

SPECIAL CONDITION: Geological Material

Version: SCGeoMats/2018-02-23

BACKGROUND

Definition: A geological material is a material extracted as-is from the earth in rock or sediment form, including rocks, clays, sands, limestone, and other industrial minerals.

Why is this a Special Condition: *A content inventory cannot be created with methods outlined in the current version of the HPD Open Standard due to variable or unknown composition and lack of CAS RNs.*

Geological materials are typically of variable/unknown composition depending on their extraction location, and in some cases, the potential for impurities is related to specific sources or regions. Until specific conditions are better understood, it will be difficult to monitor variability and predict the presence of impurities.

Scope: Any binders, coatings, and finishes, which are considered unique homogeneous materials in the HPD Open Standard, along with additives or other identifiable substances added to the material, must be inventoried as a separate substance or material on the HPD.

Harmonization: This Special Condition has been harmonized with the following:

- Cradle to Cradle Certified™, *Geological Materials Assessment Methodology*, June 2017; <http://www.c2ccertified.org/resources/detail/geological-materials-assessment-methodology>
- International Living Future Institute, *Declare Manufacturer's Guide*, May 2017; <https://living-future.org/wp-content/uploads/2017/05/Declare-Manufacturers-Guide-2017.pdf>; ("Geological materials such as natural granite do not require disclosure of a CASRN; manufactured stone products require the disclosure with a CASRN of all resins/binders/sealers, but geological components do not require a CASRN", Page 6)
- BIFMA e3 2014 <https://www.bifma.org/store/ViewProduct.aspx?id=1377924> (no specific requirements)
- GHS (no specific reporting requirements; National Stone, Sand, and Gravel Association provides GHS hazard criteria - <http://www.nssga.org/safety-and-health/training-compliance-assistance/safety-data-sheets>)

GUIDANCE/ INSTRUCTIONS:

Special Conditions instructions for specific data fields follow; ***if there are no instructions for a data field, the requirements of the HPD Open Standard should be followed.*** If the HPD Open Standard and Special Conditions instructions are followed, the HPD will not be barred from qualifying for the LEED v4 Material Disclosure and Optimization, Material Ingredients credit, Option 1.

*Data field auto-fills if using HPD Online Builder

HPD 2.1.1 Data Field	Special Condition Requirements
SECTION 1: SUMMARY	

Content in Descending Order of Quantity*	<ul style="list-style-type: none"> Materials and Substances must be listed by the Material Name if applicable (GeologicalMaterial) and/ or Substance Name (SC:[common name]) as instructed in Section 2.
Characterized Screened Identified*	<ul style="list-style-type: none"> “Yes” should be checked if all Standard requirements are met. “Yes ex/SC” should be checked to indicate all substances were characterized, screened, and/or identified as required except one or more Special Condition (SC) substances were characterized, screened, and/or identified according to SC guidance. The following is printed below the options for each item as appropriate: <ul style="list-style-type: none"> “% weight and role provided for all substances except Special Conditions (SC) which were characterized according to SC guidance” “All substances screened using Priority Hazard Lists with results disclosed except Special Conditions (SC) which were screened according to SC guidance” “All substances disclosed by Name (Specific or Generic) and Identifier except Special Conditions (SC) which were identified according to SC guidance”
Inventory and Screening Notes*	<ul style="list-style-type: none"> If the only content not characterized, identified and/ or screened is covered by the Special Condition, Inventory and Screening Notes should include the following notes: <ul style="list-style-type: none"> “Special conditions applied: [GeologicalMaterial].” [LEED v4] “Yes ex/SC ” result is due only to materials and substances for which Special Conditions were applied. Thus “Yes ex/SC” does not disqualify the product for the LEED v4 Materials and Resources Disclosure and Optimization credit, Option 1.
SECTION 2: CONTENT IN DESCENDING ORDER OF QUANTITY	
Materials – instructions apply only to Nested Materials Inventory format	
Material Name*	Enter “GeologicalMaterial”
Material Notes*	Enter “SpecialConditionApplied:GeologicalMaterial”
Substances – instructions apply to both Nested Materials and Basic Inventory formats	
Substance Name	Enter most descriptive name available preceded by “SC” (e.g., “Basalt” or “Slate” rather than “Rock”)
ID (Identifier):	Enter “SC:GeoMat” OR Enter CAS RN if available
Substance Notes	<ul style="list-style-type: none"> Enter the most recent Special Condition version nomenclature with date, available on the Emerging Best Practices web page (e.g., Version = SCGeoMats/ 2018-02-23).

	<ul style="list-style-type: none"> • Provide available information on: <ul style="list-style-type: none"> ○ Origin (country and, if available, exact location of quarry / extraction area) ○ Typical composition (if available) ○ Potential presence of toxic metals (defined as antimony, arsenic, cadmium, chromium VI, cobalt, lead, mercury, nickel, thallium, tin, uranium, and vanadium)¹. • For rock or stone-based materials (e.g., sandstone, slate, granite), provide available information on the presence of radioactive elements, namely radium, thorium, and potassium 40 (K40).² • If no information is available, include the statement/disclaimer “This disclosure does not provide typical composition or potential presence of toxic metals or radioactive elements which may be found in certain geological materials.”
<p>Hazards and Agency(ies) with Warnings*</p>	<p>Enter “Hazard Screening not performed”</p>
<p>SECTION 3: CERTIFICATIONS AND COMPLIANCE</p>	
<p>No changes to requirements for Special Conditions</p>	
<p>SECTION 4: ACCESSORIES</p>	
<p>No changes to requirements for Special Conditions</p>	
<p>SECTION 5: GENERAL NOTES</p>	
<p>No changes to requirements for Special Conditions</p>	
<p>SECTION 6: REFERENCES</p>	
<p>No changes to requirements for Special Conditions</p>	

¹ Cradle to Cradle, *Geological Materials Assessment Methodology*, June 2017, page 5.

² Cradle to Cradle, *Geological Materials Assessment Methodology*, June 2017, page 6.