This master should be used by designers working on Port of Portland construction projects and by designers working for PDX tenants (“Tenants”). Usage notes highlight a few specific editing choices, however the entire section should be evaluated and edited to fit specific project needs.

Tenant: Replace instances of “Port” with “Tenant” unless otherwise noted.

SECTION 016116 - VOLATILE ORGANIC COMPOUND (VOC) CONTENT RESTRICTIONS

1. GENERAL
   * + 1. DESCRIPTION
          1. This section describes volatile organic compound (VOC) restrictions for product categories listed below under the definitions article. All products of each category that are installed shall comply; Port project goals do not allow for partial compliance.
       2. DEFINITIONS
          1. VOC-Restricted Products: All products of each of the following categories when installed or applied on-site in the building interior:

Carpet, carpet tile, and adhesive.

Cement-based underlayment.

Resilient base.

Terrazzo.

Resilient flooring.

Moisture mitigation.

Paints and coatings.

* + - * 1. Interior of Building: Anywhere inside the exterior weather barrier.
        2. Adhesives: All gunnable, trowelable, liquid-applied, and aerosol adhesives, whether specified or not; including flooring adhesives and seam sealers, resilient base adhesives, and pipe jointing adhesives.
        3. Sealants: All gunnable, trowelable, and liquid-applied joint sealants and sealant primers, whether specified or not; including firestopping sealants and duct joint sealers.
      1. REFERENCES
         1. CAL (VOC) - Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers (including Addendum 2004-01); State of California Department of Health Services.
         2. CRI (GLP) - Green Label Plus Carpet Testing Program - Approved Products; Carpet and Rug Institute.
         3. GreenSeal GS-36 - Commercial Adhesives; Green Seal, Inc.
         4. SCAQMD 1113 - South Coast Air Quality Management District Rule No.1113; www.aqmd.gov.
         5. SCAQMD 1168 - South Coast Air Quality Management District Rule No.1168; www.aqmd.gov.
         6. SCS (CPD) - SCS Certified Products; Scientific Certification Systems.
      2. SUBMITTALS
         1. Evidence of Compliance: Submit for each different product in each applicable category.
         2. Product Data: For each VOC-restricted product used in the project, submit product data showing compliance, except when another type of evidence of compliance is required.
      3. QUALITY ASSURANCE
         1. Testing Agency Qualifications: Tests shall be performed by an independent firm specializing in performing testing and inspections of the type specified in this section.

1. PRODUCTS
   * + 1. MATERIALS
          1. All VOC-Restricted Products may not be listed below. Provide products having VOC content of types and volume not greater than those specified in State of California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers.

Evidence of Compliance: Acceptable types of evidence are:

Current Carpet and Rug Institute Green Label Plus certification; www.carpet-rug.org

Current SCS Floorscore certification; www.scscertified.com.

Current SCS Indoor Advantage Gold certification; www.scscertified.com.

Product listing in the CHPS Low-Emitting Materials Product List at www.chps.net/manual/lem\_table.htm.

Current certification by any other agencies acceptable to CHPS.

Report of laboratory testing performed in accordance with CHPS requirements for getting a product listed in the Low-Emitting Materials Product List; report shall include laboratory's statement that the product meets the specified criteria.

Product data submittals showing VOC content are NOT acceptable forms of evidence.

* + - * 1. Adhesives, Coatings, Seam Sealers, Primers, and Joint Sealants: Provide only products having volatile organic compound (VOC) content not greater than required by South Coast Air Quality Management District Rule No.1168.

Evidence of Compliance: Report of laboratory testing performed in accordance with requirements.

* + - * 1. Aerosol Adhesives: Provide only products having volatile organic compound (VOC) content not greater than required by GreenSeal GS-36.

Evidence of Compliance: A current GreenSeal Certification.

* + - * 1. Paints and Coatings: Provide products having VOC content not greater than that required by South Coast Air Quality Management District Rule No. 1113.

Provide coatings that comply with the most stringent requirements specified in 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.

Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.

Evidence of Compliance: Report of laboratory testing performed in accordance with requirements.

* + - * 1. Carpet, Carpet Tile, and Adhesive: Provide products having VOC content not greater than that required for CRI Green Label Plus certification.

Evidence of Compliance: Acceptable types of evidence are:

Current Green Label Plus Certification.

Report of laboratory testing performed in accordance with requirements.

* + - * 1. Other Product Categories: Comply with limitations specified elsewhere.

1. EXECUTION
   * + 1. FIELD QUALITY CONTROL
          1. The Port reserves the right to reject non-compliant products, whether installed or not, and require their removal and replacement with compliant products at no extra cost to Port.
          2. All additional costs to restore indoor air quality due to installation of non-compliant products shall be borne by Contractor.

END OF SECTION 016116