A.1. Work Plan below), completed under one of the programs above, must meet the requirements for a CID. See Section A.3. Remedial Sites below. If DMM-authorized staff concur that the hazardous contaminants in the environmental media or debris meet the criteria for a CID, staff will issue a CID approval letter.

In general, a request for approval of a stand-alone work plan should include the following:

1. Work Plan: An authorized representative of the facility must submit a CID Work Plan (see Generic "Contained-in" Determination Work Plan), that includes the following information:
 - a. the source of the contamination, including identification of all listed hazardous waste identified in 6 NYCRR Part 371 that contributed to the environmental contamination;
 - b. sampling for all toxicity characteristic levels under 6 NYCRR § 371.3;
 - c. characterization of the environmental media or debris being evaluated using accepted established analytical protocols (Hazardous Waste Test Methods / SW-846) or through site sampling conducted per a DEC approved work plan and the associated Quality Assurance Project Plan (QAPP);
 - d. proposed management plan for the environmental media or debris;
 - e. proposed destination(s) for the environmental media or debris; or
 - f. proposed sampling frequency to ensure that there is sufficient analysis to support a CID.

Note: DEC's approval of work plans containing information discussing CIDs or a facility's approach for the CID does not replace a DMM-issued CID. Failure to obtain a CID may leave the facility open to enforcement for illegal disposal of hazardous waste.

2. Sampling and Reporting: For environmental media or debris that is proposed to be managed as hazardous waste, no additional sampling or reporting would typically be requested beyond what is required by the receiving facility.

For environmental media and debris being considered for a CID to be managed as non-hazardous waste, the generator or their designee must

provide sufficient information for DMM-authorized staff to determine if the CID request is approvable. This information must include the following, at a minimum:

- a. sampling results that are representative of the environmental media or debris. This shall be performed by using accepted established analytical protocols (Hazardous Waste Test Methods / SW-846) or through site sampling conducted per a DEC-approved work plan and the associated QAPP;
- b. results of all Toxicity Characteristic Leaching Procedure (TCLP) analyses conducted on debris, water (groundwater, stormwater, surface water, purge water, well-development water, rainwater, decon water, rinsate), sediment, and soil for each hazardous constituent that has a TCLP regulatory level;
- c. detailed information to demonstrate that soil/sediment sampling was completed at a frequency consistent with Technical Guidance for Site Investigation and Remediation (DER-10) (e.g., Table 5.4(e)10); and
- d. data which meets the requirements described in Sections 2.1, 2.2, and 2.3 of DER-10. Category A deliverables from a New York State Department of Health Environmental Laboratory Approval Program (ELAP) accredited laboratory are acceptable (Category B deliverables are not generally required for a CID). Initially, the standard quality assurance and quality control (QA/QC) requirements from DER-10 must be requested from the lab (5% matrix spike (MS) /matrix spike duplicate (MSD)). As additional "contained-in" determination requests are made for the same waste stream at a facility, the applicant may request a reduction in the scope of required QA/QC.

Note: Waste characterization may be completed in-situ to allow direct loading or may be completed ex-situ following active management. Sample analysis should be scheduled to allow time for the results to be submitted and reviewed by DEC prior to the environmental media or debris leaving the site or requiring management on-site beyond the allowable generator storage time frames.

3. Remedial Sites. For any remedial sites, the request for a CID may also be made as follows:
 - a. as part of a remedial investigation (may include IDW), in which case the determination request would be reviewed by DMM-authorized staff and DMM approval would be documented as part of the work plan approval; or
 - b. as part of a remedial action work plan, in which case the CID request would be reviewed by DMM-authorized staff and DMM approval would be documented as part of the work plan approval; or

- c. as part of the remedy selection process, in which case DMM-authorized staff approval as well as any requirements would be documented in the applicable decision document (e.g., Statement of Basis, Record of Decision, Remedial Action Work Plan, Decision Document), and details, such as sampling requirements, would be required as part of the remedial design.

The generator must submit the analytical results in an acceptable format to DEC with all requests for a CID approval. Failure to provide this information may result in a denial of a request.

B. Management of Generated Remedial Waste

A request for a CID must include a description of how the hazardous waste determination was made and how the waste generated will be managed. In accordance with 6 NYCRR Sections 376.2(a) and 376.4(a)(2), the samples must be grab samples. DEC may grant conditional approvals for composite sampling for certain parameters based on site-specific conditions.

Waste management must be consistent with one or more of the following options:

1. Landfill Disposal: Environmental media (non-aqueous) and debris contaminated with listed hazardous waste which is granted a CID may be managed as non-hazardous waste if it is placed in an acceptable landfill, provided that analytical results demonstrate that the waste:
 - a. meets the LDRs in 6 NYCRR Part 376 for all applicable hazardous constituents and all underlying constituents;
 - i. non-aqueous wastes contaminated by listed hazardous waste on or after the effective date of the waste's LDR must meet these standards before being able to be submitted for a CID, or
 - ii. non-aqueous wastes contaminated by listed hazardous waste prior to the effective date of the waste's LDR treatment standards can be first subject to a CID and, if found not to contain hazardous constituents above contained-in concentration criteria, the non-aqueous wastes will not have to be managed as hazardous waste and therefore will not have to meet LDRs, or
 - iii. LDRs are met for non-aqueous wastes when the concentration of each reasonably expected underlying hazardous constituent detected in the soil and sediment does not exceed 10 times the constituent's UTS, or if

subjected to treatment have achieved a 90% reduction in constituent concentration less than 10 times the UTS for that constituent. Compliance with these treatment standards is measured by an analysis of grab samples, unless otherwise noted in 6 NYCRR § 376.4(h). This does not apply to P or U listed wastes or wastes that do not exhibit a hazardous waste characteristic; and

- b. does not represent a threat to human health during transportation and placement.

An acceptable landfill must have a valid permit to accept the waste, and must be either:

- a. an operating solid waste landfill with a double liner and a leachate collection system, authorized pursuant to the provisions of 6 NYCRR Part 360 in New York State; or
- b. an out-of-state RCRA Subtitle D landfill permitted to accept the waste.

The CID request must document that a landfill owner or operator has agreed to accept the waste. The CID approval will be conditioned upon the waste going to that landfill.

- 2. Thermal Treatment: Remediation waste (environmental media only) may be managed as non-hazardous waste if it is sent off-site to a thermal treatment facility authorized pursuant to the provisions of 6 NYCRR Parts 360 or 370. The facility (in-state or out-of-state) must be permitted to accept the waste. Analytical results must demonstrate that the waste meets the following conditions:

- a. the waste is contaminated with listed hazardous waste only;
- b. the waste does not exhibit a hazardous waste characteristic;
- c. the waste meets the required BTU (British Thermal Units) value for energy recovery;
- d. the waste meets all acceptance criteria required under the facility permit;
- e. the waste does not pose a threat to public health during transportation or placement (if going to a landfill for final disposition after thermal treatment); and
- f. non-volatile components in soils or sediments must meet applicable LDR requirements prior to treatment since those compounds would not be effectively removed by thermal treatment.

Prior to thermal treatment, if the environmental media contains hazardous constituents at concentrations exceeding LDRs, the waste must be stored in a container or a containment building to prevent or control unacceptable

releases of the contaminated media and its hazardous waste constituents to the environment.

3. Remedial Program Sites: Remediation waste (soil, sediment, or debris) which is granted a CID by DMM-authorized staff may be beneficially used on a remediation site if the remediation waste:
 - a. is used in a manner consistent with the remedy approved by DEC. Specifically, the waste must meet applicable requirements of 6 NYCRR Subpart 375-6 and be managed in a manner protective of public health and the environment (including groundwater);
 - b. is an effective substitute for a commercial product (e.g., soil or aggregate); and
 - c. is placed in a manner that is a legitimate reuse and is not disposal.

Note: DEC approval of a work plan containing information discussing a CID or a facility's approach for this determination does not replace DMM-issued CID. Failure to obtain a CID may leave the facility open to enforcement for illegal disposal of hazardous waste.

If all the above criteria are met, the material is not considered a waste and may be beneficially used on-site, and the CID approval will serve as the required beneficial use determination (BUD). The material must not contain any other materials prohibited for on-site reuse pursuant to 6 NYCRR § 360.12(c)(1)(iv), such as friable asbestos. DMM reserves the right to rescind or modify the BUD at any time if it finds pursuant to 6 NYCRR § 360.12(d)(5) that any information serving as the basis for the BUD is found to be incorrect or no longer valid, or if DMM finds there has been noncompliance with any conditions of the granted BUD.

If the material is to be used off-site, the applicant must petition DMM for a case-specific BUD pursuant to 6 NYCRR § 360.12(d). BUDs not under a DER program such as the BCP must be submitted as a case-specific BUD petition to the Bureau of Solid Waste Management for review and notification of submission must be made to the Bureau of Hazardous Waste and Radiation Management, via the Contained-In mailbox (Contained-InRequest@dec.ny.gov).

4. Debris: A CID for debris containing a hazardous constituent as described in this Policy provides a basis for the determination that the debris is no longer contaminated with listed hazardous waste as described in 6 NYCRR § 371.1(d)(5)(ii).

Debris (including structural material) that meets LDR treatment standards for extraction and destruction technologies as described in 6 NYCRR § 376.4(g)(3) are not considered a hazardous waste and therefore do not require a CID. This debris can be handled in accordance with the requirements of 6 NYCRR Parts 360-364. This includes uncontaminated, recognizable concrete, brick, or glass being used as aggregate as described in § 360.12.

Debris treated by an immobilization technology and untreated debris would need to be assessed on a case-by-case basis as described in the management scenario for landfills, RCRA closures, or any remedial program sites. The LDR rules for debris apply regardless of the date on which the debris was contaminated.

5. Aqueous Waste: Aqueous wastes (such as groundwater, stormwater, surface water, purge water, well-development water, rainwater, decon water, or rinsate) being managed by the generator, that have been granted a CID no longer need to be managed as hazardous waste and may be discharged in accordance with the applicable Division of Water Resources regulations at 6 NYCRR Parts 649 through 941, provided any applicable hazardous constituent concentrations in the aqueous waste meet or are below one of the following three criteria:
 - a. for discharges to the ground surface or domestic sewage systems, the New York State Class GA standards or guidance values for discharge to the environment (DEC's Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards & Guidance Values and Groundwater Effluent Limitations"); or
 - b. the pretreatment requirements of the Publicly Owned Treatment Works (POTW) receiving the aqueous waste. This determination must be made prior to transport to the treatment facility. The applicant must provide a copy of the permit, or other approval, issued by the receiving POTW authorizing the discharge. The POTW is responsible for maintaining a State Pollutant Discharge Elimination System (SPDES) permit and meeting permit requirements; or
 - c. the influent criteria, or any required characterization, established through the SPDES permitting process for the receiving on-site wastewater treatment facility.

C. "Contained-In" Determination Approvals

DMM-authorized staff will review a request for a CID in accordance with the criteria (see 63 Federal Register (FR) 65874- 65947 - Hazardous Remediation Waste Management Requirements (HWIR-Media Final Rule));

November 30, 1998⁶) included in “Contained-in” Action Levels Determination Table (Table 1). If the request contains sufficient information to demonstrate that the environmental media or debris can be handled as a non-hazardous waste pursuant to this Policy, DMM-authorized staff will issue a CID approval letter. The CID approval letter will set forth the basis for approval and the prescribed disposal or treatment options, including disposal of environmental media and debris at a permitted Part 360 solid waste landfill or an out-of-state RCRA Subtitle D permitted landfill, and the disposal of water at a permitted wastewater facility such as a POTW.

VI. Definitions

Unless otherwise defined below, terms used in this Policy are defined in 6 NYCRR Parts 370-374 and 376.

- A. Area of Concern (AOC): Pursuant to the authority granted by 6 NYCRR § 373-1.6(c)(2), an area of concern has been defined for purposes of this Policy to mean any area at the facility, or any off-site area, which is not at this time known to be a solid waste management unit (SWMU), where hazardous waste or hazardous constituents or both are present or are suspected to be present as a result of a release from the facility. The term shall include areas of potential or suspected contamination as well as actual contamination. Such area(s) may require study and a determination of what, if any, corrective action may be necessary.
- B. Area of Contamination: An area of land at a remediation site where contiguous contamination is present. Movement of hazardous wastes within these areas does not trigger land disposal restrictions in 6 NYCRR Part 376.
- C. Contaminated Debris: Contaminated debris means debris that contains hazardous waste(s) listed in 6 NYCRR Part 371 or that exhibits a characteristic of hazardous waste identified in 6 NYCRR Part 371 - Identification and Listing of Hazardous Wastes.

⁶ From 63 FR 65874-65947 – “Because the regulations that serve as the basis for the contained-in policy are part of the “base” RCRA program that was in effect prior to 1984, the Agency has taken the position that EPA or the State agency authorized to administer the “base” RCRA regulations may determine whether media contain listed wastes. Decisions that media no longer contain listed hazardous wastes (or “contained-in” decisions) have typically been made on a case-by-case basis, according to the risks posed by the contaminated media. The Agency has not issued any definitive guidance or regulations for determining appropriate contained-in levels; however, EPA Regions and States have been advised that conservative, health-based levels derived from direct exposure pathways would clearly be acceptable as “contained-in” levels. (See memorandum from Sylvia K. Lowrance to Jeff Zelikson, Region IX, (January 24, 1989)). It has been the common practice of EPA and many States to specify conservative, risk-based levels calculated with standard conservative exposure assumptions (usually based on unrestricted access), or site-specific risk assessments.”

- D. Debris: Debris, also a subset of remediation waste, is defined as "solid material exceeding a 60 mm particle size that is intended for disposal and that is: a manufactured object, or plant or animal matter, or natural geologic material..." (see 6 NYCRR § 371.1(d)(5)(ii) and § 376.1(b)(vii)). This includes but is not limited to:
- dismantled construction materials such as used bricks, wood beams, and pieces of concrete;
 - decommissioned industrial equipment such as pipes, pumps, and tanks;
 - other discarded manufactured objects such as personal protective equipment (gloves, coveralls, eyewear); and
 - large, naturally occurring objects such as tree trunks and boulders.
- E. Decon water: Decon water, short for decontamination water, includes initial rinses with or without surfactants for removing contamination from field equipment, secondary containment areas and material at the site.
- F. DMM-authorized Staff: Staff designated by DMM-BHWRM Director as having been trained and able to demonstrate a clear understanding of this Policy as well as the pertinent hazardous waste characterization and LDR regulations found in 6 NYCRR Part 371 and Part 376. DMM-authorized staff are not permitted to issue a CID approval for any project on which they are or were the project manager.
- G. Environmental Media: Environmental media means materials found in the natural environment such as soil, groundwater, surface water, and sediments; or a mixture of such materials with liquids, sludges, or solids which is inseparable by simple mechanical removal processes and is made up primarily of media. This definition is intended to include a broad range of naturally occurring environmental media that may become contaminated with hazardous waste (61 FR 18780 and 18783; April 29, 1996). This definition does not include debris as defined in 6 NYCRR § 376.1(b)(vii).
- H. In-Situ Treatment: In-situ means "in place." In-situ treatment is used to describe any treatment of contaminated media (including soil, water, or soil vapor) in place.
- I. Investigation-Derived Waste (IDW): IDW is a subset of remediation wastes. IDW is waste that is generated in the process of investigating or examining a known or potentially contaminated site. It includes solid and hazardous waste, media (including groundwater, surface water, soils, and sediments) and all debris that contains listed hazardous wastes or exhibits a characteristic of a

hazardous waste. It also includes media and debris that is not hazardous but is contaminated with hazardous constituents.

- J. Land Disposal Unit (LDU): An LDU is a landfill, surface impoundment, waste pile, land treatment unit, injection well, salt dome formation, salt bed formation, underground mine, or underground cave into which hazardous waste has been placed as indicated in the definition of land disposal in 6 NYCRR § 370.2(b).
- K. Non-Aqueous: The term means a solid (i.e., soil, debris) that is free of liquid.
- L. Release. For purposes of this Policy, “release” includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste, including hazardous constituents, unless expressly authorized under the terms of a facility’s Permit or otherwise permitted by law (e.g., SPDES permitted discharges).
- M. Remediation waste: Remediation waste means all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris that contain listed hazardous waste or that themselves exhibit a hazardous characteristic and that are managed for implementing cleanup.
- N. Rinsate: Rinsate is defined as a water sample used for analysis of metal surfaces, concrete floors, secondary containment areas and sumps, including surfaces that have been coated, to determine whether hazardous waste contamination remains. This sampling is to be performed after the surfaces have been cleaned and decontaminated, usually pursuant to the approved closure plan or a remedial action work plan.
- O. Solid Waste Management Unit (SWMU): SWMU includes any discernible waste management unit at which solid wastes have been placed or released at any time, irrespective of whether the unit was intended for the management of hazardous or solid wastes as those terms are defined in 6 NYCRR Part 371 and Subpart 373-2. These units include, but are not limited to, landfills, surface impoundments, waste piles, land treatment units, tanks, elementary neutralization units, transfer stations, container storage areas, incinerators, injection wells, recycling units, and closed and abandoned units. Certain areas associated with production processes which have become contaminated as a result of routine and systematic releases of wastes or hazardous constituents from wastes are also considered SWMUs.

VII. Related References

- 6 NYCRR Part 360: Solid Waste Management Facilities.
- 6 NYCRR Part 361: Material Recovery Facilities.
- 6 NYCRR Part 362: Combustion, Thermal Treatment, Transfer, and Collection Facilities.
- 6 NYCRR Part 363 Landfills.
- 6 NYCRR Part 364 Waste Transporters
- 6 NYCRR Part 370: Hazardous Waste Management System General.
- 6 NYCRR Part 371: Identification and Listing of Hazardous Wastes.
- 6 NYCRR Part 372: Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities.
- 6 NYCRR Subpart 373-1: Hazardous Waste Treatment, Storage and Disposal Facility Permit Requirements.
- 6 NYCRR Subpart 373-2: Final Status Standards for Owner and Operators of Hazardous Waste Treatment, Storage and Disposal Facility Permit Requirements.
- 6 NYCRR Subpart 373-3: Interim Status Standards Regulations for Owner and Operators of Hazardous Waste Treatment, Storage and Disposal Facility Permit Requirements.
- 6 NYCRR Part 375: Environmental Remediation Programs.
- 6 NYCRR Part 376: Land Disposal Restrictions.
- 6 NYCRR Parts 700-706: Water Quality Regulations.
- CP-51 New York State Department of Environmental Conservation Commissioner's Policy on Soil Cleanup Criteria, October 21, 2010.
- DER-10: Technical Guidance for Site Investigation and Remediation, June 18, 2010.
- Division of Water's Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 Edition, January 1999 Errata Sheet, April 2000 Addendum, June 2004 Addendum, February 2023 Addendum.
- EPA Guidance - "Contained-In" Policy for Soil and Debris Contaminated with Hazardous Waste. November 30, 1998.
- EPA Guidance - Determination of When Contamination is Caused by a Listed Hazardous Waste (undated).
- EPA Guidance - RO# 14283 to Piper & Marbury LLP. (August 8, 1998).
- EPA Guidance - Management of Remediation Waste under RCRA, EPA530-F-98-026 (Oct. 1998).
- EPA 63 FR 65874 - 65947 ("HWIR-Media" Final Rule; November 30, 1998).
- EPA 61 FR 18780 - 18864 ("HWIR-Media" Proposed Rule; April 29, 1996).
- EPA 63 FR 28556 - 28736 ("LDR-Phase IV" Final Rule; May 28, 1998).

Tables

- Table 1 - “Contained-in” Action Levels Determination Table

Attachments

- Appendix A - Criteria and Clarifications for “Contained-In” Determinations

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APPENDIX A: Criteria and Clarifications for “Contained-In” Determinations

I. “Contained-In” Criteria: Technical Basis

- A. Health-Based Protection (Soil and Sediment): The concentration for each hazardous waste constituent (those chemicals associated with the listed hazardous waste) must be compared with risk-based concentrations protective of public health based on reasonably expected exposure scenarios.

For disposal at a landfill or treatment at a thermal treatment facility permitted under 6 NYCRR Parts 360, 362, and 363, the contained-in criteria (see Table 1) employs concentration levels for individual chemical constituents that are protective of public health through the direct ingestion pathway.

- B. Groundwater Protection (Soil and Sediment): A CID request must demonstrate that the waste in question will not negatively impact groundwater if it leaches. Alternatively, the results of actual groundwater sampling or a leaching test can be used to demonstrate that the material would not negatively impact groundwater quality. Results of that testing must be compared to guidance values as identified in the DEC Technical and Operational Guidance Series (TOGS) document entitled, “Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations” (TOGS 1.1.1; <http://www.dec.ny.gov/regulations/2652.html>). The toxicity characteristic leaching procedure (TCLP) test can be used for this determination. For media placed in a landfill as described in section V.B.1, the engineering controls in place for the landfill and the Land Disposal Restrictions (LDR) are sufficiently protective of groundwater without additional analyses.

- C. Aqueous Waste: Accumulated water (groundwater, stormwater, surface water, purge, well-development rainwater, decon water, and rinsate) contaminated with listed hazardous waste as defined in 6 NYCRR Part 371, which does not exhibit a hazardous characteristic, will be analyzed directly for the total concentration (without filtering) of each hazardous waste constituent expected to be present in the medium. The resultant concentration for each detected constituent will be compared against the corresponding NYS Class GA water quality standard or guidance value as identified in TOGS 1.1.1. If results do not exceed these standards, then the water does not have to be managed as hazardous waste. The circumstances of the eventual discharge of the water may allow for aqueous waste with higher concentrations to be considered non-hazardous (refer to section V.B.4.), or those circumstances may impose additional restrictions under the State Pollution Discharge Elimination System (SPDES) limitations (e.g., aquatic water quality standards or guidance values) or Underground Injection Control requirements.

- D. Application of the LDR Rule: Soil and Sediment: Land Disposal Restriction requirements are met if the concentration of each reasonably expected underlying hazardous waste constituent detected in the sediment or soil does not exceed 10 times the constituent's Universal Treatment Standard (UTS), See Table 2 for the UTS concentrations. UTS requirements are provided in 6 NYCRR Part 376.

II. Clarifications

A. Environmental Media

1. Environmental media are usually contaminated through land disposal, spills and releases of hazardous waste; or spills and releases of chemical products which, when spilled, become hazardous wastes. Contaminated environmental media are subject to regulation under RCRA if they contain a listed hazardous waste or if they exhibit a hazardous waste characteristic as defined in 6 NYCRR Part 371.
2. Under the mixture rule identified in 6 NYCRR § 371.1(d)(1), (2), and (6), a non-hazardous solid waste becomes a hazardous waste when mixed with a listed hazardous waste.
3. Under the derived-from rule identified in 6 NYCRR § 371.1(d)(3) and (4), waste generated from the treatment, storage, or disposal of a listed hazardous waste also remains regulated as a hazardous waste unless it is determined to be non-hazardous under this Policy.
4. Hazardous waste liquid that drains from a landfill as leachate is not considered an environmental medium. Groundwater or rainwater, which has been impacted by waste in a landfill and is subsequently collected in a leachate collection system, is considered an environmental medium and a "contained-in" determination may be applied. If a landfill meets 6 NYCRR Part 363 design standards, and leachate concentrations are decreasing over time, the leachate can be determined to have drained from the waste. If the leachate concentrations have reached asymptotic levels (e.g., they have reached a point where the concentration stabilizes), and groundwater or surface water could reasonably be expected to infiltrate the landfill, the leachate can be determined to be an environmental medium impacted by the waste.

- B. Spent materials not addressed by this Policy. This Contained-in Policy does not apply to the following:

1. Process wastewater and wastewater sludge contaminated by listed hazardous waste. Activated carbon that contains a listed hazardous waste and that is intended to be regenerated, must be managed as a hazardous waste until it is regenerated. If the carbon exhibits a hazardous characteristic but does not contain a listed hazardous waste, then it is considered recycled under Table 1 of 6 NYCRR § 371.1 and is not a solid waste. If aqueous waste receives a CID approval prior to treatment, the carbon would not be considered a listed hazardous waste but it may still be a characteristic hazardous waste.
 2. Personal protective equipment (PPE), disposable sampling equipment, and other sampling equipment, which have been determined to have had minimal contact with environmental media contaminated with a listed hazardous waste and which do not exhibit a hazardous characteristic, are not considered a hazardous waste and therefore do not require a CID based on 6 NYCRR § 371.1(d)(5)(ii).
- C. Treatment of hazardous waste as may be required by the CID approval.
1. Treatment of aqueous hazardous waste must be completed pursuant to a permit as described in 6 NYCRR Part 373, except as follows:
 - a. If treatment takes place in a tank-based system and the treated water is legally discharged to either surface water under a SPDES permit or permit equivalent or a permitted publicly owned treatment works (POTW), then that treatment is exempt under the wastewater treatment unit (WWTU) exemption found at 6 NYCRR § 373-1.1(d)(1)(xii).
 - b. DEC accepts EPA's interpretation that a RCRA (Part 373) permit is not required if a generator treats its hazardous waste in a tank or container that complies with the requirements imposed by 40 CFR § 262.34. Such containers and tanks must also comply with 6 NYCRR § 372.2(a)(8)(i)-(iii) (DEC's counterpart to 40 CFR § 262.34).
 - c. If treatment is completed at the remedial site and the conditions described in 6 NYCRR § 375-1.12 are met, then that treatment is exempt from Part 373 permitting.
 2. Treatment of soil must be completed pursuant to a permit as described in 6 NYCRR Part 373, except as follows:
 - a. Treatment of soil in-situ (prior to active management) is not subject to permitting requirements because that soil has not been generated as a hazardous waste.

- b. DEC accepts EPA's interpretation that a RCRA (6 NYCRR Part 373) permit is not required if a generator treats its hazardous waste in a tank or container that complies with the requirements imposed by 40 CFR § 262.34. Such containers and tanks must also comply with 6 NYCRR § 372.2(a)(8)(i) - (iii) (DEC's counterpart to 40 CFR § 262.34).
- c. If treatment (either to eliminate a hazardous characteristic or to meet "contained-in" criteria) is completed at the remedial site, that treatment is exempt from Part 373 permitting.

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