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<th>Agency Nonrule Policy Document</th>
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<td>Waste 0075-NPD</td>
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<td>Brian Rockensuess, Commissioner</td>
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<td>Remediation Services Branch</td>
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**Disclaimer:** This nonrule policy document (NPD) is being established by the Indiana Department of Environmental Management (IDEM) consistent with its authority under IC 13-14-1-11.5. It is intended solely to provide guidance and shall be used in conjunction with applicable rules or laws. It does not replace applicable rules and laws, and if it conflicts with these rules or laws, the rules or laws shall control. Pursuant to IC 13-14-1-11.5, this policy will be available for public inspection for at least 45 days prior to presentation to the appropriate State Environmental Board and may be put into effect by IDEM 30 days afterward. If the nonrule policy is presented to more than one board, it will be effective 30 days after presentation to the last. IDEM also will submit the policy to the Indiana Register for publication.

**1.0 PURPOSE**

This document provides guidance for soil management plan (SMP) development for most projects participating in Indiana Department of Environmental Management’s (IDEM’s) Office of Land Quality (OLQ) remediation programs after closing with an Environmental Restrictive Covenant (ERC). This document can also be referenced for projects conducting soil excavation activities unrelated to ERCs.

**2.0 SCOPE**

This nonrule policy document (NPD) applies to soils with concentrations of human-induced chemicals or contaminants exceeding the site-specific remediation objectives based on the publish levels in the Risk-based Closure Guide (RCG) and the proper management and handling in accordance with all state and federal laws.

This NPD applies to the following IDEM OLQ programs: Brownfields, Petroleum Remediation Section, Hazardous Waste (RCRA), State Cleanup Section, and Voluntary Remediation Program Section.

**3.0 SUMMARY**

The SMP NPD provides guidance and a reporting outline for addressing residual contamination in soil disturbed, excavated, or re-located during any construction activities (e.g., excavation for new buildings, tree plantings, etc.) after closure of the property with an ERC that contains restriction(s) and/or obligations involving excavation of soil. This NPD provides a consistent approach that may be used by the Brownfields, State Cleanup (SCU), Voluntary Remediation Program (VRP), Hazardous Waste (RCRA) or the Petroleum Remediation section. For soil contamination greater than 15 feet below surface, this guidance may not apply due to reduced risk of exposure at these depths. Consult with the IDEM project manager regarding determination of applicability.

IDEM’s risk-based NPDs address and drive the reduction of risk to exposure from contaminated soil. NPDs include IDEM’s Risk-based Closure Guide (RCG) and the Remediation Program Guide (RPG). Published levels found in the RCG may be used to determine whether soil contains chemicals at concentrations possibly presenting a threat to human health.
4.0 DEFINITIONS

4.1. “Agency” – The Indiana Department of Environmental Management (IDEM).

4.2. “Applicant” – Person or entity that conducts a remediation or takes corrective action at a property with oversight from the Voluntary Remediation Program (VRP).


4.4. “Contamination” – chemicals present at a concentration that exceeds chemical’s remediation objective or established background level

4.5. “Environment” – The complex of physical, chemical, and biologic factors including land, fish, wildlife, biota, air, water, groundwater, drinking water supplies, and other similar natural resources, belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by, the state as defined in IC 13-11-2-137.


4.7. “Nonrule policy” – The term assigned by IDEM to policies identified in IC 13-14-1-11.5 as any policy which: A. Interprets, supplements, or implements a statute or rule; B. Has not been adopted in compliance with IC 4-22-2; C. Is not intended by IDEM to have the effect of law; and D. Does not apply solely to the internal IDEM organization, an administrative policy.

4.8. “Off-Site” – For purposes of this NPD, off-site refers to property that is not owned by the owner of the source of the contamination.

4.9. “On-site” – For purposes of this NPD, the term "on-site" refers to the parcel(s) that are the source of the contamination.

4.10. “Operator IC 13-23 et seq.” – For purposes regarding releases from underground storage tanks, has the meaning set forth in IC 13-11-148(d).

4.11. “Owner IC 13-23 et seq.” – For purposes regarding releases from underground storage tanks has the meaning set for in IC 13-11-148(d).

4.12. “Owner or operator IC 13-24 et seq.” – For purposes regarding releases from petroleum facilities, has the meaning set forth in IC 13-11-2-151.

4.13. “Published Level” – A concentration published by IDEM for a chemical in particular medium which is acceptable for a specified exposure scenario.

4.14. “Receptor” – A human or ecological entity exposed to a stressor.

4.15. “Release” – Has the meaning set forth in IC 13-11-2-184(a) and/or (b).

4.16. “Responsible party (RP)” – (1) The individual, company, group, or other entity legally responsible for areas where chemicals of concern are known to have been released, or legally responsible for compliance under state or federal environmental regulations. (2) The entity or party required to perform, or which voluntarily performs an investigation and/or remedial action or corrective action at a site, and who will, in most cases, prepare the Record of Remedy Selection and Record of Site Closure.

4.17. “Responsible person” – For purposes of IC 13-24 under IC 13-11-2-192(a)

4.18. “Responsible person” – For purposes of the state cleanup laws at IC 13-25-4, under IC 13-11-2-192(b)

4.19. “Sensitive population” – A human or ecological entity that cannot tolerate chemical exposure as well as other, these include pregnant and nursing women, children, older adults, etc.

4.20. “Site” – The geographical area where an evaluation of potential environmental contaminants is desired. This may consist of an entire facility and surrounding property or a single area of concern within a facility or property, depending upon the applicable regulatory program. For
purposes of IC 13-25-5, site means a parcel of real property for which an application has been submitted under IC 13-25-5-2.

5.0 ROLES

5.1 The consultant shall:
A. Represent the responsible party.
B. Prepare work plans or other documents for a site on behalf of a responsible party.
C. Coordinate activities with the IDEM OLQ project manager.
D. Submit plans, data, and documents as requested by the IDEM project manager.
E. Perform activities as described in the approved work plans or other documents.

5.2 The IDEM OLQ project manager shall:
A. Prepare correspondence to the Responsible Party and Consultant communicating the status of the remediation project.
B. Conduct internal team meetings with technical staff to discuss the effectiveness of the Soil Management Plan.
C. Conduct meetings with the Responsible Party or the Consultant to discuss approaches to soil management.
D. Ensure all pertinent documents are correctly loaded into the Virtual File Cabinet (VFC) for storage.

5.3 The Responsible Party shall:
A. Ensure that the requirements of the Soil Management Plan are being adhered to by authorized agents, employees, contractors, representatives, agents, lessees, licensees, invitees, guests, or persons acting under their direction or control.
B. Respond to the IDEM OLQ project manager in a timely manner to all requests for information.
C. Provide data, maps, or records to the IDEM OLQ project manager reflecting site conditions.

6.0 POLICY

The requirements for a site specific SMP are based on the highest level of soil contamination compared to IDEM’s Risk-based Closure Guide (RCG).

Level 1 - Soil impacted with free product
Level 2 - Soil impacted at greater than Excavation Worker Direct Contact Published Level(s) (EXDCPLs) and not impacted by free product
Level 3 - Soil impacted at less than EXDCPLs but greater than Published Levels for Industrial Direct Contact (PLIDCs)
Level 4 - Soil impacted at less than PLIDC but greater than Published Levels for Residential Direct Contact (PLRDC)

Sites with Level 1 or Level 2 soils require submission of an SMP for IDEM review and approval as part of the site’s remediation work plan and closure requirements. The SMP and all revisions shall be incorporated into the site’s ERC by VFC reference number. Sites with Level 3 or Level 4 soils may require an SMP for planned construction activities if soil screening levels exceed the current or proposed land use (i.e., exceeds Industrial Direct Contact Screening Levels at a residential or industrial use property). IDEM’s Uncontaminated Soil Policy (April 2015) addresses soils with less than RCG published level for residential direct contact and do not require an SMP.

In accordance with the definition of hazardous waste in 40 CFR 261.3, any soil impacted with a listed hazardous waste must be treated as a hazardous waste. Persons who remove soil classified as a hazardous waste must comply with all applicable hazardous waste laws and rules or must obtain a determination from IDEM stating that the Contained-In policy is applicable (See Waste
Policy 0061-NPD “Contained-in Determination Policy). Complete hazardous waste determinations must be made during the site investigation phase of a project to determine proper disposal of all soil excavated from the property as either hazardous waste, solid waste, or unregulated.

A. Site Description and Summary of Conditions

1. Site Description and Background
   Provide a general overview of the site. The background section includes information on the site location; history, including previous buildings which may prohibit sampling; current land use; surrounding land use; physical setting, including soil types; and past investigations and remedies listed chronologically and briefly summarized. Appendix A will contain a map depicting the entirety of the site and surrounding land use. Even though all sites require a map of the entire sight, the SMP map may only apply to a defined affected area.

2. Scope of Work
   For Level 3 and Level 4 soils, provide information related to the development and proposed activity at the site. Include information on where the proposed activity will occur when construction plans become available, depth of excavation, etc. For Level 1 and Level 2 soils, an SMP submitted as part of a site closure, leave this section blank. However, if construction activity occurs on a Level 1 or Level 2 site, submit the scope of work to IDEM 30 days before construction activities occur.

3. Site Characterization
   Identify the areas and contaminants of concern on the site. Provide a map depicting the extent, location, and depth of the contamination (Appendix B) and a table detailing the contaminants, depicted in Appendix B, compared against RCG screening levels (Appendix C).

B. Soil Management Requirements

Soil management requirements define the policies and procedures for preventing public access to a site during soil handling activities and managing and disposing of impacted soils during excavation or construction activities. The highest level of on-site soil contamination, found in Table 1, determines the soil management plan requirements.

1. Soil Handling and Disposal Requirements
   a. Stockpile Management
      Place soil segregation and stockpiling on an impermeable surface (i.e., plastic sheeting) away from site drainage patterns or lines, roadsides, or culverts, then cover with material adequate to prevent soil transport by wind or rainwater runoff (berm). Maintain covers in good condition. When not covered, keep soil stockpile surfaces visibly moist by water spray, as necessary, to prevent fugitive dust. Handle Level 1 soil stockpiles, even though the soil may not be a hazardous waste, in accordance with IDEM’s Treatment of Hazardous Waste On-Site by Generators Guidance and do not place on the ground. Instead, place Level 1 soil in a lined roll off dumpster for disposal at an appropriate waste facility.

   b. On-Site Transportation
      Handle impacted materials transported within site boundaries to minimize the spread of contamination. Dedicate equipment and vehicles, used to move excavated Level 1 soil and Level 2 soil, to moving impacted soils for the duration of the project. Line transport trucks when moving Level 1 soil. Appropriately decontaminate equipment which handled contaminated soil, prior to transporting clean soils with the same equipment. Waste tracking manifests are not required for transportation of soils within the site. However, the responsible party must document and maintain records of work conducted, including the final on-site locations of soils which have been re-located on site, and provide copies of these records to IDEM (upon request or if required as part of an approved plan). Allowable use of Level 2, 3, or 4 soil for backfill into the excavation does not require a Legitimate Use Approval if the soil is returned to the same vertical area from which it was taken.
c. Off-Site Soil Disposal
Either directly load Level 1 and Level 2 soil into awaiting transport trucks or place in secure roll-off boxes pending off-site disposal at a permitted Subtitle C hazardous waste or Subtitle D solid waste landfill in accordance with, 329 IAC 3.1 (40 CFR 268 Subtitle C) or 329 IAC 10 (40 CFR 268 Subtitle D), respectively. For Level 1 soil, line the transport truck with impermeable material. Transport and dispose of soil removed from the site in accordance with applicable federal, state, and local rules and regulations. The current property owner is responsible for keeping the wheels and exterior portions of the trucks free of excess dirt and debris while on public roadways. Waste manifests are generally only required for classified hazardous wastes. However, any Level 3 or 4 soils transported off-site for disposal must comply with applicable laws including 329 IAC 3.1 and 329 IAC 10. IDEM’s Compliance Branch maintains a list of permitted solid waste facilities.

C. Contamination Containment
Best management practices are essential to preventing the spread of contamination off-site or to additional areas on-site; especially when performing work near residential areas or areas containing sensitive populations (i.e., schools, playgrounds, etc.).

1. Fugitive Dust Control and Air Monitoring
In accordance with 326 IAC 6-4 and 326 IAC 6-5, provide a plan for fugitive dust control and air monitoring at the site perimeter. Consider dust control monitoring and suppression during any work with the potential to create dust at sites. For information concerning fugitive dust, contact IDEM’s Office of Air Quality Air Compliance & Enforcement Branch. Continuous dust monitoring is necessary when the site is impacted at any level and within ¼ mile of a sensitive population. Include a monitoring program as part of the SMP to effectively monitor the work and surrounding area. Conduct air monitoring on the site boundaries. Conduct air monitoring for 24-hours per day throughout the excavation work. Conduct the ambient air monitoring for the purpose of evaluating daily work conditions and for modifying work activities and procedures, as needed, based on the control level and corrective action level as described below. At a minimum, consideration for dust suppression controls and air monitoring includes:

- Establishing action levels for ambient air monitoring based on IDEM screening levels depending on the surrounding properties use (i.e., residential indoor air screening levels if surrounding properties are residential)
- Reduction of on-site vehicle speeds
- Minimizing drop heights to material haulers from soil loaders
- Timing excavation activities and considering the prevalent wind direction and speed
- Odor suppressants
- Regular watering of haul roads and soil stockpiles
- Records of continuous dust monitoring
- Revegetating, stabilizing, or covering exposed excavations as soon as practicable
- Calibration instructions for all field instruments
- Instrument calibration records

2. Equipment Decontamination Plan
Discuss how equipment used in areas where contaminated soil is present is decontaminated. Decontamination of equipment includes at a minimum:

- Brushes, shovels, etc. to conduct gross soil removal on equipment used for excavation or movement of soil at the site.
- Prior to leaving the site, cleaning, and decontaminating of all trucks and equipment.
- Brushing off loose soil on excavation and transport equipment and transferring to a truck containing impacted soils for transport to the designated landfill.

D. Field Screening
Discuss field screening to conduct during soil excavation activities. The discussion needs to include documentation of daily instrument calibration and strict adherence to the manufacturer’s instructions for operation and maintenance. In addition, maintain instrument calibration records and provide to IDEM upon request.
E. Legitimate Use

Legitimate use, as defined by IC 13-11-2-118.4, is the reuse of a material, otherwise defined as a solid or hazardous waste (i.e., contaminated soil). Level 2, 3, or 4 soils may be approved for legitimate use. Level 1 soil cannot be approved for legitimate use because it is impacted with free product. For approval of soil for legitimate use, the property owner, or an authorized agent of the owner, must obtain the commissioner’s approval in accordance with 329 IAC 10-3-1(16). To inquire about a legitimate use, contact the OLQ Compliance Branch. Two basic requirements for a legitimate use approval are:

- The use is legitimate.
- The use does not pose a threat to public health or the environment.

F. Final Restoration

Cap exposed Level 1, Level 2, or Level 3 soils per Supplemental Guidance on Engineered Exposure Controls Document, Engineering Control: Covers (See Waste-0074-NPD Supplemental Guidance on Engineered Exposure Controls). Exposed Level 4 soils do not require capping unless the soil is being used in a residential setting or other sensitive area (i.e., daycare, school, etc.). IDEM review and approval for the proposed cap is required before implementation.

G. Contingency Plan

A contingency plan is required in case unforeseen contaminated soil is encountered during excavation, digging, or other soil disturbing activities. A contingency plan is not a substitute for a thorough understanding of soil contaminants and extent of contamination. The contingency plan should include at a minimum the following actions in case unforeseen impacts to soil or groundwater are discovered during the excavation work.

- Stopping all excavation activity in the vicinity of where suspect material is encountered.
- Notifying IDEM.
- Cordon off the area, as much as practicable, with a suitable barrier.
- Managing suspect soils as impacted Level 1 soil, until shown to be level 2, 3, or 4.
- Using worker safety information contained in the Health and Safety Plan
- Soil disposal requirements.

H. Record Keeping

1. Imported Soil Verification

All imported soil material will meet regulatory standards for the proposed use. Document details of the material supplier’s imported soil source, and total quantity of imported soil material for each distinct supplier and source of imported soil.

I. Appendices

1. Site Map

Include a black and white 8.5” x 11” or 11” x 17”, nonaerial map of the entire site and surrounding land use, and geological cross section.

2. Soil Restriction Area(s)

Include a black and white 8.5” x 11” or 11” x 17”, nonaerial map of the site with a depiction and designate areas with soil impacts. Clearly define Level 1, 2, 3, and 4 soil areas. If the site has different levels of contamination, discretely mark each level of impacted soil.

3. Soil Table(s)

Use the following table template to provide information on the remaining contamination left on site depicted on the map in Appendix B.
Table 1
Site Name
Address
Soil Analytical Results

<table>
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<tr>
<th>Sample Identification</th>
<th>Depth of Sample</th>
<th>Sample Date</th>
<th>Detected Constituent and Result (in milligrams/kilogram (mg/kg))</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Constituent</td>
</tr>
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PLRDC – Published Levels for Residential Direct Contact
PLIDC – Published Levels for Industrial Direct Contact
PLEXDC – Published Levels for Excavation Worker Direct Contact

J. Additional Guidance

Although the SMP focuses on the management and reuse of contaminated soil, direction for addressing groundwater encountered is included for reference.

1. Water Management

Any accumulated rain or groundwater requires on-site retention (i.e., fractionation vessel, vacuum truck) or treatment (e.g., granular activated carbon vessels). Store groundwater or water pumped from excavations and properly dispose in accordance with the requirements of the off-site disposal facility or the appropriate National Pollution Discharge Elimination System permit. Dispose the water in accordance with all applicable federal, state, and local rules and regulations.

2. Storm Water and Erosion Control

Follow the performance-based Construction Site Run-off general permit requirements that apply to activities associated with construction and land-disturbing activities under 327 IAC 15-5. Prior to initiation of site work, develop a Storm Water and Erosion Control Plan in compliance with applicable federal, state, and local regulations (e.g., National Pollutant Discharge Elimination System permitting; EPA’s “Do I Need a Permit?” Flowchart; INDOT Indiana Design Manual 2013 Chapter 205 Temporary Erosion and Sediment Control; and EPA’s Storm Water Phase II Final Rule Construction Site Runoff Control Minimum Control Measures (December 2005)).

3. Worker Protection Guidance

IDEM’s authority does not extend to worker protection. Therefore, IDEM refers questions about worker protection to the Occupational Safety and Health Administration or Indiana Occupational Safety and Health Administration. For information regarding worker protection requirements, contact the Indiana Department of Labor. A free on-site consultation regarding worksite safety can be scheduled.

7.0 REFERENCES

7.1. Federal Laws or Rules:

A. 40 CFR 261.3
B. 40 CFR 268 Subpart C
C. 40 CFR 268 Subpart D
D. EPA’s Storm Water Phase II Final Rule Construction Site Runoff Control Minimum Control Measures (December 2005)
E. EPA’s “Do I Need a Permit?” Flowchart

7.2. Indiana Statutes:
A. IC 4-22-2
B. IC 13-11-2-118.4
C. IC 13-11-2-137
D. IC 13-11-2-148(d)
E. IC 13-11-2-150
F. IC 13-11-2-151
G. IC 13-11-2-184
H. IC 13-11-2-192(a) or (b)
I. IC 13-11-2-265
J. IC 13-14-1-11.5
K. IC 13-23 et seq.
L. IC 13-24
M. IC 13-25-4
N. IC 13-25-5-2
O. IC 13-25-5-7
P. IC 13-25-5-11
Q. IC 25-39-2-10

7.3. Indiana Administrative Codes:
A. 329 IAC 3.1-13-8
B. 329 IAC 3.1-13-9
C. 329 IAC 3.1-13-10
D. 329 IAC 3.1-13-11
E. 329 IAC 3.1-13-12
F. 329 IAC 3.1-13-13
G. 329 IAC 7.1-2-11
H. 329 IAC 9-5-8
I. 326 IAC 6-4
J. 326 IAC 6-5
K. 329 IAC 10
L. 329 IAC 10-3-1(16)
M. 327 IAC 15-5

7.4 Indiana Department of Environmental Management Nonrule Policy Documents and Guides
A. Waste-0049
B. Waste-0061
C. Waste-0065
D. Waste-0074
E. Risk-based Closure Guide
F. Remediation Program Guide

7.5. Indiana Department of Transportation:
A. INDOT Indiana Design Manual 2013 Chapter 205 Temporary Erosion and Sediment Control
8.0 **SIGNATURES**

Brian C. Rockensuess, Commissioner  
Indiana Department of Environmental Management  

Peggy Dorsey, Assistant Commissioner  
Office of Land Quality  

Nancy King, Assistant Commissioner  
Office of Legal Counsel  

This policy is consistent with Agency requirements.

Date

6/28/22

5/18/22

5/31/22

Date

29 Jun 2022