Environmental Standards Procurement Task Force

Meeting #12 - Program Implementation and EPD Grant Program Updates

June 17, 2026

Agenda

Meeting #12 - Program Implementation and EPD Grant Program Updates

10:00a to 10:10a: Introduction

- Timeline & Schedule
- Announcements & Updates

10:10a to 10:30a: Program Implementation

- Waiver/Exemption Process
- Submittal Process

10:30a to 11:10a: BuiltCold Database Demo

11:10a to 11:35a: MN EPD Grant Program Updates & Lessons Learned

11:35a to 11:40a: Next Steps

11:40a to 11:50a: *Member Discussion and Questions*

11:50a to 12:00p: *Public Comments and Questions*

Minnesota Task Force Timeline

2023
October 1 - Task Force established

2024
- February 22 - EC Context: Concrete and Asphalt
- March 14 - EC Context: Steel, Rebar and Other Materials
- April 25 and May 23 - Bidding and Procurement
- July 1 - Pilot Program begins
- Summer/Fall - Material-specific and Pilot Program Working Groups (WG)
- Oct 23 - ESPTF Mtg#6: Concrete and Asphalt WG
- Nov 20 - ESPTF Mtg#7: Steel and Rebar WG
- Dec 18 - ESPTF Mtg#8: Pilot Program and Other Materials

2025
- March 19, 2025 - Mtg#9: Task Force Recommendations
- May 8, 2025 - Draft Report sent to Task Force for comment
- Spring - Draft Report, Select Grant Awardees & Distribute Funds
- Summer/Fall - Draft Report Staff Reviews and Revisions
- Oct 8 - Mtg#10: TF Recommendations & Legislative Report
- December 1 - Report to the Legislature

2026
- January 15 - Global Warming Potential (GWP) established for concrete and rebar used in buildings.
- April 22 - ESPTF Mtg#11 (Virtual)
- June 17 - ESPTF Mtg#12 (In Person) - Maplewood, MN
- **July 15** - Implementation date of GWP limits/EPD disclosure requirements (projects letting on or after this date)
- **August 19 - BuiltCold Database Training** (In Person, TBD)
- **September 16 - ESPTF Mtg#13** (TBD)
- **October 14 - ESPTF Mtg#14** (TBD)
- **December 1** - Report to the Legislature

2027
- December 1 - Report to the Legislature

2028
- January 15 - Establish a maximum GWP for structural steel and, after conferring with the commissioner of transportation, for asphalt paving mixtures and concrete pavement
- December 1 - Report to the Legislature

2029
- January 1 - Task Force ends

Asphalt PCR updated April 2026

https://www.asphaltpavement.org/uploads/documents/EPD_Program/Doc_A_NAPA_PCR_Revision_v2.1.pdf

NAPA
NATIONAL ASPHALT PAVEMENT ASSOCIATION

Product Category Rules (PCR)

For Asphalt Mixtures

Version 2.1

Effective Date: April 2026

Validity Period: Through September 2027

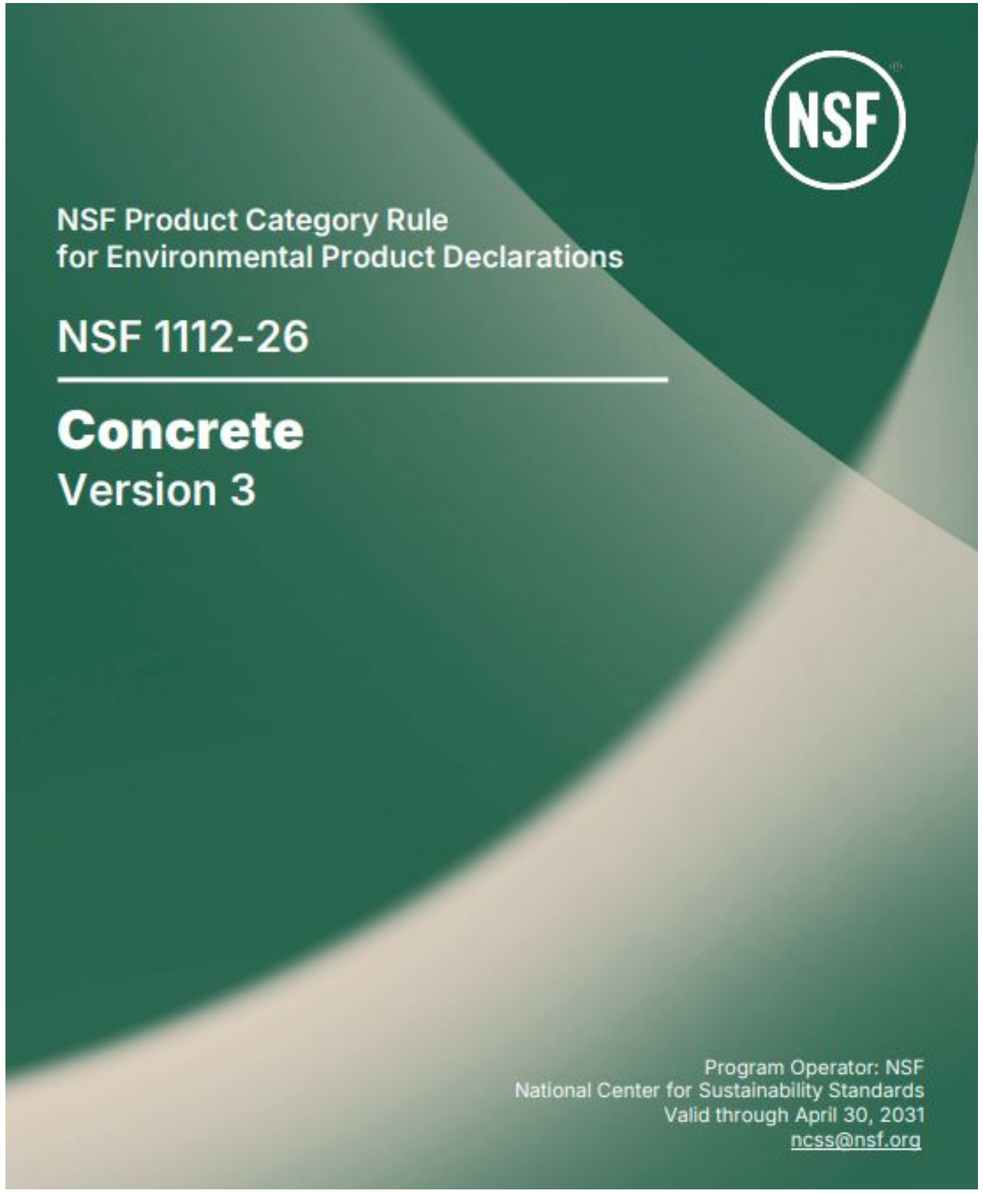
6406 Ivy Lane, Suite 350 | Greenbelt, MD 20770 | 301-731-4748
AsphaltPavement.org/EPD

Foreword

Midstream Update [final publication date: XX/XX/2025]: A midstream update was issued in response to the Environmental Protection Agency's review of the asphalt mixture Product Category Rule against the EPA – PCR Criteria as published within the Construction Materials Opportunities to Reduce Emissions (C-MORE) program. In response, NAPA, the PCR Committee, was convened to discuss and address the review with the following changes:

- Expanded the geographic applicability of the PCR to include Mexico in addition to Canada, and the United States, following the same roadmap of regionalizing upstream datasets and harmonizing with Mexican standardizing organization, Organismo Nacional de Normalización y Certificación de la Construcción y Edificación (ONNCCE).
- Updated definitions: Red-lined definitions have been provided in the attached PCR document. Updated definitions include old numbering 3.9.17, 3.9.28 (new numbering 3.9.29) and 3.9.41 (new numbering 3.9.44). New definitions added for *Facility and product-specific EPD* (3.9.18), *Producer-average EPD* (3.9.42), *Product-average EPD* (3.9.43), and *Supply-chain specificity* (3.9.55).
- Updates to section 5.3, reflecting changes in definitions, outlining the types of EPDs that this PCR can be used to develop.
- References added to the underlying LCA (Mukherjee, 2021) highlighting *Assumptions and Limitations* in this section and in section 5.2.2; and to the tabular representation of background LCI in Annex I, version2, in sections 7.1.7.2.2, 7.1.7.2.3 and 7.1.7.2.4.
- Updates to use of PCRs and EPDs for upstream materials use in section 7.1.9.2.
- Updates to sections 10.6, 10.1 and 11, providing clarity on how the underlying LCA and the Emerald Eco-Label tool has been independently verified, and recent updates including the addition of Simulator tool and the Quality Control program, that add to the transparency and veracity of the EPDs.

Concrete PCR updated April 2026 NSF-112-26



PCR revision history

Version	Changes	Date issued
1	Initial publication (published by Carbon Leadership Forum)	November 2012
1.1	Revision (published by Carbon Leadership Forum)	December 2013
2	Revision	February 2019
2.1	Revision	August 2021
2.2	Deviation	December 2022
2.3	Deviation	November 2023
2.3	Extension (including deviation)	February 2024
2.3	Extension (including deviation)	February 2025
2.3	Extension (including deviation)	April 2026
3	Revision (including deviation)	May 2026

This edition of the PCR contains the following revisions:

- Issue 3

  This revision updates throughout the document and harmonizes with upstream PCRs where possible.

- Issue 4

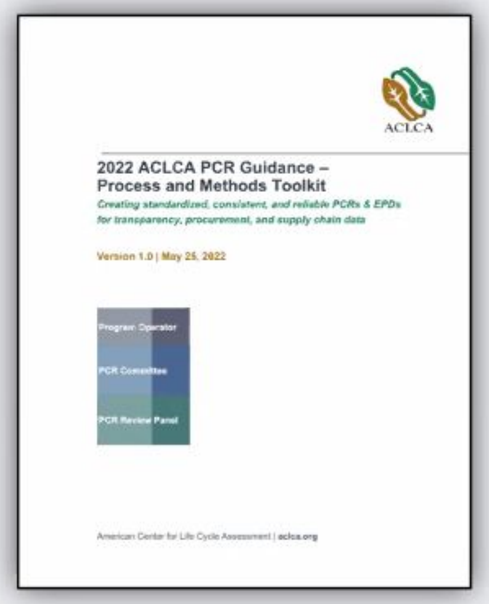
  This revision improves clarity of portable batch plants vs. mobile volumetric mixers. It adds a definition for each of those terms in Section 3, and modifies language in Section 7.1.7.2.

Suggestions for improvement of this guideline are welcome. Comments should be sent to ncss@nsf.org, or c/o NSF, National Center for Sustainability Standards, PO Box 130140, Ann Arbor, Michigan 48113-0140, US.

EPD Ecosystem Supplementary Standards

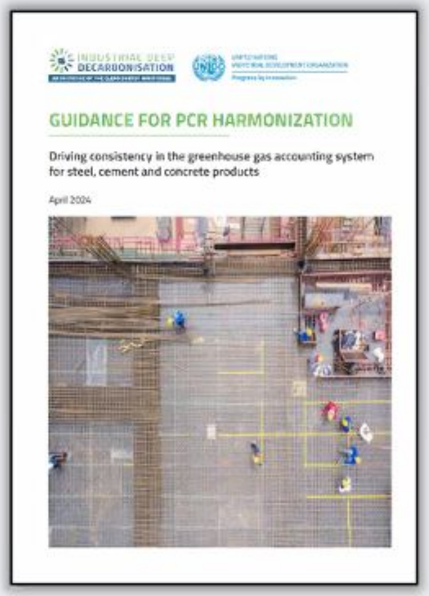
History of Supplementary Standards for EPD Programs

May 2022



www.aclca.org/initiatives#PCR-Open-Standard

April 2024

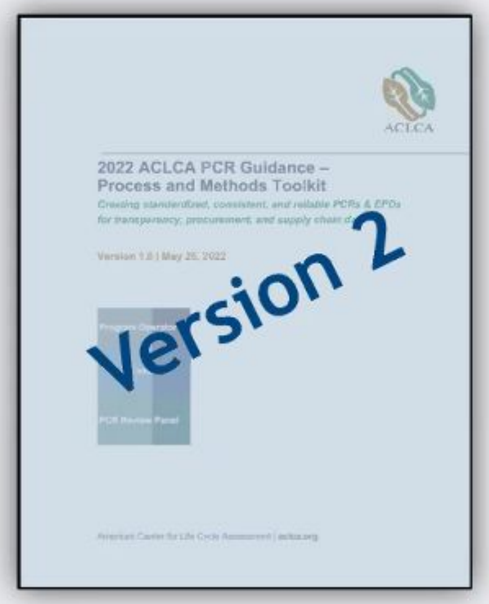


decarbonization.unido.org/resources/guidance-for-pcr-harmonization/

August 2024

www.epa.gov/system/files/documents/2024-08/final-pcr-criteria_8-7-24_508.pdf

Coming Soon!



https://www.aclca.org/initiatives#pcr-open-ver2

ERG's EPD Quality Program

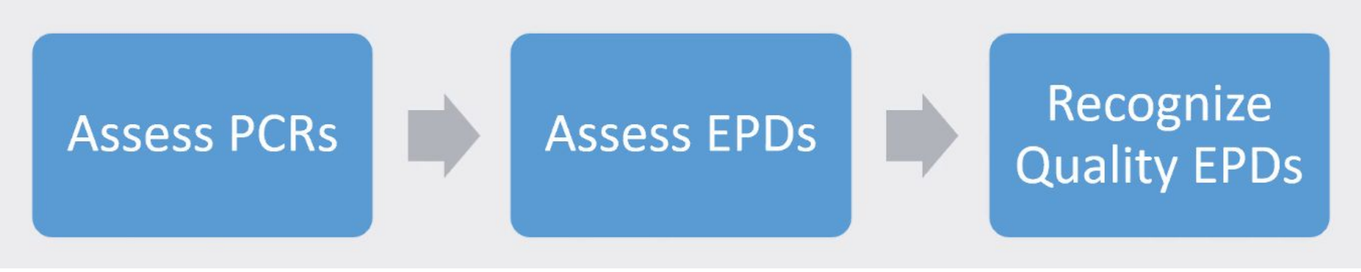
www.erg.com/epd

Objectives of ERG's EPD Quality Program

1. Establish a program to improve standardization, rigor, and trust in EPDs.

2. Recognize EPDs that are developed under high quality PCRs.

3. Provide access to high quality EPDs through a searchable, filterable database with an intuitive user interface and API connectivity.



ERG's EPD Quality Program

EPD Assessment

ERG's EPD Requirements

Set of 20 criteria that are derived from:

- PCR Requirements based on EPA and ACLCA standards & guidance
- ISO 14025 & ISO 21930

PCR-specific criteria can be added when appropriate

Requirements

Criterion	Specific Requirement	Reference/Rationale
1.	The EPD shall be made in accordance with ISO 14025 and should disclose the version of ISO 14025 within the document.	ISO 14025:2006
2.	The EPD shall provide sufficient information to identify which type of EPD it represents with respect to data specificity. Type of EPD shall be mapped to the following nomenclature, if not already disclosed on the EPD: • Manufacturer-average and product-average EPD • Manufacturer-average and product-specific EPD • Facility-specific and product-average EPD • Facility-specific and product-specific EPD	ACLCA *Guidance for Determining EPD Types and Calculating and Communicating Data Specificity Through the Supply Chain* (2025)
3.	The EPD shall identify the product(s) that it covers.	ISO 14025:2006, Clause 7.2.1.C; ISO 21930:2017, Clause 9.2.C
4.	The EPD shall include a description of each product that clearly outlines material and performance characteristics to distinguish each named product on the EPD from similar products.	ISO 14025:2006, Clause 7.2.1.B; ISO 21930:2017, Clause 9.2.B

[ERG's Approach to Implementing the Product Category Rule Criteria (Version 1.0)]

[ERG's Environmental Product Declaration Requirements (Version 1.0)]

EC3 2.0 Roadmap

February 2026 - 4 community feedback sessions held to hear directly from users, developers, manufacturers, and policymakers about EC3's strengths, gaps, and priorities.

- **Session 1** — Overview & Platform Foundation (Feb 17)
- **Session 2** — EPD Ecosystem: Sourcing, Quality & Management (Feb 18)
- **Session 3** — Project Planner, Assemblies & Workflows (Feb 23)
- **Session 4** — API, Integrations & Developer Experience (Feb 26)

A consolidated slide deck is available here📒.

What EC3 2.0 Will Include

🏗️ Cloud-Agnostic Architecture

Transitioning to a modern, cloud-agnostic backend to increase resilience, support regional data governance requirements, and enable enterprise and governmental adoption without vendor lock-in.

🤖 AI-Enabled Data Quality

AI-assisted validation and anomaly detection to improve metadata consistency, schema harmonization, and comparability across jurisdictions — scaling global data ingestion while reducing manual bottlenecks.

🌍 Expanded Global EPD Coverage

Enhanced integration across international Program Operators and schema variations to reduce duplicative reporting burdens, support policy implementation, and enable more equitable global market participation.

🔍 Improved Find & Compare

A full UI/UX redesign for clarity and speed, with better filters, statistics, and material insights — reducing barriers to entry and supporting long-term decision-making that drives down carbon.

📐 Assembly Builder & Project Planner

Rebuilt workflow tools for calculating material quantities and project-level embodied carbon across full life cycle stages, with expanded APIs for seamless integration into BIM systems, estimating tools, and enterprise platforms.

📊 Broader Environmental Impact Categories

Better surfacing of additional impact indicators already embedded in EPD data — including toxicity, water use, and recycled content — to align with evolving procurement and biodiversity requirements.

https://www.buildingtransparency.org/ec3-2-0-modernizing-open-infrastructure-for-embodied-carbon/

C.Scale & Tally 2.0

April 2026 - C.Scale has acquired Tally from Building Transparency

Key Features and Upgrades

- **Revit Updates:** Supports newer versions of Autodesk Revit (2025 and beyond) to bring it up-to-date with modern software requirements.
- **Database Integration:** Utilizes the environmental impact data of the EC3 tool to vastly expand the range of available product Environmental Product Declarations (EPDs).
- **Predictive Workflows:** Connects Tally's detailed material-level analysis with the predictive carbon platform of C.Scale

Program Implementation

Policy Implementation

- July 15, 2026 - Implementation date of GWP limits/EPD disclosure requirements (projects letting on or after this date)
- Reevaluate Tier 1 materials in subsequent program years based on data collected to establish/adjust GWP thresholds/limits
- Develop/refine plan for future implementation of Tier 2 materials (i.e. glass, aluminum, insulation)

Product Category	Implementation	Implementation Details
✅ **Concrete (used in buildings)**	**GWP Limits Set (for Ready Mix)**	**GWP Limits Set Jan. 15, 2026:** Ready Mix Concrete limits based on the National Ready-Mix Concrete Association's (NRMCA) North Central regional benchmarks published in the Industry-Wide EPD. **Implementation of GWP limits July 15, 2026**. **EPD Mandatory Disclosure Starting 2026:** Concrete Masonry Units (CMU) and Precast.
✅ **Steel Rebar (used in buildings)**	**GWP Limits Set**	**GWP Limits Set Jan. 15, 2026:** Based on Concrete Reinforcing Steel Institute's (CRSI) Industry-Wide EPD. (legislation: **GWP limits no later than Jan. 15, 2028**). Limits implemented
Structural Steel	EPD Disclosure	**EPD Disclosure - Starting 2026: Collect EPDs** to identify subcategories and establish benchmarks. (legislation: **GWP limits no later than Jan. 15, 2028**). Hot-Rolled Steel, HSS tubes, Plate, Decking, Open-Web Steel Joists, & Cold-Formed Framing.
Concrete Pavement	EPD Disclosure	**EPD Disclosure - Starting 2026: Collect EPDs** to identify subcategories and establish benchmarks. (legislation: **GWP limits no later than Jan. 15, 2028**)
Asphalt Pavement	EPD Disclosure	**EPD Mandatory Disclosure - Starting 2026: Collect EPDs** to identify subcategories and establish benchmarks. (legislation: **GWP limits no later than Jan. 15, 2028**)

Project Eligibility

Eligible Project means (16B.312.1):

1. New construction of a state building larger than 50,000 gross square feet of occupied or conditioned space;
2. Renovation of more than 50,000 gross square feet of occupied or conditioned space in a state building whose renovation cost exceeds 50 percent of the building's assessed value; or
3. New construction or reconstruction of two or more lane-miles of a trunk highway.

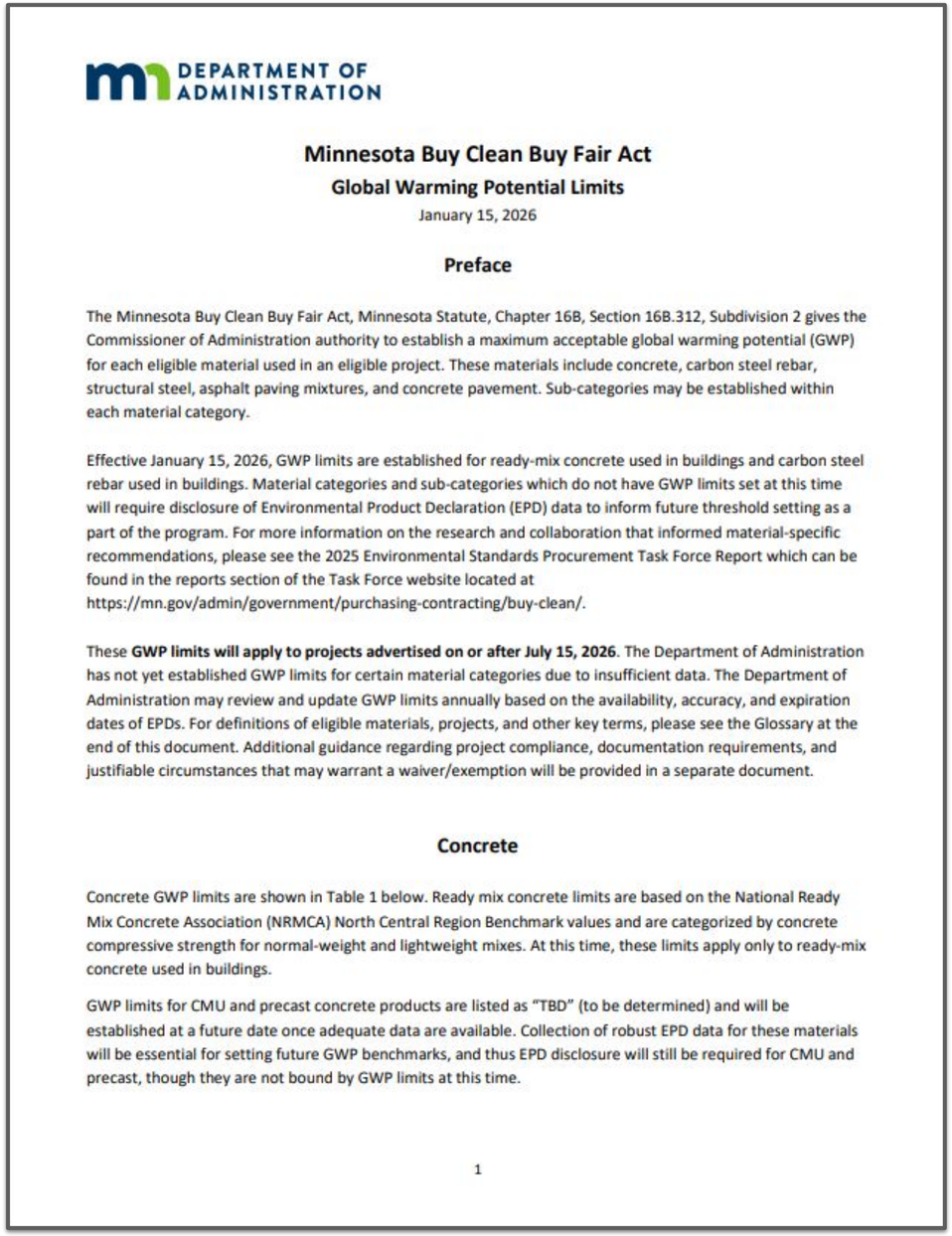
State Building means a building owned by the state of Minnesota or a Minnesota state agency (16B.312.1).

2026 GWP Limits

https://mn.gov/admin/government/purchasing-contracting/buy-clean/

Limits document has been posted on the website. And the notice was be posted in the State Register on February 2 and another reminder notice will be posted on May 4.

- Will apply to eligible projects advertised on or after **July 15, 2026**
- GWP Limits for **readymix concrete used in buildings**
- GWP Limits for **carbon steel rebar used in buildings**
- **EPD disclosure** will be required for other eligible products listed, though limits are not set at this time



DEPARTMENT OF ADMINISTRATION

Minnesota Buy Clean Buy Fair Act

Global Warming Potential Limits

January 15, 2026

Preface

The Minnesota Buy Clean Buy Fair Act, Minnesota Statute, Chapter 16B, Section 16B.312, Subdivision 2 gives the Commissioner of Administration authority to establish a maximum acceptable global warming potential (GWP) for each eligible material used in an eligible project. These materials include concrete, carbon steel rebar, structural steel, asphalt paving mixtures, and concrete pavement. Sub-categories may be established within each material category.

Effective January 15, 2026, GWP limits are established for ready-mix concrete used in buildings and carbon steel rebar used in buildings. Material categories and sub-categories which do not have GWP limits set at this time will require disclosure of Environmental Product Declaration (EPD) data to inform future threshold setting as a part of the program. For more information on the research and collaboration that informed material-specific recommendations, please see the 2025 Environmental Standards Procurement Task Force Report which can be found in the reports section of the Task Force website located at https://mn.gov/admin/government/purchasing-contracting/buy-clean/.

These **GWP limits will apply to projects advertised on or after July 15, 2026**. The Department of Administration has not yet established GWP limits for certain material categories due to insufficient data. The Department of Administration may review and update GWP limits annually based on the availability, accuracy, and expiration dates of EPDs. For definitions of eligible materials, projects, and other key terms, please see the Glossary at the end of this document. Additional guidance regarding project compliance, documentation requirements, and justifiable circumstances that may warrant a waiver/exemption will be provided in a separate document.

Concrete

Concrete GWP limits are shown in Table 1 below. Ready mix concrete limits are based on the National Ready Mix Concrete Association (NRMCA) North Central Region Benchmark values and are categorized by concrete compressive strength for normal-weight and lightweight mixes. At this time, these limits apply only to ready-mix concrete used in buildings.

GWP limits for CMU and precast concrete products are listed as "TBD" (to be determined) and will be established at a future date once adequate data are available. Collection of robust EPD data for these materials will be essential for setting future GWP benchmarks, and thus EPD disclosure will still be required for CMU and precast, though they are not bound by GWP limits at this time.

1

https://mn.gov/admin/assets/2026-MNBuyCleanGWPLimits_2026-01-15_tcm36-724796.pdf

2026 GWP Limits

Concrete

Table 1: GWP Limits for Concrete Materials

Material Category[1]			Maximum Allowable GWP Limit
Ready-Mix Concrete[2] Used in Buildings ($kgCO_2e/m^3$) based on concrete compressive strength	Normal-Weight concrete (NW)	≤2500 psi	241 $kgCO_2e/m^3$
		3000 psi	264 $kgCO_2e/m^3$
		4000 psi	312 $kgCO_2e/m^3$
		5000 psi	372 $kgCO_2e/m^3$
		6000 psi	394 $kgCO_2e/m^3$
		8000 psi	460 $kgCO_2e/m^3$
	Lightweight concrete (LW)	3000 psi	487 $kgCO_2e/m^3$
		4000 psi	537 $kgCO_2e/m^3$
		5000 psi	591 $kgCO_2e/m^3$
	Add 30% to these GWP limits where high early strength[3] concrete mixes are required for technical reasons.		
Concrete Masonry Units (CMU)			TBD[4]
Precast/Prestressed Concrete			TBD[4]

https://mn.gov/admin/assets/2026-MNBuyCleanGWPLimits_2026-01-15_tcm36-724796.pdf

2026 GWP Limits

Steel Rebar

Table 2: GWP Limits for Steel Reinforcing Bar (Rebar) Used in Buildings Projects

Steel Product Category	Maximum GWP[1] Limit at Mill or Manufacturer Gate	Equivalent GWP[1] Limit Converted for use with Fabricated[2] Product EPD
Steel Reinforcing Bar (Rebar)[3]	0.755	0.854

https://mn.gov/admin/assets/2026-MNBuyCleanGWPLimits_2026-01-15_tcm36-724796.pdf

EPD Requirements

Environmental Product Declaration (EPD) means a supply chain specific type III environmental product declaration that (16B.312.1)**:**

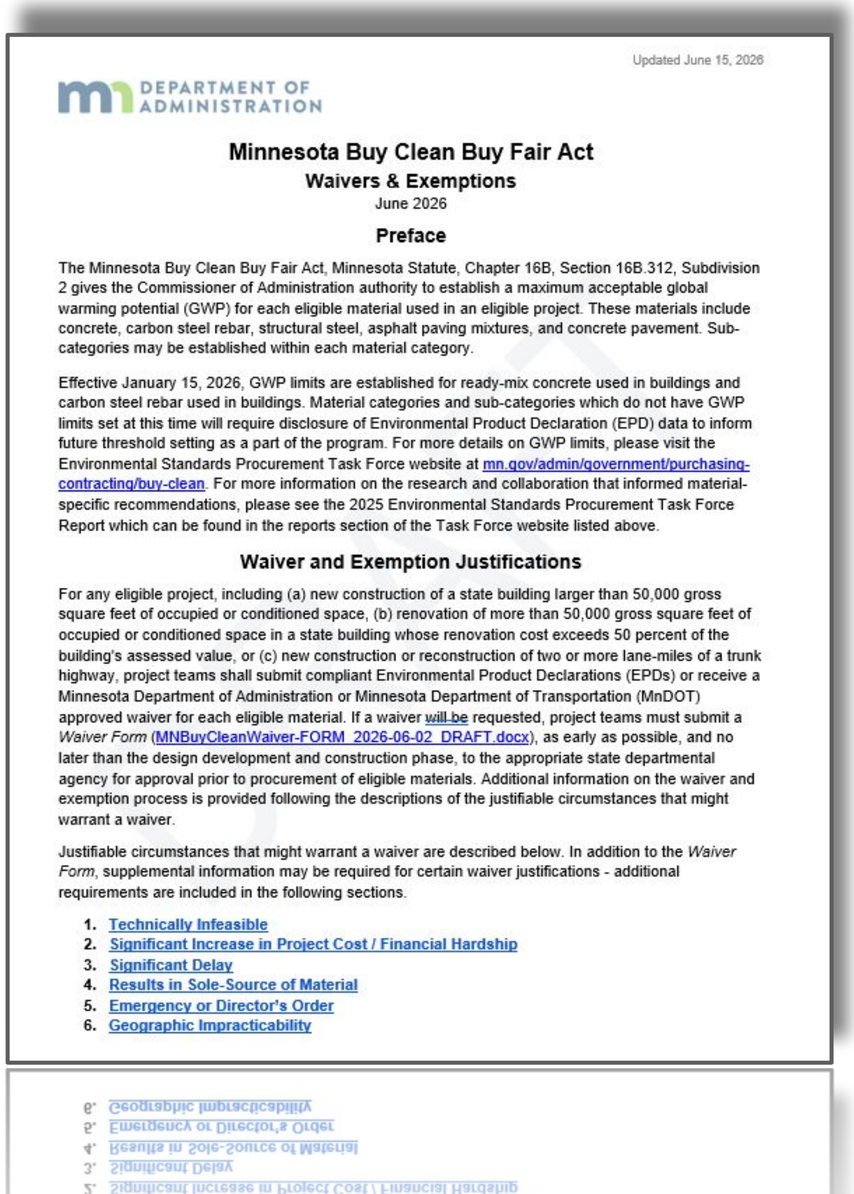
1. contains a material production life cycle assessment of the environmental impacts of manufacturing a specific product by a specific firm, including the impacts of extracting and producing the raw materials and components that compose the product;
2. is verified by a third party; and
3. meets the ISO 14025 standard developed and maintained by the International Organization for Standardization (ISO).

Supply chain specific means an environmental product declaration that includes specific data for the production processes of the materials and components composing a product that contribute at least 80 percent of the product's material production life cycle global warming potential, as defined in ISO standard 21930 (16B.312.1). Note that PCRs for some materials provide additional guidance on inclusion of supply chain–specific information. Inclusion of supply chain–specific (i.e. primary) upstream data for processes with large impacts is recommended, and may be required in PCRs for certain materials, in lieu of secondary data.

Waivers & Exemptions DRAFT

Justifiable circumstances that might warrant a waiver are described below. In addition to the waiver form, supplemental information may be required for certain waiver justifications - additional requirements are included in the following sections.

1. **Technically Infeasible**
2. **Significant Increase in Project Cost / Financial Hardship**
3. **Significant Delay**
4. **Results in Sole-Source of Material**
5. **Emergency or Director's Order**
6. **Geographic Impracticability**



Updated June 15, 2026

DEPARTMENT OF ADMINISTRATION

Minnesota Buy Clean Buy Fair Act

Waivers & Exemptions

June 2026

Preface

The Minnesota Buy Clean Buy Fair Act, Minnesota Statute, Chapter 16B, Section 16B.312, Subdivision 2 gives the Commissioner of Administration authority to establish a maximum acceptable global warming potential (GWP) for each eligible material used in an eligible project. These materials include concrete, carbon steel rebar, structural steel, asphalt paving mixtures, and concrete pavement. Sub-categories may be established within each material category.

Effective January 15, 2026, GWP limits are established for ready-mix concrete used in buildings and carbon steel rebar used in buildings. Material categories and sub-categories which do not have GWP limits set at this time will require disclosure of Environmental Product Declaration (EPD) data to inform future threshold setting as a part of the program. For more details on GWP limits, please visit the Environmental Standards Procurement Task Force website at mn.gov/admin/government/purchasing-contracting/buy-clean. For more information on the research and collaboration that informed material-specific recommendations, please see the 2025 Environmental Standards Procurement Task Force Report which can be found in the reports section of the Task Force website listed above.

Waiver and Exemption Justifications

For any eligible project, including (a) new construction of a state building larger than 50,000 gross square feet of occupied or conditioned space, (b) renovation of more than 50,000 gross square feet of occupied or conditioned space in a state building whose renovation cost exceeds 50 percent of the building's assessed value, or (c) new construction or reconstruction of two or more lane-miles of a trunk highway, project teams shall submit compliant Environmental Product Declarations (EPDs) or receive a Minnesota Department of Administration or Minnesota Department of Transportation (MnDOT) approved waiver for each eligible material. If a waiver will be requested, project teams must submit a *Waiver Form* (MNBuyCleanWaiver-FORM_2026-06-02_DRAFT.docx), as early as possible, and no later than the design development and construction phase, to the appropriate state departmental agency for approval prior to procurement of eligible materials. Additional information on the waiver and exemption process is provided following the descriptions of the justifiable circumstances that might warrant a waiver.

Justifiable circumstances that might warrant a waiver are described below. In addition to the *Waiver Form*, supplemental information may be required for certain waiver justifications - additional requirements are included in the following sections.

1. Technically Infeasible
2. Significant Increase in Project Cost / Financial Hardship
3. Significant Delay
4. Results in Sole-Source of Material
5. Emergency or Director's Order
6. Geographic Impracticability

Waivers & Exemptions DRAFT

1. Technically Infeasible

Minnesota's Buy Clean policy requires the submission of a **supply chain-specific, facility-specific Type III Environmental Product Declaration (EPD) that meets the ISO 14025 standard** developed and maintained by the International Organization for Standardization (ISO) for all eligible construction materials/products. EPDs are produced following product category rules

(PCRs), which are a set of specific rules, requirements, and guidelines for developing a Type III EPD for one or more products. **Both EPDs and PCRs must have periods of validity which are defined when they are published.** Per ISO 14025, the intent of fixed periods of validity is for the development and maintenance of its content, consideration of changes in relevant information affecting the PCR, and its selection procedure for predetermined parameters.

Some reasons why it might be technically infeasible to obtain compliant EPDs include, but are not limited to:

- **The EPD is expired and cannot be renewed because the corresponding PCR has expired.**
- **The particular material is not covered by the scope of the relevant PCR - for example, a type of steel that is not included in the PCR for structural steel.**

If providing an EPD for an eligible material would result in noncompliance with Minnesota State Building Codes or other applicable codes, then one will not be required (waived). For example, if the material with an EPD does not meet the strength, serviceability, stability, or other structural requirements as necessary for the project.

To determine technical infeasibility, the Departments of Administration or Transportation will review whether a PCR is available, current, and whether an eligible material is within the scope of an available PCR. The Department of Administration will maintain a list of in-scope and exempt eligible materials for designers. This information will be included in project specifications as necessary. For example, epoxy coated rebar is not covered by the scope of the reinforcing steel PCR and therefore it is technically infeasible to develop an EPD. The project's bid opening date will be used to determine the applicable PCR for an eligible material so that bidders and suppliers can fully consider those requirements at time of bid. Absence of an eligible material's PCR at time of bid would exclude EPD requirements for that eligible material.

Waivers & Exemptions DRAFT

2. Significant Increase in Project Cost / Financial Hardship

The development and publication of a facility-specific, Type III EPD incurs a cost for the producer that is essentially fixed regardless of the quantity of material to be produced or the overall project size. There will be cases for a project where publication of the EPD, which will be included in the bid cost, is significant relative to the cost of the quantity of that material being bought and/or the total cost of the project.

For each of the eligible materials, the cost of developing a facility specific EPD may be spread over multiple projects purchasing these materials. Therefore, a suggested cutoff value equal to the engineer's estimated value for the product based on quantity is provided to estimate an approximate lower bound for the cost of material at no less than two and a half times the cost to develop an EPD. This value equates to an EPD cost of about 40% or more of the material cost. Meeting this cutoff value does not guarantee that a waiver will be granted, but it is a recommended cutoff value to guide the project team on whether or not pursuing a waiver on the basis of significant cost/financial burden may be a feasible pathway. It is ultimately up to the state agency/governing authority to grant or deny a waiver after reviewing the information provided by the project team, including cost analysis calculations, waiver request justifications, and other project details.

Waivers & Exemptions DRAFT

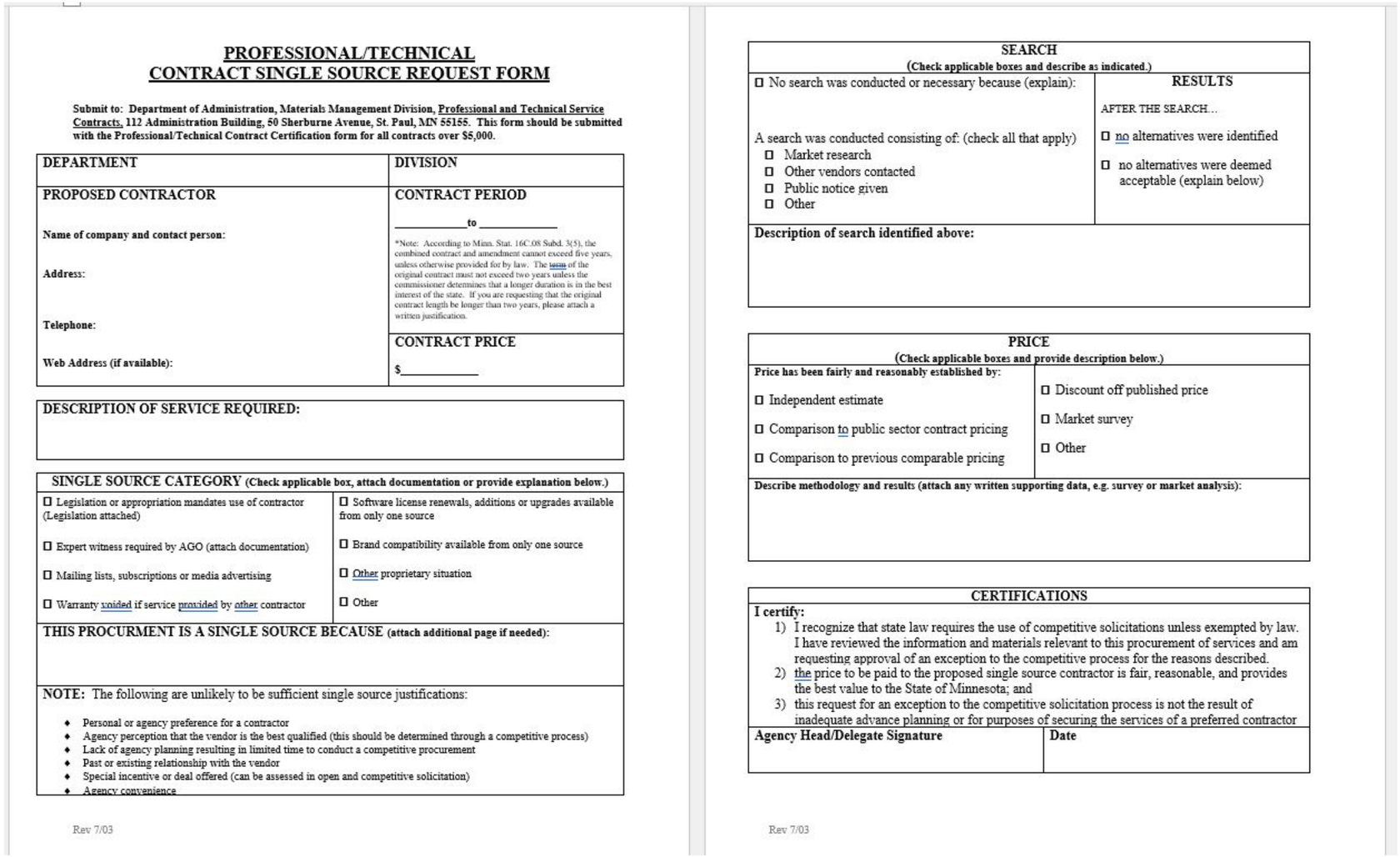
3. Significant Delay

The development and publication of a facility-specific EPD takes an amount of time for the producer that is essentially fixed regardless of the quantity of material to be produced or the overall project size. There will be cases where the time required to develop and publish the EPD is significant relative to the duration of the project or would otherwise significantly delay the start or completion of the project. The estimated time to develop a facility specific EPD will vary depending on the LCA software and/or program operator, existence of current/updated governing PCR requirements, and data availability. Given the minimum project size and expected minimum duration of eligible Buy Clean projects that would be covered in program requirements, it is expected that teams will typically be able to procure a material with a facility specific EPD prior to installation without causing significant delay to the project. In some cases, a temporary waiver may be provided by state agencies if it is anticipated there will be significant delays in procuring an EPD in the required timeframe.

Waivers & Exemptions DRAFT

4. Results in Sole-Source of Material

Exemption is allowed where there is only one viable material supplier in order to allow for competitive pricing. Examples include where no other producers or vendors have made EPDs available or do not meet the GWP threshold. A single source request form must be completed and submitted; the form can be found here: https://mn.gov/admin/assets/RECS-CS-SingleSourceJustificationForm_tcm36-208500.doc



PROFESSIONAL/TECHNICAL
CONTRACT SINGLE SOURCE REQUEST FORM

Submit to: Department of Administration, Materials Management Division, Professional and Technical Service Contracts, 112 Administration Building, 50 Sherburne Avenue, St. Paul, MN 55155. This form should be submitted with the Professional/Technical Contract Certification form for all contracts over $5,000.

DEPARTMENT	DIVISION
PROPOSED CONTRACTOR Name of company and contact person: Address: Telephone: Web Address (if available):	CONTRACT PERIOD _____to _____ *Note: According to Minn. Stat. 16C.08 Subd. 3(5), the combined contract and amendment cannot exceed five years, unless otherwise provided for by law. The term of the original contract must not exceed two years unless the commissioner determines that a longer duration is in the best interest of the state. If you are requesting that the original contract length be longer than two years, please attach a written justification. CONTRACT PRICE $_____

DESCRIPTION OF SERVICE REQUIRED:

SINGLE SOURCE CATEGORY (Check applicable box, attach documentation or provide explanation below.)

☐ Legislation or appropriation mandates use of contractor (Legislation attached)	☐ Software license renewals, additions or upgrades available from only one source
☐ Expert witness required by AGO (attach documentation)	☐ Brand compatibility available from only one source
☐ Mailing lists, subscriptions or media advertising	☐ Other proprietary situation
☐ Warranty voided if service provided by other contractor	☐ Other

THIS PROCURMENT IS A SINGLE SOURCE BECAUSE (attach additional page if needed):

NOTE: The following are unlikely to be sufficient single source justifications:

- Personal or agency preference for a contractor
- Agency perception that the vendor is the best qualified (this should be determined through a competitive process)
- Lack of agency planning resulting in limited time to conduct a competitive procurement
- Past or existing relationship with the vendor
- Special incentive or deal offered (can be assessed in open and competitive solicitation)
- Agency convenience

Rev 7/03

SEARCH
(Check applicable boxes and describe as indicated.)

☐ No search was conducted or necessary because (explain): A search was conducted consisting of: (check all that apply) ☐ Market research ☐ Other vendors contacted ☐ Public notice given ☐ Other	**RESULTS** AFTER THE SEARCH… ☐ no alternatives were identified ☐ no alternatives were deemed acceptable (explain below)

Description of search identified above:

PRICE
(Check applicable boxes and provide description below.)

Price has been fairly and reasonably established by: ☐ Independent estimate ☐ Comparison to public sector contract pricing ☐ Comparison to previous comparable pricing	☐ Discount off published price ☐ Market survey ☐ Other

Describe methodology and results (attach any written supporting data, e.g. survey or market analysis):

CERTIFICATIONS

I certify:

1) I recognize that state law requires the use of competitive solicitations unless exempted by law. I have reviewed the information and materials relevant to this procurement of services and am requesting approval of an exception to the competitive process for the reasons described.
2) the price to be paid to the proposed single source contractor is fair, reasonable, and provides the best value to the State of Minnesota; and
3) this request for an exception to the competitive solicitation process is not the result of inadequate advance planning or for purposes of securing the services of a preferred contractor

Agency Head/Delegate Signature	Date

Rev 7/03

Waivers & Exemptions DRAFT

5. Emergency or Director’s Order

An emergency, as defined in MN Statute may be used as the basis of a waiver request. The approval correspondence by the Procurement Official must be provided with the waiver request.

6. Geographic Impracticability

Some reasons why it might be geographically impractical to obtain compliant EPDs include, but are not limited to:

- Product is more readily available across state boundaries (outside of Minnesota)
- Product is not available near project site and must be transported from a manufacturer/facility farther away (this could result in significant increase in project cost, project delay, and/or a single source situation)

Waivers & Exemptions DRAFT

E1 - Exception Pathway: Carbon Budget/Project Average Method (only within the Same Material / Product Category)

The total embodied carbon of all concrete mix designs on a project shall not exceed the allowable Carbon Budget, which is calculated by multiplying the volume of concrete for each mix design strength classification by the corresponding GWP limit. In other words, a single mix design may exceed the GWP limit as long as you come in below the GWP limits for other mixes on the project (weighted by volume).

Mix No.	Mix Strength/Description	Quantity (m3)	GWP Limit (kgCO2e/m3)	Qty x GWP Limit = Carbon Budget (kgCO2e)	Actual GWP from EPD (kgCO2e/m3)	Qty x Atual GWP from EPD (kgCO2e)
1	4000 PSI - FOOTINGS/FOUNDATIONS	850	312	265,200	292	248,200
2	4500 PSI - EXTERIOR SLABS AND WALLS	400	342	136,800	332	132,000
3	5000 PSI - INTERIOR SOG/SLAB ON METAL DECK	550	372	204,600	368	202,400
4	6000 PSI - COLUMNS/PIERS AND INTERIOR WALLS	300	394	118,200	412	123,600
	TOTALS	**2,100**		**724,800**		**707,000**

Waivers & Exemptions DRAFT

E2 - Temporary Exemption: Supply Chain Issues

A prime contractor may seek a temporary exemption to the GWP threshold if the applicable concrete producer can demonstrate that supply chain constraints outside the producer's control mean that producing a compliant mix for the application is temporarily not possible.

a. For projects using multiple mixes and pursuing a Project Average exemption, a prime contractor shall demonstrate that the supply chain constraint is such that it affects all project mixes or enough project concrete volume that it is not possible to meet the GWP threshold through the Project Average approach listed above.
b. A supply chain constraint exemption request is only valid when the timing of the constraint aligns with when the mix is actually needed on the project. Supply chain constraint exemptions shall be project specific and only valid for the duration of the supply chain constraint or duration of the formation of a unique concrete element of the project.

<u>The exemption request should include:</u>

1. Specific mix identifying information;
2. Anticipated quantity subject to the exemption;
3. Anticipated application, project identifying information, and timeframe related to the use of the mix;
4. Explanation of the supply chain constraint and the due diligence actions pursued to overcome the constraint; and
5. Estimated duration of the supply chain constraint and associated rationale.

Waivers & Exemptions DRAFT

Industry-Wide EPDs

If a facility-specific EPD cannot be provided due to any of the above Waiver Justifications / Exemptions, in some cases, an industry-wide EPD will be allowed as a proxy for estimating GWP impacts. Teams must apply for a waiver and describe the steps taken in an attempt to generate a facility-specific EPD. It is ultimately up to the discretion of the state agency/governing authority to grant or deny a waiver after reviewing the information provided by the project team, at which point an industry-wide EPD may be deemed acceptable.

Submittal Process

Vertical Construction (Buildings)

- Predesign - Waiver Requests
- Design Phase & Construction Phase
  - EPD Submittal Template
  - Upload EPDs and material quantities into database
- Closeout - verification of as-built, installed EPD material data

Horizontal Construction - MnDOT - more details later in the presentation

- MnDOT Special Provisions - updated requirement
- EPD file-naming convention
- No later than 12 weeks after installation, must submit EPDs and verify final material data

Submittal Process

BuyClean/B3 Project Phases and Submittal Timeline - Vertical Construction

B3 Phase Names	Common phase names	Buy Clean Submittal Requirements
Predesign	Agency Planning; Predesign – Programming; Predesign – Site Selection; Concept Design	Project team must provide written acknowledgement that they are aware of the Buy Clean requirements. Team must acknowledge that Buy Clean requirements must be met for eligible materials on eligible projects, and that they have accounted for Buy Clean in their budget.
Design	Schematic Design	Identify preliminary materials and which materials are eligible. Apply for waivers and/or exemptions (if applicable).
Final Design	Design Development Construction Documents	Finalize material selection. Verify which materials are eligible. Submit specification language outlining contractor submittal requirements during the Closeout/ Construction phase, including a schedule of EPDs required to be submitted by the contractor.
Closeout	Construction/ Construction Administration Correction Period	Submit product data and EPDs to demonstrate compliance with Buy Clean requirements. Team to verify that product data and EPDs provided in the submittals match the as-built condition and comply with Buy Clean requirements.

EPD Reporting Template - DRAFT

Material/Product Data

	Material Category	Material Subcategory	CSI Specification Section or Bid Item No.	Manufacturer Name	Manufacturing Facility/Plant/Mill Location*	Product Name & Description
Ex.	*Concrete*	*CIP ReadyMix Concrete*	*03 30 00*	*ABC Cem Inc.*	*123 Main Street, Minneapolis, MN 55411*	*4000 PSI, 3/4, FLY, 4% AIR, VMA*
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Application/ Usage Details	Product Quantity (in Declared Units**)	Declared Units[b]	Product Category Rule (PCR) listed on EPD	EPD Expiration Date	[A1] GWP-100 (kgCO2e per Declared Unit*)	[A2] GWP-100 (kgCO2e per Declared Unit*)	[A3] GWP-100 (kgCO2e per Declared Unit*)	[TOTAL = A1+A2+A3] GWP-100 (kgCO2e per Declared Unit*)
FOOTINGS	*1203*	*m3 (cubic meter)*	*NSF International PCR for Concrete, v.2.3 extension, 2024-02-28*	*8/9/2029*	*218.00*	*11.10*	*15.20*	*245.00*

- Industry-aligned data fields
- Dropdown menus for Material Categories
- Mandatory and Voluntary Materials/Products

EPD Reporting Template - DRAFT

Material Category	CSI Spec Section	Subcategory / Product Description	Standard Declared Unit (for reporting GWP from EPDs)
Asphalt	02 25 00	Asphalt Paving Mixtures	mt (metric tonne)
Concrete	03 30 00	CIP ReadyMix Concrete - Standard	m^3 (cubic meter)
	03 30 00	CIP ReadyMix Concrete - LW*	m^3 (cubic meter)
	03 30 00	CIP ReadyMix Concrete - HE**	m^3 (cubic meter)
	03 30 00	CIP ReadyMix Concrete Paving	m^3 (cubic meter)
	03 41 00	Precast Concrete - Structural	mt (metric tonne)
	03 45 00	Precast Concrete - Architectural	mt (metric tonne)
	04 22 00	Concrete Masonry Unit (CMU) Block	m^3 (cubic meter)
Steel	03 20 00 / 03 21 00	Concrete Reinforcing Steel Bars (rebar)	mt (metric tonne)
	05 12 00	Hot-rolled sections	mt (metric tonne)
	05 12 00	Plate	mt (metric tonne)
	05 12 00	HSS	mt (metric tonne)
	05 20 00	Steel joists (open web)	mt (metric tonne)
	05 31 10	Steel decking	mt (metric tonne)
	05 40 00	Cold-formed steel (stud framing)	mt (metric tonne)
	05 00 00	Aluminum extrusions (optional)	mt (metric tonne)
	07 74 00	Metal wall panels (optional)	100 m^2 (per 100 square meters)
Brick	04 22 00	Brick Masonry (Clay) (optional)	m^2 (square meter)[c]
Glass	08 80 00	IGUs (optional)	m^2 (square meter)
	08 81 00	Panes (optional)	mt (metric tonne) or kg (kilogram)
Insulation	07 21 00	Thermal Insulation - Heavy Density (optional)	1 m^2 RSI-1
	07 21 00	Thermal Insulation - Light Density (optional)	1 m^2 RSI-1

* LW = Lightweight

** HE = High Early Strenth

Database Development

BUILTCOLD + MINNESOTA

https://www.builtcold.com/

- Federal Buy Clean Initiative
- Buy Clean Colorado Act
- Washington State Buy Clean Buy Fair

Building Transparency EC3 https://www.buildingtransparency.org/

hpdc https://www.hpd-collaborative.org/

Database Development

BUILTCOLD

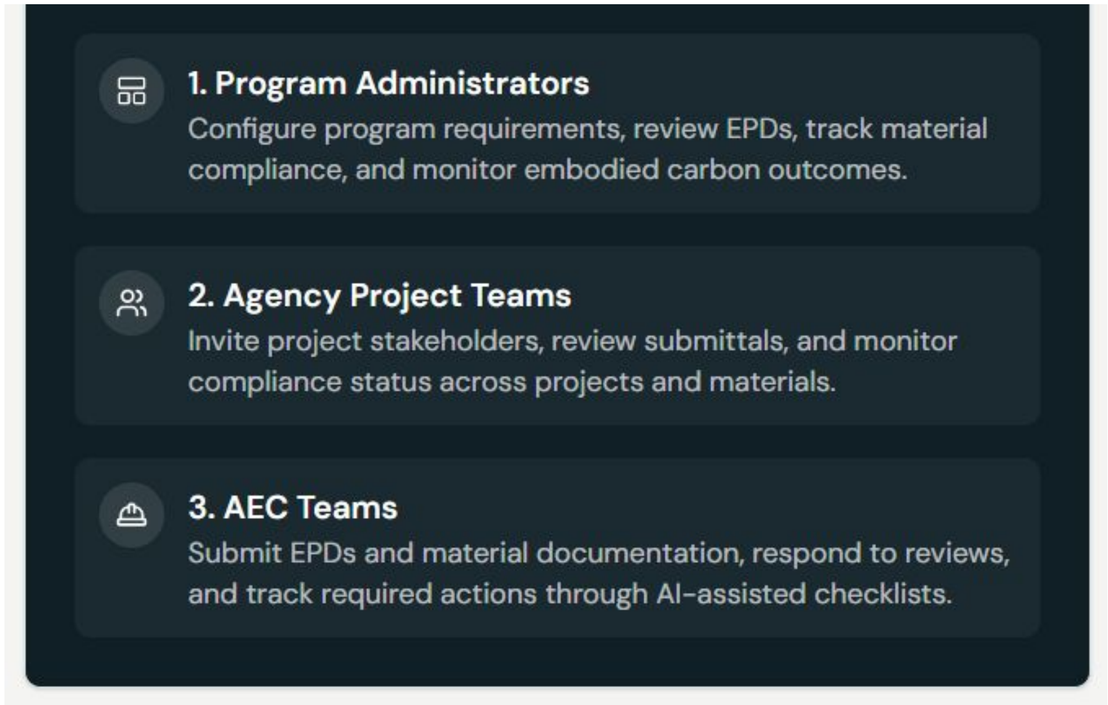
Preliminary Schedule of Deliverables

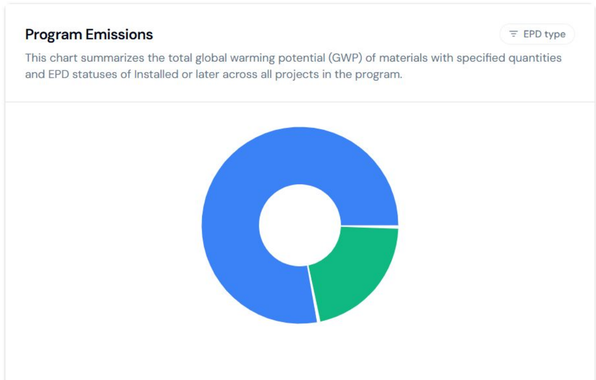
MN Buy Clean Database Deliverables & Timeline		April 2026				May 2026				June 2026					July 2026				August 2026					Sept. 2026				October 2026			
		6	13	20	27	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	5	12	19	26
PHASE A: VERTICAL CONSTRUCTION																															
Configuration																															
1A	**Distinct agency-specific Basis of Design and project reporting workflow.** Discuss and document database design, functionality, interface, process, Global Warming Potential (GWP) limit thresholds/baselines, and data storage/logistics/access/reporting.			■	■	■	■																								
2A	**A Minnesota-specific BuiltCold database configuration - initial DEMO version.** Soft launch an internal demo version of the database environment (cloud-based online database platform) to conduct internal testing of customized project workflows.			■	■	■	■	■	■																						
Piloting & Testing																															
3A	**Preliminary pilot project template reports (x3 projects).** Conduct 3 test/pilot projects to refine workflow, user interface, tool development, and reporting methodology. Refine/adjust database configuration (deliverable D2) as needed.							■	■	■																					
Operationalizing & Fine-Tuning																															
4A	**A Minnesota-specific BuiltCold database configuration - public LAUNCH version.** Finalize and publicly launch database. **Tentative Launch Date: July 1, 2026**									■	■	■	■	■																	
5A	**Training/education documents.** Develop training materials and schedule. Deliver 3-4 training sessions (webinar style).									■	■	■	■	■					■			■				■				■	
6A	**A suite of customizable, agency-aligned digitized reporting templates.** Refine reporting metrics and produce a template report formatted to support tactical project management and program-level evaluation. Export reports/data at agency agreed upon project intervals (e.g. monthly, quarterly, annually, etc.).												■	■					■				■				■				■
7A	**Database longevity/maintenance plan.** Develop a plan forecasting and identifying anticipated project needs for subsequent project years. Refine plan as needed as program progresses.																									■	■				■
PHASE B: HORIZONTAL CONSTRUCTION																															
Configuration																															

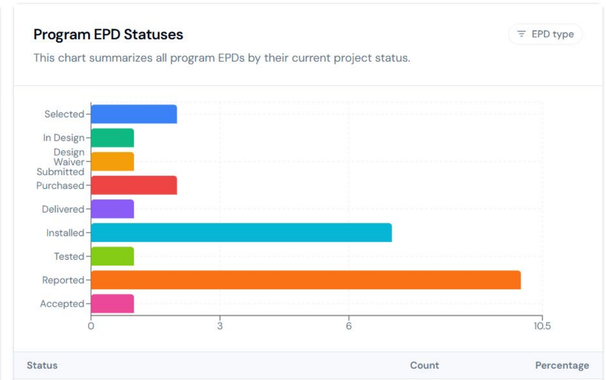
Database Development

BUILTCOLD

- Streamlined workflow and project team communications, Activity Log
- Automated compliance checks
- Embedded waiver process and carbon budget exception pathway
- Customized reporting templates (program and project dashboards), exporting options
- Benchmarking/threshold metrics
- Future expansion/capabilities
  - software integration, APIs
  - market analysis
  - evolve with program requirements (i.e. HPDs, additional documentation, expanded materials/GWP limits







BuiltCold DEMO

Taylor Linnell, Co-Founder of BuiltCold

BuiltCold

Enabling Embodied Carbon Policies

Minnesota Task Force | BuiltCold Introduction

June 17, 2026

Agenda

- MN Buy Clean Configuration
- Threshold Assessments
- EPD Submission Pathways
  - System Ingestion
  - Project Team Uploads
  - Supplier Requests
- Manufacturer Creation
- Material Management
- Future Phases

(For BuiltCold Demo recording, see link on Task Force Website)

BuiltCold Database Next Steps

- Pilot Project data input
- Refine customized reporting templates, dashboards, and exporting options
- Database launch date (tentative) - July 15, 2026
- Database training session - August 19, 2026
  - Vertical Session
  - Horizontal Session

Questions/comments/feedback about the database?

- We will gather database feedback ahead of the next meeting
- MnDOT integration with BuiltCold?

DEPARTMENT OF TRANSPORTATION

(2062) Environmental Product Declaration (EPD)

Emil Bautista, PhD, PE
Sustainability Engineer, OMRR

Special Provisions

S-1 (1603) MATERIALS: SPECIFICATIONS, SAMPLES, TESTS, AND ACCEPTANCE (EPD)

NEW 06/10/25 ◄DO NOT REMOVE THIS DATE. IT NEEDS TO STAY IN FOR THE CONTRACTORS.

Always use this write-up when using SP2025-XX (2062) Environmental Product Declaration (EPD).

SP2025-XX

S-1.1 Add the following to 1603, "Materials: specifications, Samples, Tests, and Acceptance":

1603.5 Development of Global Warming Impact Standards

The Contractor shall submit supply chain-specific Type III Environmental Product Declarations (EPDs) for materials in accordance with S-2 (2062) Environmental Product Declaration. The provisions of the Buy Clean and Buy Fair Minnesota Act, (Sec. 16B.312 MN Statutes) require incorporating global warming impact standards into the state's procurement process for construction materials used in public infrastructure projects. To achieve this the Department is requesting the Contractor to submit supply chain-specific Type III Environmental Product Declarations (EPDs) for all eligible materials as defined by State Statute. The reporting of environmental impacts will account for embodied carbon of construction materials in accordance with the Buy Clean and Buy Fair Minnesota Act, ISO 21930, ISO 14025 and ISO 14040/44.

(2062) Environmental Product Declaration (EPD)

S-2 **(2062) ENVIRONMENTAL PRODUCT DECLARATION (EPD)**

NEW 12/19/2025 ◄DO NOT REMOVE THIS DATE. IT NEEDS TO STAY IN FOR THE CONTRACTORS.

Use this special provision when the project meets any of the following criteria. ***Contact Emil Bautista, Office of Materials and Road Research, to determine the number of EPDs that will be required on this project.***

- **New construction, rehabilitation, mill and overlay, or reconstruction of two or more lane-miles of a trunk highway pavement.**
- **New construction or re-decking with a total bridge deck quantity of 6000 square feet or more.**
- **ADA projects with a minimum of more than 1 intersection in the project**

SP2025-XX

S-2.1 DESCRIPTION

This Work consists of submitting Type III Environmental Product Declarations (EPDs) in accordance with S-1 (1603) Materials: Specifications, Samples, Tests, and Acceptance (EPD). These EPDs are Cradle-to-Gate, including life cycle stages A1 to A3: raw material supply, transport to the manufacturing site, and manufacturing.

S-2.2 MATERIALS - BLANK

S-2.3 CONSTRUCTION REQUIREMENTS

Provide EPDs for the following materials:

Table SP2062.3-1
Materials Requiring EPDs

Spec No.	Description	Minimum Project Quantity	EPDs Required Frequency	Estimated EPDs per Material
2301	Concrete Pavement	3,500 cubic yards	1 per mix design	4
2301	Dowel Bar	No minimum	1 per diameter	1
2301	Supplemental Pavement Reinforcement	No minimum	1 per source	1
2301	Drill & Grout Reinf Bar (Epoxy Coated)	No minimum	1 per source	1
2301	Reinforcement Bars (Incidental)	No minimum	1 per source	1
2360	Plant Mixed Asphalt Pavement	1000 tons	1 per mix design	2 to 3
2363	PASSRC and PASB	1000 tons	1 per mix design	1
2401	Concrete Bridge Construction	500 cubic yards	1 per mix design	3 to 5
2401	Reinforcement Bars	No minimum	1 per source	1
2401	Reinforcement Bars (Epoxy Coated)	No minimum	1 per source	1
2402	Steel Bridge Construction	No minimum	1 per source	3
2521, 2531	Walks and Concrete Curbing	500 cubic yards	1 per mix design	2
2521	Drill & Grout Reinf Bar (Epoxy Coated)	No minimum	1 per source	1
2533	Concrete Median Barriers	500 cubic yards	1 per mix design	2

Provide Type III Cradle-to-Gate EPDs meeting ISO standards ISO 21930, ISO 14025 and ISO 14040/44. Use product specific supply chain data, including an EPD for upstream cement or asphalt cement production for concrete and bituminous mixtures mix-design specific EPDs. Use industry average values when product specific supply chain data does not exist. Cradle-to-gate EPDs report on the production stage of the life cycle, encompassing A1 to A3 modules: raw material extraction, transportation to the plant, and manufacturing processes. When providing the Mix Name for the EPD, comply with the following mix naming conventions:

(1) Bituminous mixtures – Mix Number and MDR number (e.g., SPWEB340_PG58H-34, 0-2025-999)
(2) Concrete mixtures – Mix Number and RM, JMF, or PS Sheet Number (e.g., 3F52F, RMX999-999)

Notify the Engineer, prior to the preconstruction meeting, when a source does not have 12 months of data to support development of the EPD.

Produce EPDs files in Portable Document Format (PDF) or OpenEPD JavaScript Object Notation (JSON) Format using the following naming convention SP_Number_Pay Item Name_Mix Name_EPD.pdf. (e.g., SP1234-568_Bridge Slab Concrete_3YHPC-S_JMF25-999_EPD.pdf or SP1234-568_Reinforcement Bars_EPD.pdf.)

Submit Type III EPDs per source and location as shown in in Table SP2062-1, with the associated delivered quantities, in twelve weeks or less of completion of final installation of the Contract item to the Engineer and to epd.mn.dot@state.mn.us. Include the SP Project number, and when applicable, the MnDOT Mix ID for the concrete and asphalt mixtures in the subject line.

S-2.4 METHOD OF MEASUREMENT

The Engineer will measure Environmental Product Declaration by the number of Environmental Product Declarations, as shown in Table SP2062-1, submitted for each unique material and mix design.

S-2.5 BASIS OF PAYMENT

The Contract Unit Price for Environmental Product Declaration is compensation in full for developing and supplying the EPDs for the Materials required to complete the Work. The Engineer will pay for that EPD once per Contract when the same EPD is used for more than one pay item. The Engineer may pay for additional EPDs needed to complete the Work.

The Department will pay for Environmental Product Declaration shown in in Table SP2062.3-1 on the basis of the following schedule:

Item No.	Item	Unit
2062.602	Environmental Product Declaration	each

Table SP2062.3-1 - Materials Requiring EPDs

Spec No.	Description	Minimum Project Quantity	EPDs Required Frequency	Estimated EPDs per Material
2301	Concrete Pavement	3,500 cubic yards	1 per mix design	4
2301	Dowel Bar	No minimum	1 per diameter	1
2301	Supplemental Pavement Reinforcement	No minimum	1 per source	1
2301	Drill & Grout Reinf Bar (Epoxy Coated)	No minimum	1 per source	1
2301	Reinforcement Bars (Incidental)	No minimum	1 per source	1
2360	Plant Mixed Asphalt Pavement	1000 tons	1 per mix design	2 to 3
2363	PASSRC and PASB	1000 tons	1 per mix design	1
2401	Concrete Bridge Construction	500 cubic yards	1 per mix design	3 to 5
2401	Reinforcement Bars	No minimum	1 per source	1
2401	Reinforcement Bars (Epoxy Coated)	No minimum	1 per source	1
2402	Steel Bridge Construction	No minimum	1 per source	3
2521, 2531	Walks and Concrete Curbing	500 cubic yards	1 per mix design	2
2521	Drill & Grout Reinf Bar (Epoxy Coated)	No minimum	1 per source	1
2533	Concrete Median Barriers	500 cubic yards	1 per mix design	2

SEQ

STATEMENT OF ESTIMATED QUANTITIES

							SP 0416-55 TH 197	
							ROADWAY	CITY UTILITIES
NOTE	SHEET NO.	TAB	ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL ESTIMATED QUANTITY	ESTIMATED QUANTITY (A)	ESTIMATED QUANTITY (B)
			2011.601	AS BUILT	LUMP SUM	1	1	
			2016.601	CONTRACT MANAGEMENT	LUMP SUM	1	1	
			2016.601	PUBLIC INFORMATION MANAGEMENT	LUMP SUM	1	1	
			2021.501	MOBILIZATION	LUMP SUM	1	0.98	0.02
			2051.501	MAINT & RESTORATION OF HAUL ROADS	LUMP SUM	1	1	
			2062.602	ENVIRONMENTAL PRODUCT DECLARATION	EACH	4	4	

1

Concrete Mix EPDs Naming Requirements

Standardize EPD names so mixes can be traced to MnDOT-approved sources

Required Data Fields (must be present):

- **MnDOT Mix Number** (e.g., RM051)
- **Corresponding Sheet Number** (RMX / RMS / JMF / PS — must match supplier sheet ID)
- **MnDOT Grade** (A, B, C, F, etc.)
- **Supplying Plant Location** (must match the plant that produced the mix)

Asphalt Mix EPDs Naming Requirements

Ensure asphalt EPDs capture design, specification, and project traceability

Required Data Fields (must be present):

- **Mix Design Report Number (MDR #)**
- **Specification Entity**
- **Specification Number** & Mixture Designation
- **Gradation Type** (Dense, Open, Gap)
- **Mix Design Method** (Superpave)
- **Nominal Maximum Aggregate Size** (NMAS, mm)
- **Performance Grade (PG)** of Asphalt Binder
- **MnDOT Project Number** (SP####-###) and **Roadway** (e.g., TH###)

Lettings

District	Number of Projects	Asphalt	Concrete	Steel	Total EPDs
1	8	8	2	1	11
2	8	5	4	2	11
3	20	22	31	16	69
4	8	9	14	8	31
Metro	28	41	72	35	148
6	9	9	2	0	11
7	8	12	27	13	52
8	8	5	8	6	19
Total	97	111	160	81	352

*Projects are in Lettings from January 2026 to May 2027.

Data Analysis Focus Areas

- Identify **trends** and **outliers**
- Determine **impacts of underlying items**
- Understand where **site-specific** vs. **industry-average** data is used
- Evaluate **precision** in reported data
- Consider **Mixture Specification influences**:
  - RAP percentages
  - Supplementary cementitious materials

MN Buy Clean
EPD Grant Program

MN EPD Grant Program Updates

DEPARTMENT OF ADMINISTRATION

DEPARTMENT OF TRANSPORTATION

UNIVERSITY OF MINNESOTA
CSBR
Center for Sustainable Building Research

2025-2026 Grantees:

McNAMARA CONTRACTING INC

- Generated **24 EPDs** for their stationary asphalt plant in Rosemount
- Utilized the Emerald EcoLabel tool

Minnesota Asphalt Pavement Association

- **24** plants, **12** unique companies
- So far: **133 mixes, 13** plants owned by **7** companies; Anticipated total by the end of the grant: ~**300 EPDs**
- Utilized the Emerald EcoLabel tool

AGGREGATE & READY MIX
ASSOCIATION OF MINNESOTA

- **29 plants** enrolled, **8** participating companies
- Anticipated total by the end of the grant: ~**435 EPDs**
- 3 LCA tools/providers utilized by participating plants: Climate Earth**,** WAP Sustainability (theta), Pathways AI

Minnesota Asphalt Pavement Association (MAPA)

MAPA EPD Grant Program Breakdown

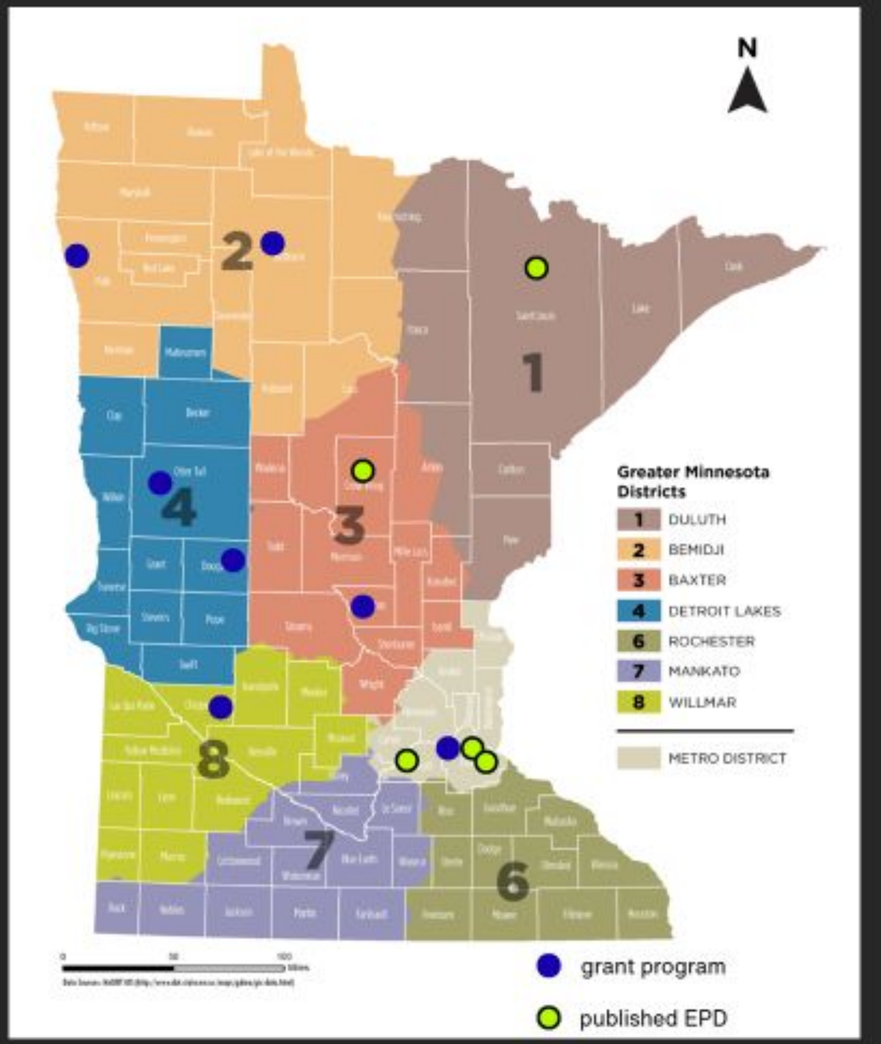
BREAKDOWN

Grant Program → 24 plants, 12 unique companies (see map)

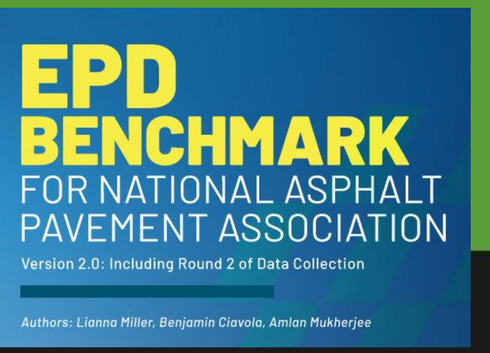
- (6) stationary and (18) portable plants
- Roughly 50/50 urban/rural split
- (8) Parallel flow, (4) Counter flow, (6) Batch — some unknown

Grant Program Process

- Company submits application, instructed to purchase software
- Purchase submitted for reimbursement, company connected with software consultant
    - Developers of EcoLabel tool
- Company publishes EPDs in agency view



Emerald EcoLabel Breakdown



PARTICIPATING COMPANIES		
Mathy Construction	2 plants	13 mixes
Martin Marietta	3 plants	9 mixes
McNamara Contracting	1 plant	25 mixes
KGM Contractors	2 plants	11 mixes
Valley Paving	1 plant	21 mixes
Anderson Bros Construction	3 plants	42 mixes
Pine Bend Paving	1 plant	12 mixes

PROGRAM TOTALS

7
Companies

13
Plants

133
Mixes

NAPA Emerald Eco-Label Software

Web-Based EPD Tool for Asphalt Mixtures

Develop and publish verified Environmental Product Declarations (EPDs) for asphalt mixtures — plant-specific, product-specific, and fully aligned with international standards.

WHAT IT DOES

- Create plant- and product-specific EPDs for asphalt mixtures
- Cradle-to-gate (A1–A3) reporting coverage
- Evaluate and optimize environmental impacts from materials and plant operations
- Scenario analysis via built-in Optimizer to compare mix designs and identify emissions-reduction opportunities

WHY IT'S USED

- Provides credible, comparable environmental data for asphalt producers
- Supports Buy Clean, sustainability, and procurement requirements
- Identify opportunities to improve plant efficiency and reduce embodied carbon
- Generates independently verified EPDs ready for owner/agency submission

Emerald Eco-Label: Data, Verification & Limitations

DATA INPUTS

- Asphalt production tonnage
- Electricity and fuel use
- Material inputs: aggregate, binder, RAP, RAS, additives
- Supplier transport distances
- Water and emissions data (where applicable)

BUILT-IN CHECKS & VERIFICATION

- Flags unusual energy or electricity values automatically
- Users can confirm entries outside expected ranges and route for review
- EPDs and PCRs go through independent review and verification
- Aligned with ISO 14025, 14040, 14044, and ISO 21930

KNOWN LIMITATIONS (Current Version)

- Portable asphalt plants not yet supported
- Some CCPR cases not fully implemented
- Canada-specific plant support pending
- Some additional environmental information fields not yet available

NAPA has indicated these features may be added in future updates.

Emerald Eco-Label: Data You Need to Enter

Six categories of data before creating an asphalt mix EPD.

1. Project & Product ID

- Producer and plant name
- Plant location & state/region
- Mix / product name
- Data year
- Product category (if applicable)

2. Mix Design Information

- Aggregate sources & quantities
- Binder type and quantity
- RAP and RAS content
- Additives or modifiers
- Other constituent materials

3. Production Data

- Total tonnage for data year
- Batch or drum plant details
- Fuel used for heating/drying
- Electricity consumption
- Water use (if tracked)

4. Material Sourcing & Transport

- Supplier names / source locations
- Haul distances: aggregate, binder, RAP/RAS
- Transportation mode (if required)
- Average haul assumptions

5. Energy & Utility Inputs

- Natural gas, propane, diesel, or other fuel
- Purchased electricity
- On-site generation (if applicable)
- Other utility data tied to production

6. Environmental & Emissions Data

- Emission factors
- Plant emissions data
- Water and waste information

What We Learned

EPD Adoption in Minnesota — Lessons from the Field

Contractor Reluctance

- Contractors were not forthcoming in proactively sharing data
- When grant funding became available, uptake was low — contractors either viewed 2028 implementation as distant or were uncomfortable publishing mix-specific data for competitive reasons

Early Progress via IRA Initiatives

- National Benchmarking Challenge (IRA-directed): some companies provided plant-specific data, but not mix-specific
- MnDOT's Climate Challenge (IRA-directed): 11 companies asked to provide EPDs — varying degrees of success; also requested A4/A5 construction phase data, likely averages rather than real data

The Turning Point

- Worked with MnDOT and Dept. of Administration to allow "agency view" instead of public view — greatest participation followed
- MnDOT is now requesting EPDs on many projects this year via change order
- Legislation will ultimately require the public view

Where Things Stand

- Grant terms require producers to publish all mixes from EEL-funded plants — not all have complied yet
- MAPA/MnDOT funding runs through June 30, 2027
- Remaining non-compliance is likely less about resistance and more about a new task getting sidelined as the construction season picks up

Aggregate and Ready Mix Association of Minnesota (ARM of MN)

STATE OF MINNESOTA

Buy Clean EPD Grant Program

WORK PLAN / PROGRAM OUTCOMES

Over 400 Type III EPDs across 29 Minnesota ready mix plants

Outcomes and deliverables from the work plan, including locations of the 29 participating ready mixed concrete plants serving the Minnesota market.

AGGREGATE & READY MIX
ASSOCIATION OF MINNESOTA

ARM of Minnesota

PROGRAM AT A GLANCE

Deliverables

29

Ready mixed concrete plants

geographically distributed across MN

435

Type III EPDs

produced for MnDOT mixtures

3

EPD service providers

engaged to deliver capability

FY25–26

Project window

June 2025 – June 2026

New EPDs

435 Type III EPDs for MnDOT concrete mixtures

New Capability

29 additional plants able to deliver EPDs on future projects in Minnesota

New Insight

Trend analysis to help identify pathways to lower embodied carbon

Five tasks. One outcome: an EPD-ready Minnesota concrete industry.

01

Organizational meetings

Three summer 2025 meetings, one per service provider, covering EPD overview, data needs, and software demos.

02

Distribute plants to providers

Confirm participation of 29 plants and assign across the 3 EPD service providers.

03

Facilitate data entry

Ensure adequate software support, monitor progress, and provide direct technical support to producers.

04

Collect completed EPDs

Verify 435 Type III EPDs complete on schedule; compile and analyze for trends and lowering opportunities.

05

Report findings

Submit EPDs, analysis, recommendations, debriefings, and written progress + final technical reports.

29 ready mix plants across Minnesota

29

ready mixed concrete plants

Combined estimated annual output:

~711,452 cubic yards / year

Coverage spans greater Minnesota — northwest, north shore, central, metro, and southeast regions — including smaller producers and those outside the Twin Cities metro.

Participating operators

Knife River	15 plants
Leitzen	1 plant
Worms Lumber & Ready Mix	3 plants
Arrowhead / Lakehead	2 plants
Croell, Inc.	2 plants
Kohner Materials (4 Corners / Wabasha SG&RM / Modern)	3 plants
Alexandria & Willmar Ready Mix	2 plants
Buffalo Ridge Concrete	1 plant

29 ready mix plants across Minnesota

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ready mixed concrete plants

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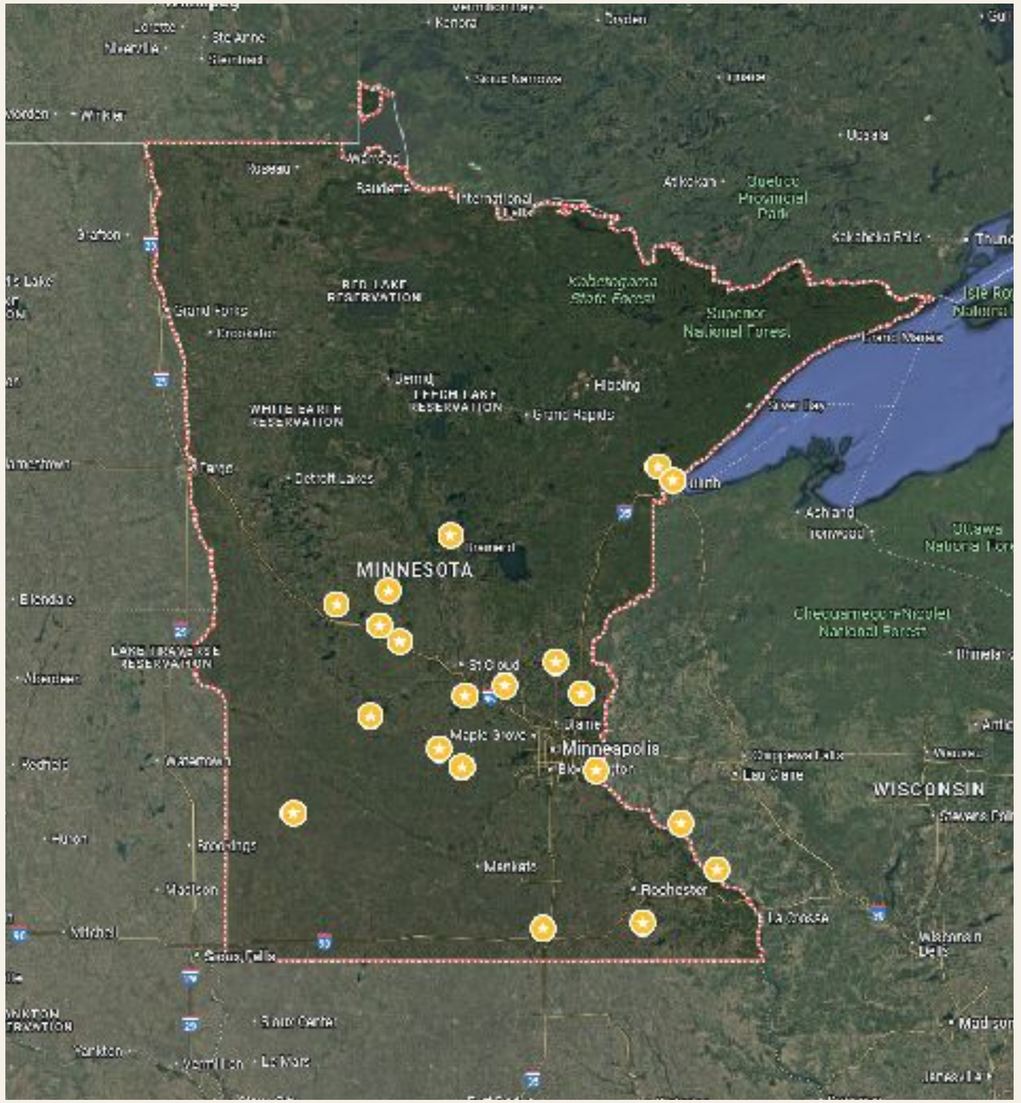

Northern & Northwest Minnesota

#	Plant / Operator	City
1	Arrowhead Concrete Works	Hermantown, MN
2	Lakehead Concrete Works (raw mat: Canyon, MN)	Superior, WI
3	Knife River	Crookston, MN
4	Knife River	Hallock, MN
5	Knife River	Trail, MN
6	Knife River	Detroit Lakes, MN
7	Knife River	Perham, MN
8	Knife River	Moorhead, MN
9	Knife River	East Grand Forks, MN
10	Knife River	Baxter, MN
11	Knife River	Alexandria, MN

Central Minnesota

#	Plant / Operator	City
12	Alexandria Ready Mix	Alexandria, MN
13	Willmar Ready Mix	Willmar, MN
14	Worms Lumber & Ready Mix	New Munich, MN
15	Worms Lumber & Ready Mix	Sauk Centre, MN
16	Worms Lumber & Ready Mix	Long Prairie, MN
17	Knife River	Isanti, MN
18	Knife River	Forest Lake, MN
19	Knife River	Annandale, MN
20	Knife River	Big Lake, MN
21	Knife River	Glencoe, MN
22	Knife River	Hutchinson, MN

Southern Minnesota & Metro

#	Plant / Operator	City
23	Buffalo Ridge Concrete	Marshall, MN
24	4 Corners Ready Mix (Wabasha RM LLC)	Hastings, MN
25	Wabasha Sand, Gravel & Ready Mix	Wabasha, MN
26	Modern Ready Mix Company	Winona, MN
27	Croell, Inc.	Albert Lea, MN
28	Croell, Inc.	Spring Valley, MN
29	Leitzen	Rochester, MN

Network totals

29 plants • ~711,452 CY estimated annual output • 435 Type III EPDs to be produced

Geographic distribution covers greater Minnesota, including smaller producers and minority-owned operators outside the largest metro area — advancing equitable workforce development in sustainability.

From data to decisions — what the final report addresses

Analysis

- Identifiable trends in materials, geographic areas, and processes
- Opportunities for lowering embodied carbon in ready mixed concrete
- Gaps in EPD data

Recommendations

- Ways to optimize the EPD generation process for producers
- Short- and long-term technical training and support needs
- How bid letting and contracting may be shaped by lessons learned
- Regional differences to consider in bidding or contracting procedures

Debriefs & Reports

- Debrief for producers and the State agency
- Six-month written progress report
- Final written Technical Report of Findings

BUILDING MINNESOTA'S EPD CAPABILITY

435 EPDs. 289 plants. Statewide foundation for lower-carbon concrete.

Outcomes from the work plan position the State of Minnesota to gather and analyze far more embodied-carbon data, optimize lifecycles, and shape future bidding and contracting — with a workforce that includes greater Minnesota, smaller producers, and minority-owned operators.

Program contact

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Next Steps

Next Steps

- Summer-Fall 2026
  - Program Implementation and Operationalization
  - Database piloting and launch
  - Rule-setting and Guidance Documents
  - Training
- 2026 and beyond…
  - Track PCR updates and industry updates
  - Re-evaluate EPD data and limit-setting for
    - Tier 1 Materials: Asphalt Paving, Concrete Paving, Structural Steel, Precast Concrete, CMU, CFMF
    - Tier 2 Materials: Glass, Insulation, Aluminum
  - December 2026 report updates
- December 2027 Legislative Report updates
- 2028, January 15 - Establish a maximum Global Warming Potential (GWP) for structural steel and, after conferring with the commissioner of transportation, for asphalt paving mixtures and concrete pavement

Upcoming Meetings

- **August 19, 2026 - BuiltCold Database Training - IN PERSON**
  - Separate Vertical & Horizontal Sessions

- **September 16, 2026 - ESPTF Mtg#13** (TBD), 10am-12pm
- **October 14, 2026 - ESPTF Mtg#14** (TBD), 10am-12pm

Meeting information, agendas, and notes will be updated on the Task Force website:

https://mn.gov/admin/government/purchasing-contracting/buy-clean/

Feedback/Agenda for Future Task Force Mtgs

Feedback

- BuiltCold Interface
- Waivers
- Submittal Process

Agenda Topics for Future Task Force Meetings

- Steel Limits and Sub materials (September?)
- Asphalt and Concrete Paving (October?)
- Concrete testing methods, durability, technical issues as the industry produces lower GWP mixes

Minnesota Task Force Timeline

2023
October 1 - Task Force established

2024
- February 22 - EC Context: Concrete and Asphalt
- March 14 - EC Context: Steel, Rebar and Other Materials
- April 25 and May 23 - Bidding and Procurement
- July 1 - Pilot Program begins
- Summer/Fall - Material-specific and Pilot Program Working Groups (WG)
- Oct 23 - ESPTF Mtg#6: Concrete and Asphalt WG
- Nov 20 - ESPTF Mtg#7: Steel and Rebar WG
- Dec 18 - ESPTF Mtg#8: Pilot Program and Other Materials

2025
- March 19, 2025 - Mtg#9: Task Force Recommendations
- May 8, 2025 - Draft Report sent to Task Force for comment
- Spring - Draft Report, Select Grant Awardees & Distribute Funds
- Summer/Fall - Draft Report Staff Reviews and Revisions
- Oct 8 - Mtg#10: TF Recommendations & Legislative Report
- December 1 - Report to the Legislature

2026
- January 15 - Global Warming Potential (GWP) established for concrete and rebar used in buildings.
- April 22 - ESPTF Mtg#11 (Virtual)
- June 17 - ESPTF Mtg#12 (In Person) - Maplewood, MN
- **July 15** - Implementation date of GWP limits/EPD disclosure requirements (projects letting on or after this date)
- **August 19 - BuiltCold Database Training** (In Person, TBD)
- **September 16 - ESPTF Mtg#13** (TBD)
- **October 14 - ESPTF Mtg#14** (TBD)
- **December 1** - Report to the Legislature

2027
- December 1 - Report to the Legislature

2028
- January 15 - Establish a maximum GWP for structural steel and, after conferring with the commissioner of transportation, for asphalt paving mixtures and concrete pavement
- December 1 - Report to the Legislature

2029
- January 1 - Task Force ends

Member Discussion and Questions

Public Comments and Questions