



COLORADO

Department of Transportation

Office of the Chief Engineer

Materials and Geotechnical Services
4670 Holly Street
Denver, CO 80216

October 17, 2022

Ms. Andrea Burr
NSF International
PO Box 130140
Ann Arbor, MI 48113-0140

RE: Comments/Requests/Suggestions related to:
Product Category Rule for Environmental Product Declarations
PCR for Concrete

Dear Ms. Burr:

As you may be aware, the Colorado Department of Transportation (CDOT) has recently begun to collect Environmental Product Declarations (EPDs) on projects as of July 2022 in compliance with Colorado House Bill 21-1303. Our initial EPD collection efforts are geared toward regional benchmarking the Global Warming Potential associated with materials supplied to CDOT projects in conformance with our CDOT specifications, prior to establishing GWP limits by January 2025. Review of published Colorado EPDs led to an in depth review of the PCR for Concrete by our CDOT EPD Implementation Team. Reviews were conducted on Asphalt Mixtures, Ready Mixed Concrete, Precast Concrete and Steel PCRs and our comments/questions will be posted to our [CDOT EPD webpage](#). CDOT has also shared and sought input on these comments with other States/Agencies (MNDOT, WSDOT, ODOT, CALTrans, and PANYNJ) that are interested in or are currently pursuing EPD collection efforts as well. The following comments, requests, and suggestions are a result of that review and have been provided primarily as we look ahead to submittal verification/quality assurance and anticipated data granularity needs for our regional benchmarking efforts here in Colorado. Comments specific to your PCR are:

1. To set up CDOT regional benchmarks it is good to know the mix design. The current EPD format does not report the mix design. CDOT is requesting that the EPD format should include the mix design, with materials components to be detailed to 10s of pounds and fluid ounces for admixtures. This is most relevant for the binder content and binder origin (supplier and location). CDOT will be requesting this information per July 1st, 2023.
2. The EPD should include what cement data is used (how much of each of the following: industry average, company average, or site/plant specific data). CDOT will be requesting this information per July 1st, 2023.
3. Consider requiring the use of a unique EPD number for each unique EPD generated
4. Consider requiring the registration of EPDs on the NSF website.
5. Admixture data seems in need of more industry participation. How is NSF stimulating the development of relevant admixture EDPs? How can CDOT help getting more manufacturers to provide EPDs? NAPA has started to work on guidance for additives as the first EPDs for additives are coming out. A similar effort from NSF for admixture data would be recommended.



6. After reviewing the literature data sources, we recommend developing a data quality protocol for the use of non-primary data and review the current data against it. Regionalization of data would be desirable, going beyond national averages. This would inform data development and outreach from NSF/NRMCA to industry representatives to improve the data (recommended). CDOT is willing to support this outreach as we are considering requiring facility-specific data for (the main) mix components by July 1st, 2023. Some data is older than the 10 years that the ISO21930 uses as the data requirement for background data. it would be useful to collaborate with the Precast and asphalt mix program operators for alignment.
7. We recommend to reviewing the PCR and reporting the review in a public document against the ACLCA guidelines <https://aclca.org/pcr/> to assist in transparency and harmonization.
8. When declaring an (national) average, the actual average is not very helpful for regional benchmarks. For other purposes, a value that covers a minimum or maximum, or declares a more conservative value, like an 80% percentile, would be more useful and potentially provide an incentive to produce more specific EPDs.
9. Having more than one EPD-tool raises concern with variable outputs. We recommend that the PCR committee defines and provides for a recurring tool review and reporting to assure equal outcomes, and a review process for new tools when they become available.
10. We recommend that the Program Operator organizes periodic (at least annual) meetings with third party reviewers to discuss interpretation issues, and potential PCR improvements as part of a continuous improvement process that is not bound by the 5-year PCR update process. This process has been very valuable when implemented in other PCR committees.

CDOT greatly appreciates your support as we move forward with our EPD implementation process. We are hopeful that the comments, questions and suggestions outlined above can be considered and implemented in the immediate future.

If you have any questions related to these comments, please do not hesitate to reach out to us for clarification. I can be reached by phone at 303-398-6501, or by email at craig.wieden@state.co.us. I intend to follow up with you in a week or two to discuss these comments with you and to determine actions and timeframes that may be undertaken to address them.

Sincerely,

Craig Wieden
State Materials Engineer
Colorado Department of Transportation

Cc: Katie Poss - NRMCA

