

# **Guidance on Contained-Out Determinations for Management of Contaminated Soil in Utah**

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Utah Department of Environmental Quality
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DISCLAIMER: This guidance document is not policy, nor is it intended as a substitute for rulemaking. As guidance, the guidelines provided in this document do not create any substantive or procedural rights.

#### LIST OF ACRONYMS AND ABBREVIATIONS

AOC Area of Contamination

ATS Alternative Treatment Standards

DWMRC Utah Division of Waste Management and Radiation Control

EPA United States Environmental Protection Agency

HCOC Hazardous Constituent of Concern

HI Hazard Index

ID Identification

LDR Land Disposal Restrictions

POD Point of Departure

RBSL Risk-Based Screening Levels

RCRA Resource Conservation and Recovery Act

RSL Regional Screening Levels

TC Toxicity Characteristic

TR Target Risk

UCL Upper Confidence Limit

UST Underground Storage Tank

UTS Universal Treatment Standard

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FIGURE 1: Contained-Out Determination Process

**Contained-Out Determination Application** 

**Application for Project Oversight** 

**NOTE:** Before sending in an application/request for a Contained-Out Determination by the Director, please complete the "Application for Project Oversight" which can be found here: <a href="https://documents.deq.utah.gov/waste-management-and-radiation-control/hazardous-waste/DSHW-2020-016142.pdf">https://documents.deq.utah.gov/waste-management-and-radiation-control/hazardous-waste/DSHW-2020-016142.pdf</a>. This will allow for processing the payments for voluntary oversight and technical review of your Contained-Out Determination request and supporting documentation.

Setting up a billing account for the voluntary oversight of your project will need to be completed before the Division can work on the technical review of your Contained-Out Determination request.

#### 1.0 INTRODUCTION:

The U.S. Environmental Protection Agency (EPA) has delegated authority to the State of Utah to regulate hazardous wastes in Utah pursuant to the Resource Conservation and Recovery Act (RCRA). Under the Utah Solid and Hazardous Waste Act, the responsibility to regulate hazardous waste is assigned to the Waste Management and Radiation Control Board and the Director of the Division of Waste Management and Radiation Control (Director).

The purpose of this guidance document is to provide information on the process to determine whether contaminated soils, impacted by hazardous materials or wastes, must be managed as a hazardous waste subject to RCRA requirements, such as disposal at a permitted hazardous waste landfill and land disposal requirements. In some circumstances, impacted soils may not be regulated as hazardous waste and may be eligible for a more cost-effective landfill disposal alternative.

Additionally, this document is intended to help guide the user through the formal process of requesting that the Director decide whether the user's contaminated soil qualifies to be managed as a non-hazardous waste, a regulatory decision referred to herein as a "Contained-Out" determination. If the request for the Contained-Out determination of impacted soils is denied by the Director, then by default the contaminated soils, impacted by hazardous materials or wastes, are still considered as "Contained-In", and must be disposed of as a hazardous waste as illustrated by **Figure 1**. "Contained-Out Determination Process" (see Attachments).

It is important to note that soils contaminated with hazardous waste(s) are the only impacted "contaminated environmental media" that are addressed by this guidance document. All other impacted environmental media, such as groundwater, surface water, sediments, debris, etc. should be addressed separately on a site-specific basis in accordance with applicable rules and regulations.

#### 1.1 Considerations for Management of Soils Generated in Utah and Shipped Out-of-State for Disposal

Note that this guidance regarding Contained-Out determinations made for soil generated within Utah does not limit the responsibility of generators to comply with the applicable requirements of other states, if the soils are intended to be shipped out of Utah for final disposal.

Before shipping the soil out of Utah, a generator must contact both the operator of the landfill or other receiving facility and the relevant state agency (or the relevant EPA region, if the state does not administer the RCRA program) to determine if they are willing to accept the Contained-Out determination made by Utah. The generator has the responsibility to explain the process used in Utah in making a Contained-Out determination to the relevant parties.

# 1.2 Considerations for Management of Soils Generated Out-of-State and Shipped to Utah for Disposal

EPA authorized states with delegated RCRA programs to develop their own state-specific, risk-based standards for their Contained-Out determination evaluation process. Consequently, soils that have been generated outside of Utah, where that state has approved of a Contained-Out determination using their own state-specific, risk-based standards, may or may not be approved for disposal in Utah via a concurrent Contained-Out determination.

Specifically, contaminated soils generated outside the State of Utah may be disposed of in Utah provided they meet the Utah-specific, risk-based standards established for a Contained-Out determination as outlined in this guidance document, and they receive approval by the Director for the soils to be disposed of at an appropriate facility in Utah.

Even if the soils have already obtained a Contained-Out determination by another state, Utah may not approve of the same type of Contained-Out determination for the soils to be disposed of within Utah if there are significant differences in the risk-based standards used by the other state. For instance, a state may choose to use a different exposure scenario that it deems appropriate to represent a Site Worker at the permitted facility when deriving a risk-based concentration level for the protection of the Site Worker. In addition, a target risk (TR) level chosen by a state as a point of departure (POD) may vary from state to state. The POD is the risk level at which a state may determine that the potential risk to receptors is insignificant.

As a result of varying standards used by different states, a Contained-Out determination approval issued by other states which are based on standards that are not consistent with standards used in the State of Utah for the derivation of risk-based concentration levels may be rejected. Consequently, the soil may not be allowed in Utah as a non-hazardous waste for disposal at a permitted Subtitle D waste disposal facility even though the same soil had been previously determined to be non-hazardous by another state.

As conditions warrant, this guidance document may occasionally be changed or updated by the Division of Waste Management and Radiation Control (DWMRC) without prior notification. The DWMRC advises that the user refers to the most up-to-date version of this guidance document for working on any applicable soil cleanup and disposal projects in the State of Utah.

#### 2.0 BACKGROUND AND ELIGIBILITY FOR DETERMINATIONS:

EPA's Contained-In policy regarding making the appropriate determinations for environmental media impacted by hazardous materials or wastes are not codified in federal regulation or in state administrative rule. However, the Contained-In policy dates back to a 1986 EPA memorandum, was published in the *Federal Register* (63 FR 65877 November 30, 1998), and is also referred to in several other releases from EPA.

The applicant must first submit a request (see the "Contained-Out Determination Application" in the Attachments) to the Director prior to managing the waste as non-hazardous. The Director will then evaluate the contaminated soil on a site-specific basis to determine compliance with applicable rules. This guidance document is not policy, nor is it intended as a substitute for rulemaking. As guidance, the guidelines provided in this document do not create any substantive or procedural rights related to a site-specific determination. In addition, all determinations are made on a case-by-case basis and these guidelines do not replace the requirements for a site-specific Contained-Out determination by the Director for the contaminated soils, impacted by hazardous materials or wastes, in question.

#### 2.1 What is the Difference Between Contained-In and Contained-Out Determinations?

EPA does not consider soil to be a solid waste since it is not abandoned or discarded. However, if the soil is contaminated with a hazardous material or waste, the soil must be managed as if it is a hazardous waste. This determination became known as the "Contained-In" policy.

This Contained-In policy forms the basis for applying RCRA Subtitle C requirements in managing soil remediation projects. This policy requires contaminated soil to be managed as hazardous waste if it contains one or more listed wastes or exhibits one or more characteristics of hazardous waste. The impacted soils are subject to all applicable RCRA hazardous waste requirements until the impacted soil no longer contains hazardous waste as explained in greater detail in this guidance document.

However, contaminated soils, impacted by hazardous materials or wastes, do not need to be managed as a hazardous waste if they do not exhibit a hazardous characteristic and do not contain hazardous constituents above site-specific risk-based or health-based levels. The determination of whether contaminated soils do not exhibit a hazardous waste characteristic or contain listed hazardous constituents at unacceptable levels is referred to as a "Contained-Out" determination. This Contained-Out determination is made by the Director. These guidelines identify some of the components of applicable management, treatment, storage and disposal regulatory options and requirements associated with impacted soils from a contaminated site subject to RCRA regulatory requirements for hazardous waste(s), for which the applicant is seeking a Contained-Out determination by the Director for more cost-effective soil disposal options.

#### 3.0 APPLICABILITY TO CONTAMINATED SOILS:

Contaminated soils, impacted by hazardous materials or wastes, that contain a listed hazardous waste or exhibit a hazardous waste characteristic must be managed as hazardous wastes. However, contaminated soils are not in and of themselves considered a hazardous waste – only the hazardous constituents contained within the soil are considered hazardous waste.

Underground Storage Tank (UST) Exclusion (<u>Utah Admin. Code</u> R315-261-4(b)(10)): Petroleum-Contaminated soil from Underground Storage Tank (UST) corrective actions are excluded from the definition of hazardous waste if they only exhibit the toxicity characteristic (TC) as specified in <u>Utah Admin. Code</u> R315-261-24 and in <u>Utah Admin. Code</u> R315-261-4(b)(10), for waste codes D018 through D043. This exclusion does not apply to RCRA metals and to solvent-bearing wastes that are not listed.

#### 3.1 When is Contaminated Soil Considered to Contain a Hazardous Waste?

Soil is considered to contain (i.e., "Contained-In") a hazardous waste under RCRA and the Utah Hazardous Waste Regulations as outlined in <u>Utah Admin. Code</u> R315-261 if, when it is *generated*, it meets <u>either or both</u> of the following conditions;

- The soil exhibits one or more of the characteristics of a hazardous waste; toxicity, reactivity, ignitability, or corrosivity.
- The soil contains hazardous constituents from a listed hazardous waste (F, K, P or U classes).

Soils contaminated with hazardous wastes (characteristic or listed) need to be managed properly according to all applicable federal regulations and state rules. Refer to the applicable regulations provided in <a href="Utah">Utah</a> <a href="Main-Admin.code">Admin. Code</a> R315-268 for the proper management of soils described in this document in Section 5.0 (Land Disposal Restrictions).

#### 3.2 How Can Soils Contaminated with Hazardous Waste Become Eligible for Disposal as Non-Hazardous Waste?

Soil that is considered to contain a hazardous waste (characteristic or listed) can become (or be considered) non-hazardous under certain conditions, depending upon the factors that originally made it a hazardous waste.

#### Soils Contaminated with Characteristic Hazardous Waste:

Contaminated soils, impacted by hazardous materials or wastes, are considered to contain a hazardous waste if the soils continue to exhibit a characteristic of hazardous waste (i.e., toxicity, reactivity, ignitability or corrosivity). Once the contaminated soil is treated using an acceptable method and no longer exhibits a hazardous characteristic, then the soils may be considered non-hazardous, or in other words "Contained-Out" as demonstrated by analytical testing using approved EPA laboratory methods, and a final determination by the Director.

#### Soils Contaminated with **Listed** Hazardous Waste:

Soils that contain listed hazardous waste must be managed as hazardous wastes for as long as soils contain listed hazardous waste constituents. However, it is possible for soils that are contaminated with a listed hazardous waste to be considered as non-hazardous waste under certain conditions. This scenario is possible, **if** the contaminant levels of the listed hazardous waste(s) are at or below certain risk-based levels or concentrations considered to be protective of human health and the environment as determined on a

site-specific basis by the Director. Consequently, the soils are no longer considered hazardous (even if the soil still contains a detectable concentration of a listed hazardous waste). If the Director determines that any given volume of contaminated soil no longer contains a hazardous waste, this decision is considered a Contained-Out determination. Such a determination by the Director has obvious cost benefits, such as the contaminated soil being able to be handled, stored, transported, and ultimately disposed of as non-hazardous wastes at a permitted RCRA Subtitle D solid waste disposal facility or landfill.

#### Soil Treatment:

Treatment methods for contaminated soils that have been determined to be "Contained-In" with hazardous waste(s) are approved by the Director on a site-specific basis. During all treatment processes, the treatment must not; (1) dilute the soil to a larger volume to lower the hazardous constituent concentration or, (2) release excessive amounts of hazardous constituents to the air. Any deliberate mixing of soil contaminated with hazardous waste to change its treatment classification is prohibited, pursuant to <a href="Utah Admin. Code">Utah Admin. Code</a> R315-268-3 and is subject to enforcement actions as outlined in Utah Code §19-6-112.

#### Applicability of Land Disposal Restrictions:

It should be noted that, notwithstanding whether the contaminated soils are treated to remove the hazardous characteristic (as listed above), the soils may still be subject to land disposal restrictions even though soils may meet a Contained-Out determination by the Director. As further explained in Section 5.0 (Land Disposal Restrictions), it is EPA's position (US EPA, 2001) that even contaminated soils that are no longer characterized as hazardous waste and have obtained a Contained-Out determination by a regulatory agency, may still be subject to LDR treatment standards if the soils still contain some hazardous constituents at detectable concentrations.

#### 4.0 DETERMINATION OF CONTAINED-OUT STATUS FOR SOILS:

There are two basic options available to an applicant seeking a Contained-Out determination by the Director as described in more detail below:

#### 4.1 Option 1 for Soils Contaminated with Hazardous Wastes

Soils must be managed as hazardous waste under RCRA Subtitle C Regulations when the soils:

- are contaminated with a listed hazardous waste under Utah Admin. Code R315-261 (listed waste);<sup>1</sup>
- exhibit any of the characteristics of a hazardous waste;<sup>2</sup>, or
- have a concentration of any Hazardous Constituent of Concern (HCOC) listed under <u>Utah Admin.</u> <u>Code</u> R315-261-33,<sup>3</sup> and <u>Utah Admin. Code</u> R315-261-1092, Appendix VIII<sup>4</sup> which are greater than:
  - o the current US EPA <u>Regional Screening Levels for Chemical Contaminants at Superfund Sites</u> (accessed on October 1, 2021) "RSL" Table;
  - site-specific industrial Risk-Based Screening Level (RBSL) at a cancer risk of 1x10<sup>-6</sup>;
  - o a non-cancer hazard index of one for direct exposure (ingestion, inhalation, and dermal exposure) to the contaminated soil(s); or
  - $\circ$  cumulative risk posed by multiple chemicals in the medium is greater than  $1x10^{-4}$  or the hazard index is greater than one.

The Director uses EPA's Regional Screening Level (RSL) tables tabulated for the Industrial and/or Commercial Land Use Scenario and a cancer risk or target risk of 1x10<sup>-6</sup> and a hazard index of one as reference for making a Contained-Out determination of soil containing listed waste. The Director may also consider a site-specific industrial risk-based screening level (RBSL) derived at a target risk of 1x10<sup>-6</sup> and a hazard index (HI) of one for direct exposure. Use of the EPA's RSL tables or RBSLs provide for the protection of the industrial worker or landfill worker who may come into contact with the impacted soils at a later time.

Data for soils containing a concentration of any HCOC at levels above applicable regulatory limits as outlined herein must be obtained through representative sampling and analysis.

If discrete soil samples are taken, the concentrations of the HCOCs must be reported as the 95% upper confidence limit (95% UCL). If the required number of samples for determination of a 95% UCL is not adequate, the maximum concentration shall be used for reporting. The minimum sample size required for statistical validity is eight (US EPA ProUCL). In cases where the calculated 95% UCL concentration is greater than the maximum concentration, the lesser of the two values shall be reported. This determination must be approved by the Director prior to managing the waste as non-hazardous.

If composite soil samples are taken from a small container, the composite sample(s) shall be comprised of a minimum of 4 equally spaced discrete samples. The samples shall be considered to represent the entire volume of soil in the container. If a large roll-off bin or container is sampled, the composite sample(s) shall be comprised of a minimum of 8 equally spaced discrete samples. The samples shall be considered to represent the entire volume of soil within the bin or container.

<sup>&</sup>lt;sup>1</sup> Corresponding federal regulation, 40 CFR Part 261, Subpart D (listed waste).

<sup>&</sup>lt;sup>2</sup> See <u>Utah Admin. Code</u> R315-261; 40 CFR Part 261.

<sup>&</sup>lt;sup>3</sup> Corresponding federal regulation 40 CFR Part 261.33.

<sup>&</sup>lt;sup>4</sup> Corresponding federal regulation 40 CFR Part 261, Appendix VIII "adopted and incorporated by reference with the following addition: (a) P999 – CX, GA, GB, GD, H, HD, HL, HN-1, HN-2, HN-3, HT, L, T, and VX."

Contaminated soils, impacted by hazardous materials or wastes, managed under RCRA Subtitle C, where the soil is determined to "contain" listed hazardous waste or which exhibits a characteristic of hazardous waste at the time of generation (removed or excavated), must also meet all applicable LDR requirements established for soils in <a href="Utah Admin.code">Utah Admin. Code</a> R315-268-40, R315-268-48, and R315-268-49<sup>5</sup>, and disposed of at a permitted RCRA Subtitle C landfill.

#### 4.2 Option 2 for Soils Contaminated with Listed Wastes Determined to be Non-Hazardous

Soils may be managed as a non-hazardous waste under RCRA Subtitle D Regulations when the soils are:

- determined to not exhibit any of the characteristics of a hazardous waste;
- determined to be contaminated with a listed hazardous waste under <u>Utah Admin. Code</u> R315-261,<sup>6</sup> but it is demonstrated that the levels or concentrations of any applicable hazardous constituents (<u>Utah Admin. Code</u> R315-261-33 and R315-261-1092, Appendix VIII)<sup>7</sup> in the soil(s) are:
  - o less than or equal to the current US EPA Industrial RSL Table Value;
  - o less than or equal to the carcinogenic industrial site-specific RBSLs calculated at a target risk of  $1x10^{-6}$  for direct exposure to soil; and/or,
  - o less than or equal to the non-carcinogenic site-specific industrial RBSLs calculated at a hazard index equal to one for direct exposure to soil; and/or,
  - o cumulative risk posed by multiple chemicals in the medium is within the acceptable risk range of  $1x10^{-4}$  and  $1x10^{-6}$ .

If, and when, the conditions described above are met, and upon meeting any applicable LDR treatment standards requirements, the Director may authorize the soil(s) to be managed and disposed of in a permitted, lined RCRA Subtitle D solid waste landfill with the approval of the receiving landfill facility.

<sup>&</sup>lt;sup>5</sup> Corresponding federal regulations 40 CFR Parts 268.40, 268.48 and 268.49.

<sup>&</sup>lt;sup>6</sup> Corresponding federal regulation 40 CFR Part 261, Subpart D.

<sup>&</sup>lt;sup>7</sup> Corresponding federal regulations 40 CFR Part 261.33 and Part 261, Appendix VIII with the following addition: (a) P999 – CX, GA, GB, GD, H, HD, HL, HN-1, HN-2, HN-3, HT, L, T, and VX."

#### 5.0 LAND DISPOSAL RESTRICTIONS:

Contaminated soils, which contain hazardous materials or wastes, upon generation (removed from place or excavated) are subject to all applicable RCRA Subtitle C hazardous waste management, storage, treatment, and disposal requirements. In addition, such waste must meet the LDR requirements outlined in <a href="https://doi.org/10.1001/juba.1001/

#### 5.1 Do Land Disposal Restrictions (LDR) Apply at My Site?

The EPA has stated in Title 40, Part 268 of The Code of Federal Regulations, (40 CFR 268), and as set forth in the corresponding rule, <u>Utah Admin. Code</u> R315-268, that soil is generally subject to the RCRA Land Disposal Restrictions (LDR) program, including the LDR treatment standards, if the following conditions are met as outlined in <u>Utah Admin. Code</u> R315 Rules 261 and 268 (and as set forth in the corresponding federal regulations 40 CFR Sections 261 and 268):

- the soil is generated; and,
- the soil contains a hazardous waste regulated under RCRA.

#### 5.2 When is Contaminated Soil Considered to be Generated for LDR Requirements?

Contaminated soil is considered generated for purposes of land disposal restrictions (LDR) when it is excavated and subsequently accumulated or placed in containers (tanks, drums, roll-offs, etc.), or other RCRA regulated units, treated ex-situ, or removed from the on-site "source" area (also known as the Area of Contamination or AOC). This guidance document only applies to contaminated soils and does not apply to waste streams generated during normal industrial or manufacturing operations as generated wastes.

LDR treatment standards do not apply to soils left in place (or treated in-situ), nor do the standards require the contaminated soils to be excavated and removed from the site. As an example; if the contaminated soil is re-graded or consolidated within an on-site AOC, the soil would not be considered generated, and the LDR requirements do not apply. If the excavated soils are not treated ex-situ, not placed into containers, tanks, or another RCRA-regulated unit, or not moved outside of the AOC, the excavated soils will not be considered generated for purposes of having to meet LDR requirements.

#### 5.3 LDR Treatment Standard Requirements Prior to Land Disposal

A major consideration in the EPA Contained-In policy is that the policy does not carry an automatic exclusion from the LDR treatment standards (see 40 CFR 268.40 for a treatment standards table). LDR treatment requirements apply even if the soil is determined to no longer contain a hazardous waste and it is being described as "Contained-Out". Applicability of LDR treatment standards to soil containing any hazardous waste must be made before off-site disposal at an appropriate landfill. Ultimately the determination for the applicability of LDR treatment requirements for contaminated soil(s) is the responsibility of the disposal facility accepting the wastes (hazardous or non-hazardous). Applicable LDR requirements can be found in <a href="Utah Admin. Code">Utah Admin. Code</a> R315-268-40, R315-268-48, and R315-268-49, § for the following scenarios:

• If the soil is a characteristic hazardous waste at the time of generation or removal, even if the characteristic is removed because of treatment, the soil must also meet LDR requirements for all underlying HCOCs before proper disposal.

 $<sup>^{\</sup>rm 8}$  Corresponding federal regulations 40 CFR Parts 268.40, 268.48, and 268.49.

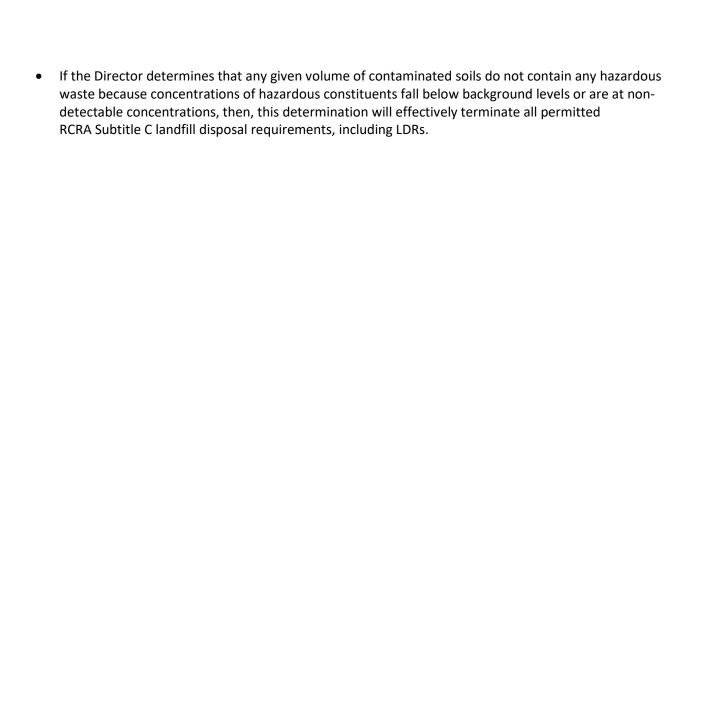
- If the soil was contaminated with a listed waste, and the listed waste was subject to LDR requirements
  at the time of release, then the excavated soil must meet LDR requirements, even if the soil does not
  contain a hazardous waste after having been approved by the Director for a Contained-Out
  determination.
- For treatment standards, generators may choose between meeting the Universal Treatment Standard (UTS) for the HCOC,<sup>9</sup> or, in situations where the UTSs are exceeded, opting to use the Alternative Treatment Standards (ATS).<sup>10</sup> To meet the ATS, all underlying hazardous constituents must be treated to reduce hazardous constituent concentrations levels by ninety percent (90%), or treated to achieve hazardous constituent concentrations that are less than ten times the UTS (10x UTS), whichever is greater.
- All contaminated soil subject to the LDR requirements may also qualify for treatment variance if it is
  established that a nationally applicable treatment standard is unachievable or is not appropriate. A
  site-specific LDR treatment standard may be established on a case-by-case basis.
- Under <u>Utah Admin. Code</u> R315-268-44(h)(3),<sup>11</sup> variance from an otherwise applicable LDR treatment standard may be approved if it is determined that compliance with the treatment standard would result in treatment beyond the point at which short-term or long-term threats to human health and the environment are minimized. This allows a site-specific risk-based determination to supersede the technology-based LDR treatment standard under such circumstances.
- Alternative LDR treatment standards established through site-specific risk-based concentrations minimize the threat to human health and the environment. In requesting alternative LDR treatment standards, applicants must demonstrate to the Director that the concentrations for the contaminants of concern meet applicable risk-based cleanup levels. That is, for carcinogens, alternative treatment standards should ensure constituent concentrations result in the total excess risk to an individual exposed over a lifetime to be within the acceptable risk range from 1x10<sup>-4</sup> to 1x10<sup>-6</sup>, using 1x10<sup>-6</sup> as a point of departure in accordance with <u>Utah Admin. Code</u> R315-101. Subject to approval by the Director, no additional work or cleanup action(s) may be required for the soils with risks to an individual falling in this acceptable target risk range.
- To provide the most conservative approach in protecting human health and the environment at the project site, applicants must demonstrate that risks from exposure to the calculated project-specific risk-based values are closer to the more protective end of the acceptable risk range of 1x10<sup>-6</sup> rather than the lesser protective end of the acceptable risk range of 1x10<sup>-4</sup>, which could create the need for corrective action at the site to reduce contaminant concentrations. For non-carcinogenic effects, alternative treatment standards should ensure constituent concentrations that an individual could be exposed to daily, without appreciable risk of deleterious effect during a lifetime. In accordance with Utah Admin. Code R315-101, the hazard index should not exceed one.
- Constituent concentrations that achieve these levels of risk should be calculated based on a reasonable
  maximum exposure scenario. Specifically, the exposure scenario should be based on an analysis of
  both the current and reasonable expected future land uses, with exposure parameters chosen based on
  a reasonable assessment of the maximum exposure that might occur. However, alternative LDR
  treatment standards may not be based on considerations of post-land disposal controls such as
  protective covers/caps or other barriers.

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<sup>&</sup>lt;sup>9</sup> <u>Utah Admin. Code</u> R315-268-48 and corresponding federal regulation 40 CFR Part 268.48.

<sup>&</sup>lt;sup>10</sup> <u>Utah Admin. Code</u> R315-268-49 and corresponding federal regulation 40 CFR Part 268.49.

<sup>&</sup>lt;sup>11</sup> Corresponding federal regulation 40 CFR Part 268.44(h)(3).



#### 6.0 RECOMMENDATIONS FOR ENVIRONMENTAL SAMPLING:

Representative sampling is based on site-specific conditions. If desired by the applicant, the Division highly encourages that a proposed Sampling and Analysis Plan (SAP) be submitted to the Division for the Director's review and approval prior to conducting environmental sampling. This will help ensure that the sampling method and associated results are considered acceptable, and representative of the contaminant concentrations distributed throughout the site.

Alternatively, the Director may determine that data gaps exist, and further environmental sampling is needed at the site. This is because once environmental sampling has been performed, the analytical data is submitted to the Director for review in making a Contained-Out determination. The sampling results will be reviewed to ensure that they are considered defensible and acceptable as representative of site conditions in terms of contaminant(s) concentration distribution at the site (both laterally and vertically). In this case, the applicant is strongly encouraged to submit a proposed SAP for this additional environmental sampling and analysis for review and approval. The sooner the applicant gets in touch with the Division regarding this process and requests feedback, the more efficient and cost-effective the outcome will be.

#### 7.0 DOCUMENTATION REQUIRED FOR CONTAINED-OUT DETERMINATION REQUESTS:

Any request for the Director to review and, if approved, to make a Contained-Out determination must contain (at a minimum) the following information:

- Name and address of the facility, and EPA ID number if one has been assigned to the site;
- Proposed quantity of the soils to be managed and disposed of;
- Proposed disposal location for the transfer of the soils, if approved by the Director;
- Documentation that the on-site soils have been adequately characterized by representative sampling; this includes the identification, segregation, and sampling of "hot spots" and quantification of the soil volume subject to this Contained-Out determination;
- Documentation (including environmental sampling results from an acceptable analytical laboratory)
  that demonstrates that the contaminated soil(s) no longer contains a hazardous waste, achieved by
  using an appropriate contaminant reduction or treatment approach as discussed or referenced in
  this guidance document;
- Documentation that acceptable soil concentrations were achieved by proper removal or treatment, and not by dilution;
- Documentation of utilizing an approved treatment method, if treatment was conducted; and,
- Documentation that any applicable land disposal restrictions (LDR) have been satisfied.

**Figure 1** (Contained-Out Determination Process) illustrates the process used when the Director reviews a Contained-Out determination request.

An application form to request a Contained-Out determination, and an application form to pay for technical oversight costs by the DWMRC associated with the review of the determination request are both attached for applicants to complete and submit to the DWMRC for processing.

#### **8.0 REFERENCES:**

US EPA, Introduction to Land Disposal Restrictions (40 CFR Part 268), Solid Waste and Emergency Response (5305W) EPA 530-K-05-13, Sept. 2005

US EPA, Land Disposal Restrictions: Summary of Requirements, EPA530-R-01-007, August 2001

Federal Register Vol. 63, No. 229 Monday, November 30, 1998 Rules and Regulations, pp 65877

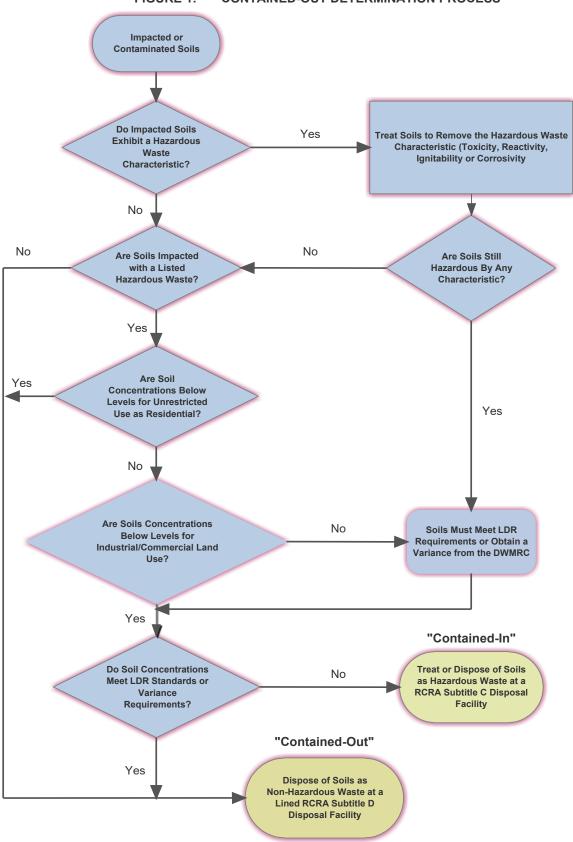
Federal Register Vol. 61, No. 83 Monday, April 29, 1996 Rules and Regulations pp 18795

Hugh Davis, EPA, and Jim Harford, NDEQ. Land Disposal Restrictions Training Slides

### **ATTACHMENTS**

## UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL CLEANUP PROGRAM

FIGURE 1: CONTAINED-OUT DETERMINATION PROCESS



#### **UTAH DIVISION OF WASTE MANAGEMENT AND RADIATION CONTROL**

#### **ENVIRONMENTAL CLEANUP PROGRAM**

### **Contained-Out Determination Application**

SUE	BMITTED BY:	DATE:
Dea	ar DWMRC Director,	
the		determination regarding soil from the following RCRA site regulated by ent and Radiation Control within the Utah Department of Environmental
	Site Name:	
	EPA RCRA ID:	
	Street Address: City/Town:	
	Zip Code:	<del>-</del>
		I to be included in this determination:
	Facility Name:	y if request for a Contained-Out determination is approved:
	Facility Location:	
	Treatment Method	
The	e soil contains the following	sted hazardous waste(s) with waste codes:
		, which the DWMRC is
	_	Resource Conservation and Recovery Act (RCRA) by the U.S. y (USEPA). However, the soil (check the applicable box):
	Meets all applicable risk	ased or cleanup standards upon removal from the site; or
	Was treated through a r standards.	thod of treatment other than dilution to meet all the applicable cleanup
The	e levels of the listed hazard	s waste constituents in the generated soil are:
		at provides a summary of listed hazardous waste constituents and
	<u> </u>	and/ or after treatment, in the soil, and the applicable standards used. In describe the date(s) and type(s) of treatment implemented.]
	•	ibit any characteristics of hazardous waste. These determinations were soil samples by sampling method(s)
The	e soil from which the sampl	were taken had a volume of The soil was
sam	npled on	The soil was sampled in a representative manner as outline in <u>Utah Admi</u>
r	ie K315-260-10 that adequ	ely demonstrated the levels of hazardous material present in the soil.

"hot spots." I have attached documentation of the soil sampling methods used and analytical results of the sampling and testing of the soil from a Utah certified environmental analytical laboratory that corroborates the above statements. This documentation includes the location and depth of soil samples taken at the project location.

I understand that my request for a Contained-Out determination is subject to a reasonable holding period, during which the determination is subject to review by the DWMRC and that the soil cannot be handled as non-hazardous waste until a determination is made by the DWMRC. In consideration of compliance with the "90-day generator" status for the soils, during this review period, or as soon as possible after the holding period has ended, the Division will notify the applicant as to the status of either issuing an approval or denial of the determination request. Regardless of the final determination by the Division (i.e., approval or denial), the applicant is still required to be in compliance with the 90-day generator status and ultimate disposition of the soil(s). Storage of hazardous waste longer than 90 days may lead to an enforcement action and financial penalties.

deter	mined if the operator of the landfill	ansported out-of-state for final disposal, that it must first be or other receiving facility are willing to accept Contained-Out by my firm of(insert						
reque	requesting company name here). In proposing to transport the soils out-of-state, the process by which							
		ned in Utah will be explained by						
-	(insert requesting company name here) to the relevant parties, and all of the proper documentation will be retained by name here) on-behalf of the							
	(insert requesting company name here) on-behalf of the ponsible party and will also be filed with the DWMRC.  test under penalty of perjury and sign below: (i) that I have personally examined and am familiar with information contained in this submittal, including any and all documents accompanying this submittal; that, based on my inquiry of those individuals immediately responsible for obtaining the information,							
respo	nsible party and will also be filed wit	n the DWMRC.						
the in (ii) the maccure or end made impris	formation contained in this submitted in this submitted in the submitted in the submitted in the submitted in this attention to the submitted in the submitted in the submit ity legally responsible for this submit and erstand that there are significant.	l, including any and all documents accompanying this submittal;						
Ву:	Signature	 Date						
	Name	Title						
	Company Name							
	Telephone:	Email:						
Subm	itted on-behalf of:							
	Name of	Responsible Party or Requesting Entity						

# UTAH DIVISION OF WASTE MANAGEMENT AND RADIATION CONTROL ENVIRONMENTAL CLEANUP PROGRAM

#### **Application for Project Oversight**

Complete this application to apply for and request technical assistance and review from the Utah Division of Waste Management and Radiation Control (DWMRC). Please note that the applicant is responsible for payment of the Division's staff costs of review and oversight throughout the investigation, cleanup, risk assessment or other applicable site-specific scopes of work as outlined in <u>Utah Admin. Code</u> R315-101. Oversight fees charged to applicants are in accordance with the legislative-approved fee schedule which may change annually. Please call (801) 536-0200 should you have any questions about the Environmental Cleanup Program or need assistance with completing this application for oversight of your project.

Current Property Owner or A Owner/Applicant	• •	
Correspondence with DWMF	RC should be directed to:	
Contact Person		_Title
Organization	Phone ( )	email:
Address		
City		Zip Code
General Site Information:		
Property/Site name		
Address		
City	State	Zip Code
Current Property Value (as as	sessed for property taxes) \$	Property size (acres)
Property Land Use(s): Current Use –		
Proposed Use –		
Environmental Site Inves	tigation Report/Results (please attacl	h with application unless previously submitted)
Not known at this time (A Cleanup to Generic Scree periodic environmental r	monitoring, site controls, environmen Risk-Based Levels (with <u>or</u>	
Billing Information:		
The DWMRC billing for agence		-related site work should be directed to:
Name(s)	Tit	ile
		Email:
Address		7: code
City	State	Zip Code
Authorization to Proceed wit	th DWMRC regulatory oversight:	
Ву:	Name:	
(Signature of author	rized representative)	(Print or Type)
Date:	Title:	
Company	Phor	ne ( )

Please return this completed application for project oversight to the DWMRC at: <a href="mailto:dwmrcsubmit@utah.gov">dwmrcsubmit@utah.gov</a>