



Emerald Eco-Label Software

Frequently Asked Questions

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A. Organizations/System Administration

1. I'm having trouble getting started.

A brief overview of the overall registration process is available here (see the "How To Get Started" section at the bottom of the page):

<https://www.asphaltpavement.org/programs/napa-programs/emerald-eco-label/registration-process>

2. How does the data gathering excel spreadsheet work? Do we need to input all of our information to the data gathering excel spreadsheet, then submit to get a score back?

In general, the Emerald Eco-Label software is sort of like a self-service tax software – there are data inputs for your organization, your plant(s), your materials/suppliers, and your mix designs. The output of the software is a verified EPD for each of your mixes, which you can then choose to [publish](#) through the EPD website.

The data gathering Excel sheet is a tool that helps you compile your plant and mix information so you can collect this information offline, which makes it easier to input the data into the software. It's not a requirement to use this spreadsheet, but many users find it helpful.

3. How do I change the Primary Contact for my organization?

- Log into the tool and use the left menu bar to navigate to the Organizations page.
- Click on the name of the organization for which you'd like to change the Primary Contact.
- In the Details box (which lists the Primary Contact), click the Edit button.
- Click on the drop-down for the Primary Contact field and select the appropriate user.

Note, any user with the "Edit Organization Details" permission can make this change.

4. The Organization Details says "Please enter a URL" even though I have entered the URL for my company's website.

Make sure you enter the complete URL for your company's website, including the http:// or https:// prefix.

5. How do I add a new user to my Organization? When I enter their email address into the permissions editing page, it says:

No users were found with the email address that was entered. Please ensure the email address is correct and has been used to create an account on this site.



The user has to have created a profile and logged in to the asphaltpd.org website in order to add them to your Organization. Here is how to do that.

- The new user should start by going to <https://asphaltpd.org/> and click the Sign In link.
- The SSO protocol will bring them to the NAPA website at member.asphaltpavement.org, where they should sign in using their NAPA credentials.
 - o If they do not already have a username and password on the NAPA website, they should create a profile on the NAPA sign-in page. You do not need to be a NAPA member to create a NAPA username and password.
- Once they sign into the NAPA website, the SSO protocol should return them to asphaltpd.org. The user should then accept the End User License Agreement (<https://asphaltpd.org/eula/>) and then notify you that they have created a profile.
- Now, you can go to the Organizations page, click on the name of the Organization that you'd like to add them to, then edit their permissions using the Organization Authorizations or Plant Authorizations edit field, as appropriate.
- Note that you can assign permissions to any Emerald Eco-Label user – all you need is their email address. But the user needs to have first set up a user profile. If you type in an email address for a person who does not have an Emerald Eco-Label profile, it will return an error message.

6. I am a manager/company executive with responsibility over multiple operating companies. Is there a way for me to look at all of our companies, plants, and mixes to understand and monitor our progress in developing EPDs?

Yes. Each Organization in the software has a Primary Contact. All you have to do is ask the Primary Contact to add you to their account.

The first step is to make sure that you set up a username and password at <https://asphaltpd.org>.

The second step is for the Primary Contact associated with the Organization to add you as a user (see question 5 above).

Each operating company (Organization) will have to complete both steps.

If you are just beginning the process of creating your company's organizations, you could develop new Organizations for the companies that you are responsible for and assign permissions to the appropriate personnel for each Organization.



- 7. My company recently acquired an asphalt plant that had previously developed EPDs. Since acquiring the plant, we have changed the material suppliers and the mix designs but have not made any significant changes to plant operations. Do we need to wait until we have 12 months of operational data under the new ownership to develop EPDs, or can we develop EPDs using data from a shorter period of time (e.g., 6 months of data)?**

There are two options for newly acquired asphalt plants. The first option is to use the operational data from the previous owner. However, you are responsible for obtaining the data from the previous owner, as well as the documentation needed to support the data in case your EPDs are audited. In these situations, it's best to discuss the data and documentation needs during the business negotiations/due diligence period prior to the acquisition.

The second option is to begin the 12-month data collection period on January 1 of the year that your company purchased the asphalt plant. As long as the plant operates under your control during that calendar year, you can start developing and publishing EPDs in January of the subsequent year. Once the plant operates under your control for 12 months, you should update your plant data.

For example, if you start operating the new plant on July 1, 2023, your initial data collection period would run from January 1 through December 31, 2023. You can start developing and publishing EPDs in January 2024. You would then update your plant data for a collection period running from July 1, 2023 through June 30, 2024.



B. Data Inputs – General Considerations

1. Can a published EPD be edited if I have updates on the Plant Data Set, or other data?

Yes. Once you have developed an EPD for a mix, any time you revise and save your plant data, it will automatically update all EPDs associated with your plant, including EPDs that have been published. The version number of all EPDs associated with that plant will also move up by one to indicate that a change has been made (e.g., v3 will become v4).

For EPDs that have not yet been published, you can also update the information for the mix design data inputs. When you save your changes to the mix design data, the version number for that EPD will move up by one to indicate that a change has been made. To make a change to the mix design for an EPD that has already been published, you have to unpublish the EPD first, then make your changes, then publish it again.

2. We have made some changes to our plant/mix design/suppliers. Do we need to update the EPD?

The ISO 14025 standard *requires* the mix producer to correct or amend the information in an EPD to reflect changes in technology or other circumstances that could alter the content and accuracy of the EPD. It's your responsibility as the mix producer to identify changes and revise your EPDs accordingly. Below are some examples of changes that should trigger an EPD to be revised. Please note that this is not an exhaustive list – when in doubt, we recommend updating your EPDs.

- Plant Operations
 - o Changing the burner fuel or hot oil heater fuel.
 - o Significant energy efficiency improvements (e.g., covering aggregate stockpiles, using warm mix asphalt technologies to reduce the mix production temperature, other operational changes that significantly affect energy efficiency).
- Suppliers
 - o If the aggregate or asphalt binder supplier has changed, you need to update the material transport distance and mode to reflect the new supplier.
- Mix Designs
 - o Generally, the threshold for updating an EPD to reflect changes to the mix design should be tied to agency requirements for submitting a new or revised mix design for approval. If the change is significant enough to require a new mix design, then you should also update the EPD or create a new one for the new mix design.

Note that you have flexibility regarding the frequency that you update your plant data. You can either wait until you have a complete new 12-month dataset (e.g., updating your 2021 data with data from 2022), or you can update your data on a rolling 12-month basis. Changes to suppliers and mix designs, on the other hand, should be made as they occur. See Question 5 of the Data Inputs – Plants section for more information.



C. Data Inputs – Plants

- 1. We use a generator to operate our RAP Crusher at one of our locations. Would we need to report the fuel for this?**

No, you do not need to report the generator fuel consumption for the RAP crusher. As specified in the PCR for Asphalt Mixtures, a pre-determined parameter of 0.1 gallons of diesel fuel per ton of RAP processed is automatically included in the software to account for this.

- 2. Would an onsite Lab, Shop, or Office Trailer be considered another facility (electricity usage excluded) or be considered inclusive?**

You can exclude electricity consumption (and other utilities, as appropriate) associated with an onsite lab, shop, office trailer, or other activities. Best practice is to submeter all utilities to the plant. If your utilities are not submetered, the PCR for Asphalt Mixtures allows you to allocate these material and energy inputs.

- 3. Regarding waste materials, is it only required to enter the volume of hazardous waste, non-hazardous waste or recycled material if it is transported off-site? In general, we transport our waste (start-up, shutdown, mix-change etc.) to a location on-site and then recycle it during production later. As such, this number equals the difference between tons produced and tons sold at a plant. How should we handle this data requirement? We currently have our plant's waste volume (essentially Tons Produced – Tons Sold) as the recycled waste number and 0 miles for distance transported.**

If you were sending the waste material to an off-site C&D Disposal facility, you would list it as Non-Hazardous Waste. If it were going to an off-site C&D Recycling facility, or for another off-site recycling activity (for road base, temporary parking lots, general fill, land reclamation, etc.), you would list it as Recycled Materials.

But since your recycling operation is on-site, the waste amount should be zero. The material processing is accounted for when you use RAP in the mix – as required in the PCR, we use a value of 0.1 gallons of diesel per ton of RAP. So if your mix has a 20% RAP content (by weight of total mix), the emissions and other impacts associated with 0.02 gallons of diesel are added to the A1 (raw materials) life cycle stage.

- 4. Our plant has onsite solar panels. On average, we generate more power than we consume, and the few months that we consumed more was taken care of by our banked generation. How do we get credit for the onsite solar generation?**

The data you enter into the Electricity field should be your plant's electricity consumption *before* any reductions or credits for onsite renewable energy generation. Unfortunately, this means that you do not get credit for any onsite renewable electricity generation. This requirement, which is



established in Section 7.2.1.2 of the [PCR for Asphalt Mixtures](#), is a conservative approach due to the lack of standardized guidance for accounting for clean energy purchases.

In the example electricity bill below, you should add up the “Energy Consumed” kwh for each of the months in your 12-month data gathering period.

Net Meter		Next Scheduled Meter Reading Date On or About: 07/09/2018		Banked Generation: 2364			
Meter #	From	To	Rate	Service Description		Cycle	1.5% Late Charge Applied After
12345	05/09/2018	06/09/2018	RRC	10384 RIVER RD			07/09/2018
Prev Rdg	Pres Rdg	Usage	Mult	Billed Usage	Type	Description	
80482	83253	2771	1.0	2771	Actual	Cons	
-69802	-74937	5135	1.0	-5135	Actual	Gen	
0	0	0	1.0	0	Actual	Net	

CHOPTANK ELECTRIC COOPERATIVE DELIVERY CHARGES		SUPPLIER CHARGES		CHOPTANK ELECTRIC COOPERATIVE	
Consumer Charge			11.75		
Universal Service			0.36		
Roundup Contribution			0.89		

TOTAL DELIVERY CHARGES		TOTAL SUPPLIER CHARGES			
		13.00		0.00	

Accumulated excess generation from previous months carried over to offset following month's usage

Energy consumed

Excess energy generated into the grid

Net billed energy

*Generation exceeds consumption
*No energy charges billed
*Difference gets added to Banked Generation balance

While the PCR does allow for GHG emission reductions associated with renewable energy purchased to be reported as Additional Environmental Information, this functionality has not yet been implemented in the Emerald Eco-Label software.

5. Our plant has switched burner fuels. How can we update our data?

There are two approaches, both of which are acceptable. The first option is to wait until 12 months after the new fuel is in use, then update your plant data to reflect the new fuel. This will likely result in an abrupt change in your A3 impacts reported in the EPD.

The second option is to update your data on a rolling 12-month basis as you start using the new fuel. This will likely result in an incremental change in the A3 impacts reported in the EPD.

Regardless of which approach you use, remember that you have to update *all* of the plant data (asphalt mix tonnage, electricity consumption, etc.) to reflect the same 12-month period when you revise the plant data.

Please see Question 2 of the Data Inputs – General Considerations section for more information.



6. We have installed a new asphalt plant at a new site. Do we need to wait 12 months to develop EPDs for this new plant?

For purposes of this discussion, “new asphalt plant” means new to your company – it could either be a brand new plant or a used plant. If you’re installing a new asphalt plant, you can begin the 12-month data collection period on January 1 of the year that the plant is installed. As long as your plant operates during that calendar year, you can start developing and publishing EPDs for the mixes you produced in during the previous year and the subsequent mix production in January of the subsequent year. Once the plant operates for 12 months, you should update your plant data.

For example, if you start operating the new plant on July 1, 2023, your initial data collection period would run from January 1 through December 31, 2023. You can start developing and publishing EPDs in January 2024. You would then update your plant data for a collection period running from July 1, 2023 through June 30, 2024.

7. We have two asphalt plants located at the same site. Can I combine the data for these two plants, or does each plant need its own EPDs?

Two plants located at the same time are considered two separate plants, each of which requires its own EPDs. See Section 3.9.17 of the PCR for Asphalt Mixtures, which is available [here](#).

8. Our plant burns compressed natural gas (CNG), which is reported on the invoices in MMBtu. How do we convert from MMBtu to mcf?

According to the U.S. [Energy Information Administration](#), one thousand cubic feet (1 mcf) of natural gas equals 1.037 MMBtu. To convert your CNG consumption from MMBtu to mcf, divide it by 1.037. For example, if your plant consumes 1,000 MMBtu of CNG, this is equivalent to 964 mcf.



D. Data Inputs – Ingredients

- 1. Would you recommend having each quarry as a separate source even if they all belong to the same company with the same primary contact person? Or should one company/entity be listed once, as the source variability is reflected in the distances each material is hauled anyway?**

NAPA recommends creating a separate source (supplier) for each quarry. You should do the same for binder suppliers (for cases where one company owns multiple asphalt terminals). In the long run, this will make it easier to manage your mix designs and materials. This is because Sources and Ingredients are stored at the Organization level. So the drop-downs in the Mix Design page will show all materials associated with the Organization, which is fairly straightforward if you only have a couple of plants in the system, but can become more challenging to manage as the number of plants grows.



E. Data Inputs – Mixes

1. How many decimals should the mix design percentages include?

Mix design percentages should be taken out to 2 decimals (e.g., 3.47%). This will ensure that additives are appropriately accounted for down to the 0.01% threshold for disclosing a data gap.

2. We use 3.08% binder by mass of what (?) for this mix. It is terminal modified by adding 0.5% Antistrip (amidoamines) which has data-gaps. What information/documents can we provide to help address the gap, and how long does it take on average for your team to update the more commonly used materials?

At this time, most additives are data gaps. What NAPA needs is for the additive manufacturers to develop either industry-wide life cycle assessments (LCAs), or product specific environmental product declarations (EPDs) for their products. We can then integrate their LCA/EPD data into the Emerald Eco-Label software. There is a modest fee to the additive manufacturers to integrate their data – the real time and expense is actually developing the LCA or EPD. It can easily take 6-12 months, sometimes longer, depending on the complexity of the additive’s manufacturing process, supply chain, and availability of upstream data for raw materials that go into the additives.

It would help if you contact your additive supplier(s) directly to let them know you are interested in this issue. Also, please share with NAPA the manufacturer(s) name and specific products that you’re interested in by sending an email to epd@asphaltpavement.org so we can help amplify the message.

3. Is it possible to define thresholds where an ingredient’s additive is small enough to be negligible e.g., 0.015% antistrip of total mix by mass of what in our case?

Section 7.1.8.1 of the [PCR for Asphalt Mixtures](#) specifies a cut-off threshold of 0.01% of total mix by weight or, for binder additives, 0.1% of the asphalt binder mass.

4. I understand that public datasets are used to calculate impact values for all upstream materials. So is that RPR_E number for Materials (A1) in Table 5 specific to the source zip code? If so, it is probably necessary for us to list out each source quarry rather than one company as my earlier question under ingredient sources, right?

For the generic upstream data that is used for aggregates, asphalt binder, hydrated lime, etc., the upstream data is generally based on a national average. The only exception to this is the electricity data for your asphalt plant’s operations, which is mapped to A3 (it’s an upstream process associated with mix production). In general, A1 numbers (raw materials) will be the same regardless of where your plant (or material suppliers) are geographically located. We anticipate that this will change in the future, either through the availability of regionalized generic data for common materials, or through wider availability of facility- and product-specific EPDs for materials like aggregates and asphalt binder. Therefore, it’s best to list each supplier location separately.

5. My materials do not add up to 100.00% and the Mass Balance Calculator is giving me an error message. How do I fix this?

It's fairly common for mix designs or job mix formulas (JMFs) to show the dry ingredients (aggregates, RAP, and RAS) add up to 100%. This is done to set cold feed bin percentages and calculate the mix design by weight of aggregate. The virgin binder content is then dosed on top of that. Mix Form B in the [Data Gathering Sheet](#) does this calculation for you to put everything in terms of 100%.

Things can get a little confusing if your mix designs don't indicate the virgin binder content – sometimes it only has the total binder content or “optimal binder content”. But usually, either your company's QC department or someone from the asphalt plant can get you the virgin binder content for a given mix design or JMF.

With additives, things often get confusing as well since additives can be dosed by weight of total asphalt binder, by weight of virgin asphalt binder, by weight of total mix, or by weight of dry aggregates. Also, additives are sometimes not “included” or accounted for in the mix design. Mix Form B is set up to do the necessary calculations for additives that are dosed by weight of total asphalt binder. If you have other additives that are dosed on a different basis, please send an email to epd@asphaltpavement.org and we can help make sure you're entering the correct dosage.

6. How do I calculate the transportation distance for materials shipped by inland barge or ocean vessel?

Transport distances for inland barge and ocean vessel should be based on the actual distance travelled over water, rather than “as the crow flies.” It's always best to check with the shipping company that actually transports your materials. Several online calculators are also available, a few of which are provided below. Be sure to keep a record of which calculator you use and include that in the uploaded documentation. Note that some of these tools provide data in nautical miles – if so, you will need to convert this to statute miles. 1 nautical mile = 1.15078 statute miles.

- NOAA provides lookup tables for distances between U.S. ports:
<https://www.nauticalcharts.noaa.gov/publications/docs/distances.pdf>
- McDonough Marine provides an inland calculator and a separate offshore calculator, although their coverage is limited to relatively few ports:
<https://www.mcdonoughmarine.com/inland-offshore-calculators.html>
- ShipTraffic.net provides a Sea Route & Distance calculator:
<http://www.shiptraffic.net/2001/05/sea-distances-calculator.html>



F. Upgrading from Version 1 to Version 2 of the Emerald Eco-Label Software (for users who purchased access and entered data into the system prior to March 24, 2022)

1. Will I have to re-enter all of my data into the software after the update?

User data that has been entered into the Emerald Eco-Label software will automatically migrate over to the new version of the software. In most cases, you will not have to re-enter your data into the software. However, there are a few considerations to be aware of:

- Version 2 of the PCR for Asphalt Mixtures has new data requirements that must be completed. The software will indicate which data fields need to be completed and will not allow you to finalize or publish an EPD until all data requirements have been completed. The latest version of the Data Gathering spreadsheet includes all required data fields.
- The data collection period for primary data related to asphalt plant operations (fuel, electricity, water consumption, total mix sold, etc.) must begin on April 1, 2017 or later. You will have to update your plant data if the data collection period began prior to April 1, 2017.
- Even if your plant's data collection period began after April 1, 2017, this is a good opportunity to review and update your data to a more recent time period to more closely reflect your plant's current operational practices.

2. I am the primary contact for my company. Will my training still be valid with the new software?

No. NAPA has posted a new training webinar for Version 2 of the software. As the primary contact, you will have to watch this video and pass the associated quiz. Your company will not be able to develop or publish EPDs until the training requirement for the primary contact has been fulfilled.