NOTICE OF NEW REQUIREMENTS FOR CONCRETE

The City of Portland is adding the following requirements to the approval process for the supply of Portland Cement Concrete (PCC), including: Commercial Grade Concrete (CGC), Plain Concrete Pavement (PCP), and High-Performance Concrete/Structural Concrete (HPC) for City construction projects.

NEW REQUIREMENTS

Beginning January 1, 2020:

1. All Portland Cement Concrete submitted to the City of Portland Materials Testing Lab for inclusion on the City’s (Pre)Approved Concrete Mix Design List will need to have a product-specific Type III Environmental Product Declaration (EPD) that is 3rd party verified and within its 5-year period of validity.

2. All Portland Cement Concrete not on the City’s (Pre)Approved Concrete Mix Design List that are proposed for use over 50 yd³ on a City-owned or solicited construction project will need to have a product-specific Type III Environmental Product Declaration (EPD) that is 3rd party verified and within its 5-year period of validity.

By April 1, 2021:

City of Portland Procurement Services will publish the maximum acceptable Global Warming Potentials (GWPs) for Portland Cement Concrete submitted to the City of Portland Materials Testing Lab for inclusion on the City’s (Pre)Approved Concrete Mix Design List and project-specific Portland Cement Concrete proposed for use over 50 yd³ on a City-owned or solicited construction project. The City will use EPD data collected in 2020, City concrete usage data, stakeholder feedback, the National Ready Mixed Concrete Association (NRMCA) Member National and Regional Life Cycle Assessment Benchmark (Industry Average) Report, and related applicable data to determine the GWP maximum values. The City will also use this information to evaluate how to effectively specify Portland Cement Concrete performance criteria within the context of lower GWP mixes.

Beginning January 1, 2022:

1. All Portland Cement Concrete submitted to the City of Portland Materials Testing Lab for inclusion on the City’s (Pre)Approved Concrete Mix Design List will need to have a Global Warming Potential (GWP) below the City’s established GWP maximum value within its strength class as determined by a product-specific Type III Environmental Product Declaration (EPD) that is 3rd party verified and within its 5-year period of validity.

2. All Portland Cement Concrete not on the City’s (Pre)Approved Concrete Mix Design List that are proposed for use over 50yd³ on a City-owned or solicited construction project will need to have a Global Warming Potential (GWP) below the City’s established GWP maximum value within its strength class as determined by a product-specific Type III Environmental Product Declaration (EPD) that is 3rd party verified and within its 5-year period of validity.
BACKGROUND
The City of Portland’s 2016 Sustainable Supply Chain Analysis identified construction services as the top spend category contributing to the City’s supply chain greenhouse gas (GHG) emissions. Within construction services, concrete is one of the most GHG-intensive materials typically used on City-owned construction projects. By requiring product-specific Environmental Product Declarations (EPD) and using those EPDs and related mix performance information to select lower impact mixes for Portland Cement Concrete, the City seeks to reduce GHG emissions associated with concrete use on City projects.

To learn more about EPDs and the resources available to help concrete producers with developing EPDs, please visit https://www.ocapa.net/oregon-concrete-epds.

For questions about the proposed EPD requirements for the supply of Portland Cement Concrete, please email Stacey Foreman, City of Portland Procurement Services, at stacey.foreman@portlandoregon.gov.