

# **General Program Instructions for**

**Environmental Product Declarations (EPD) Program National Asphalt Pavement Association** 

Version 1 September 15, 2014



### 1. General Program Instructions

- a. These program instructions are used in the operation of the National Asphalt Pavement Association (NAPA) Environmental Product Declaration (EPD) Program with the intent to develop product category rules (PCR) and EPDs for products related to asphalt pavements.
- b. These program instructions meet the requirements of ISO 14025:2006
  "Environmental Labels and Declarations Type III Environmental Declarations Principles and Procedures."

## 2. Program Scope

- a. The scope of the NAPA EPD Program is to facilitate the development of PCR and the administration of Type III EPDs for any product related to asphalt mixtures and asphalt ingredients manufactured or produced in North America.
- b. Asphalt mixtures include all plant-produced asphalt mixtures.
- c. Asphalt ingredients are all constituent materials required to manufacture asphalt mixtures. Examples of typical asphalt ingredients are aggregates, asphalt binders, recycled asphalt pavement, recycled asphalt shingles, ground tire rubber, steel slag, and other additives.
- d. Procedure for definition of Product Categories:
  - i. To ensure clarity and avoid duplication of PCRs, the product category shall be defined by one or more of the following classification systems:
    - UNCPC United Nations Central Product Classification Ver. 2, i.e. 37940: Bituminous mixtures based on natural and artificial stone materials and bitumen, natural asphalt or related substances as a binder;
    - 2. NAICS North American Industry Classification System 2012, i.e. 324121: Asphalt Paving Mixture and Block Manufacturing; or
    - 3. UNSPSC United Nations Standard Products and Services Code, i.e. 30111509: Asphalt-based concrete.

## 3. Program Goal and Objectives

- a. The goal of the NAPA EPD Program is to provide comprehensive, credible, and comparable environmental data to customers (engineers, specifiers, users, and producers) that may be inputted into future pavement EPDs. EPDs published from the program will allow decision makers to make informed comparisons among asphalt mixtures and ingredients with the goal of improving the environmental impact of pavements.
- b. The program objective is to develop PCRs and verify EPDs in a transparent and credible manner in accordance with ISO 14025.

### 4. Identification of Program Operator

- a. The Program Operator is the National Asphalt Pavement Association, based in Lanham, Maryland.
- b. The National Asphalt Pavement Association (NAPA) is a 501(c)6 non-profit organization. It is the only trade association exclusively representing the interests of asphalt pavement material producers and paving contractors on the national level with Congress, governmental agencies, and other national trade and business organizations. NAPA supports an active research program designed to answer questions about environmental issues and to improve the quality of asphalt pavements and paving techniques used in the construction of roads, streets, highways, parking lots, airports, and environmental and recreational facilities. The association provides technical, educational, and marketing materials and information to its members, and supplies technical information to users and specifiers of paving materials. The association, which counts more than 1,100 companies among its members, was founded in 1955.

#### 5. Intended Audience

 The intended audience of this program is both business-to-business and businessto-consumer.

#### 6. Compliance with Relevant Standards

- a. The PCRs and EPDs within this program are developed and verified in accordance with the following standards:
  - i. ISO 14020 Environmental Labels and Declarations: General Principles
  - ii. ISO 14025 Environmental Labels and Declarations Type III Environmental Declarations Principles and Procedures
  - iii. ISO 14040 Environmental Management Life-Cycle Assessment Principles and Framework
  - iv. ISO 14044 Environmental Management Life-Cycle Assessment Requirements and Guidelines
  - v. Any standard document developed in future that is deemed relevant and applicable.

## 7. Administration of the NAPA EPD Program

- a. The NAPA EPD Program will be administered by NAPA and overseen by the Sustainability Committee.
  - i. NAPA will be responsible for forming and maintain the Sustainability Committee.

- ii. The Sustainability Committee shall consist of individuals from NAPA's membership with a variety of perspectives and expertise, including representatives with knowledge of the asphalt industry and life-cycle assessment.
- b. The Sustainability Committee shall be responsible for the following:
  - i. Preparing, maintaining, communicating and implementing the NAPA General Program Instructions and EPD Program supporting documents.
  - ii. Identifying the need for PCRs pertaining to asphalt mixtures and asphalt ingredients.
  - iii. Maintaining a transparent procedure to review existing PCRs for compliance with these program rules and applicable standards.
  - iv. Conducting intense Internet searches to identify applicable existing PCRs.
    - In the case an out-of-date PCR exists, the Sustainability Committee shall invite the program operator to participate in the creation of a new, updated PCR.
    - 2. In the case that an existing PCR exists, the Sustainability Committee shall contact the PCR owner to obtain permission to modify the existing PCR.
    - 3. If no such PCR exists, an LCA shall be commissioned to aid in the development of a new PCR.
  - v. Posting open invitations to participate in the PCR Development Task Group, which is responsible for modifying or developing new PCRs, at least 30 days before the start of deliberations and selecting committee members.
    - The PCR Development Task Group shall consist of 10 individuals with at least one member from an upstream vendor or customer; one material supplier, if applicable; one LCA expert; and one academic. At least 50% of the members shall come from the industry of the product seeking the PCR.
    - 2. Members of the PCR Development Task Group shall sign a disclosure of any conflicts of interests.
  - vi. Establishing a procedure for selecting competent verifiers for the PCR and EPD third-party reviews.
  - vii. Publishing all verified PCR documents verified within the program available at www.asphaltpavement.org/EPD.
  - viii. Maintaining a publically available list of all verified EPDs within the program available at www.asphaltpavement.org/EPD.
  - ix. Publishing EPDs certified through the program.

x. Making the NAPA General Program Instructions publically available to any interested party at www.asphaltpavement.org/EPD.

#### 8. Involvement of Interested Parties

- a. The PCR development process shall be open to all parties affected by the PCR, including but not limited to asphalt mix producers, laydown contractors, suppliers, customers, governmental bodies, and non-governmental organizations.
- b. Interested parties shall participate during the PCR develop by serving on the PCR Development Task Group (see Section 7.b.v) or by submitting comments during the open consultation process.
- c. Interested parties are available to participate remotely through email or telephone.
- d. NAPA will identify, document, and publish in the Appendix of the PCR all interested parties invited for the PCR development and the members of the PCR Development Task Group.

#### 9. Data Confidentiality Management

- a. Confidential information or data will not be used for any purposes other than activities required to develop EPDs or PCRs.
  - i. All data will be kept strictly confidential.
  - ii. NAPA will prevent access by unauthorized persons to confidential information.
  - iii. Authorized persons (NAPA employees, subcontractors, verifiers, stakeholder experts) will enter into a confidentiality agreement prior to having access to any confidential information.
  - iv. All electronic and hard copies of supporting information will be kept in a secure format in case of any future communication is required.
  - v. Upon request, NAPA will return any stored information containing confidential information.
  - vi. NAPA will publish data from EPD results only as industry baselines or averages for purposes of benchmarking, publishing an industry average EPD, and supporting the free repositories of life-cycle data, such as the U.S. Life-Cycle Inventory (LCI) Database (http://www.nrel.gov/lci/).
- b. EPDs, created through this program, are owned by the organization seeking the EPD.
  - i. NAPA will make EPDs available, upon written request by the organization seeking the EPD.
  - ii. Information from the EPDs shall not be quoted in part or whole without written approval by the organization seeking the EPD.

### 10. Procedure for Development and Maintenance of PCR

- a. When no appropriate PCR exists, the Sustainability Committee will develop a PCR for relevant asphalt mixtures and asphalt ingredients.
- b. At minimum, the PCR will contain the following sections:
  - i. Name of the product category
  - ii. The product category code and definition
  - iii. The intended application of the resulting EPD developed using the PCR
  - iv. Existing PCRs (if any) and the reason for developing a superseding PCR
  - v. The dates of development and period of validity
  - vi. Details of the LCA scoping, including:
    - 1. Define the functional unit(s) and/or reference units
    - 2. Goal and scope of the LCA-based study, including the life-cycle stages
    - 3. Define procedure for inventory analysis
    - 4. Define allocation and calculation rules adequate for the product categories
    - 5. Impact categories selected and methodology of impact assessment
    - 6. Rules on producing any additional environmental claims
  - vii. Define the content and format of the label
  - viii. Define any specific additional verification required
- c. Selection procedure for predetermined parameters:
  - i. The PCR Development Task Group will be responsible for guiding the selection of predetermined parameters for a given product category.
  - ii. The selection procedure will include but will not be limited to:
    - 1. Identify methods to define all terms and definitions relevant to the product category.
    - Identify methods to define goal, scope, system boundaries, and functional units for EPD, including specific inclusion and exclusion criteria.
    - 3. Identify the period of validity for primary data.
    - 4. Identify when to use existing inventory data instead of primary data when conducting inventory analysis.
    - 5. Identify rules to select life-cycle inventory data when multiple sources are available.

- 6. Identify methods to handle co-product allocation and waste handling processes.
- 7. Identify data reporting and quality assurance procedures.
- 8. Identify life-cycle assessment impact assessment methods to be used and reporting categories.
- iii. The PCR Development Task Group will make the decisions for the predetermined parameters through consensus.
- iv. For each of the predetermined parameters in the PCR, the PCR Development Task Group will define a set of defaults. Examples of defaults for predetermined parameters are:
  - By default, units for the LCA modelling and reporting must be U.S. Customary Units.
  - 2. By default, where no primary data is available the U.S. LCI Database models must be used.
- v. Justification for all decisions made will be tracked.
- vi. Any changes to default values for predetermined parameters must be justified.
- d. Rules for Period of Validity
  - i. PCRs developed for the NAPA EPD Program shall be valid for no longer than five years, as determined by the Sustainability Committee.
  - ii. Prior to expiration, the PCR document shall be reviewed by the Sustainability Committee to determine if any changes are necessary. Any changes will be developed using the same process used to develop new PCRs.
  - iii. Any interested party may submit relevant information that may impact the PCR at any time. The Sustainability Committee may revise the PCRs prior to expiration, if the relevant information indicates that change is necessary.

### 11. Procedure for Independent Verification

- a. All new PCRs developed and the supporting LCA are reviewed by a third-party review panel.
  - i. The review panel (at least three people) shall be led by an LCA expert (certified professional or equivalent) and contain at least one industry expert.
  - ii. Individuals on the review panel shall not have been involved in the development of the PCR.
  - iii. The review panel is responsible for ensuring that the:
    - PCR has been developed in accordance with the ISO 14040 Series of standards and specifically in accordance with the 6.7.1 Section of ISO 14025;

- 2. PCR was developed in accordance with the general program instructions: and
- 3. Supporting LCA demonstrates that the PCR developed adequately describes the environmental impacts of the products.

## b. Competence of EPD verifiers

- i. The EPDs developed from an approved NAPA program PCR and the supporting LCA must be reviewed by an independent verifier.
  - 1. The verifier shall not have been involved in the development of the LCA studies.
  - 2. The verifier shall be an individual with knowledge of the asphalt paving industry and have expertise in LCA methodology.
- ii. The LCA review will ensure conformance with:
  - 1. The PCR.
  - 2. The ISO 14040 Series.
  - 3. These general program instructions.
- iii. The EPD review will evaluate:
  - Data quality: adequate coverage, precision, completeness, representativeness, consistency, reproducibility, sources, and uncertainty.
  - 2. The plausibility, quality, and accuracy of the LCA-based data.
  - 3. The quality and accuracy of any additional environmental information.
  - 4. The quality and accuracy of the supporting information.
- iv. The independent verifier shall develop a report documenting the results of the verification process, while adhering to the data confidentiality requirements.
- v. The report will be made available to the NAPA EPD Program, the company seeking EPD verification, and any other person upon request made to the NAPA Sustainability Committee.
- vi. For EPDs based on other peer-reviewed LCA/EPD software tools, the verifier will check to ensure conformance to the ISO guidelines and PCR.
- vii. For EPDs based on the NAPA LCA/EPD certified software tool, NAPA will check to ensure that the data inputs are reasonable for the product.

#### 12. Periodic Review of the General Program Instructions

a. The General Program Instructions will be reviewed by the Sustainability Committee at least every five years or as needed due to known changes in relevant policy or standards.

- b. At minimum the review will include:
  - i. Checking for updates in national or international standards.
  - ii. Making necessary changes to conform to standards.
  - iii. Making necessary program changes to accommodate for changing program goals and objectives.
  - iv. Posting all changes at <a href="https://www.asphaltpavement.org/EPD">www.asphaltpavement.org/EPD</a>.

## 13. Procedure for Management of the Data and Documentation

Addressed in Sections 10–12.

## 14. Funding Source and Program Fees

- a. The program will be funded by the EPD Program fees.
- b. The EPD Program fees will be developed on a case-by-case basis.
- c. Where possible standard program fees will be published at www.asphaltpavement.org/EPD.

## 15. Guidance on Communicating EPD Information

- a. As noted in Section 9b, NAPA Certified EPDs, EPDs certified and published through this program, are owned by the organization seeking the EPD.
  - i. NAPA will make NAPA Certified EPDs available upon written request by the organization seeking the EPD.
  - ii. Information from NAPA Certified EPDs will be used only for the purposes stated in the EPD and shall not be quoted in part or whole without written approval from the organization seeking the EPD.
- b. NAPA Certified EPDs will display the NAPA Certified EPD Logo.
  - EPDs from different programs may not be comparable. Use of the program logo indicates the declaration was developed through the NAPA EPD Program.
- NAPA reserves the right to initiate legal action in the event of any misuse or misrepresentation of the NAPA Certified EPD Logo or information published in NAPA Certified EPDs.