

ENVIRONMENTAL PRODUCT DECLARATION (EPD) FOR PVC PIPE

DATELINE: MAY 15, 2015 – ANN ARBOR, MI – EPD FOR PVC PIPE

NSF International announced publication of the first American industry-wide EPD for water and sewer pipe. The EPD was developed in compliance with ISO standards and was certified by NSF Sustainability, a division of NSF International. In 2023, the EPD was renewed by NSF International. To access the complete EPDs from 2015, [click here](#), and 2023, [click here](#).

BACKGROUND

The following background information should be helpful in understanding the EPD development process:

LIFE-CYCLE ASSESSMENT (LCA): An LCA for pipe is a transparent analysis of the environmental impacts of piping products. Included in the analysis are raw material acquisition, as well as pipe manufacture, shipping, installation, use, and end-of-life.

PRODUCT CATEGORY RULE (PCR): Before an EPD can be created for a product, a PCR must exist. PCRs are necessary to ensure that consistent procedures will be used each time an EPD is created for a product. PCRs are based on the science of LCA and define items such as scope, calculation steps, and areas of environmental impact that are specific to the product.

ENVIRONMENTAL PRODUCT DECLARATION (EPD): An EPD contains information about the composition and environmental characteristics of a product based on LCA. The result is quantified environmental data for a product within pre-defined categories. The EPD may be certified to provide credibility – this process includes verification of compliance with relevant ISO standards and verification of data developed for the LCA.

HISTORY

LCA: In 2013, seven PVC pipe companies provided data for Sustainable Solutions Corporation (SSC) to prepare an LCA. SSC gathered data on pipe materials, manufacturing, and shipping from the participating companies, analyzed the data, and made comparisons to information published for competitive materials. SSC also prepared several scenarios for pipe installation and operation. The LCA was verified by an independent third-party panel of experts.

EPD: In 2015, NSF International reviewed the LCA data and certified compliance with the requirements of the ISO standards. “The PVCPA environmental product declaration provides transparent environmental impact data...,” said Amber Dzikowicz, NSF Sustainability Unit Manager. “Having their EPD verified by an independent third-party organization like NSF International lends credibility and trust to their report and is an industry best practice.”

EPD Renewal: In 2023, new information was submitted to verify that the PVC pipe industry still complied with EPD requirements. As a result of analysis of this information, NSF Sustainability re-certified PVC pipe’s EPD.

PARTICIPATING COMPANIES

PVC pipe companies providing data for the 2023 review were:

- Diamond Plastics
- IPEX, Inc.
- Jet Stream by PipeLife
- JM Eagle
- National Pipe & Plastics
- Sanderson Pipe
- Westlake Pipe & Fittings

These companies are members of the Uni-Bell PVC Pipe Association. PVC pipe producers hope that all water and sewer utilities interested in sustainability will review this document and recognize the environmentally responsible role that PVC pipe plays.