

# PVCPipe Association TECHNICAL BRIEF

## ENVIRONMENTAL PRODUCT DECLARATION (EPD) FOR PVC PIPE

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

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. To access the complete PVC pipe EPD, please [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 insure that consistent procedures will be used each time an EPD is created for a product. PCRs are based on the science of Life-Cycle Assessment (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 life-cycle assessment (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 a Life-Cycle Assessment (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.”



### PARTICIPATING COMPANIES

The following PVC pipe manufacturers participated in the LCA:

- Diamond Plastics Corporation
- IPEX, Inc.
- National Pipe and Plastics
- North American Pipe Corporation
- North American Specialty Products
- Pipelife Jet Stream, Inc.
- Royal Building Products

All of 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.