



WQGIT Meeting
03/22/2021

**BMP Verification Ad-Hoc
Action Team Update**

By: Elliott Kellner, Chair and Vanessa Van Note,
Coordinator

Who makes up the BMP Verification Ad-Hoc Team?

The BMP Ad-Hoc Team is composed of:

- 1) Representatives from all jurisdictions and Bay Partnership signatory member organizations
- 2) Representatives from all source sector workgroups
- 3) At – Large Members from the CBF, GEC, USDA, DoD, USFS
- 4) Representatives from the CBP Advisory Committee (CAC, STAC, LGAC)
- 5) Representatives from the NRCS
- 6) Representatives from UMD

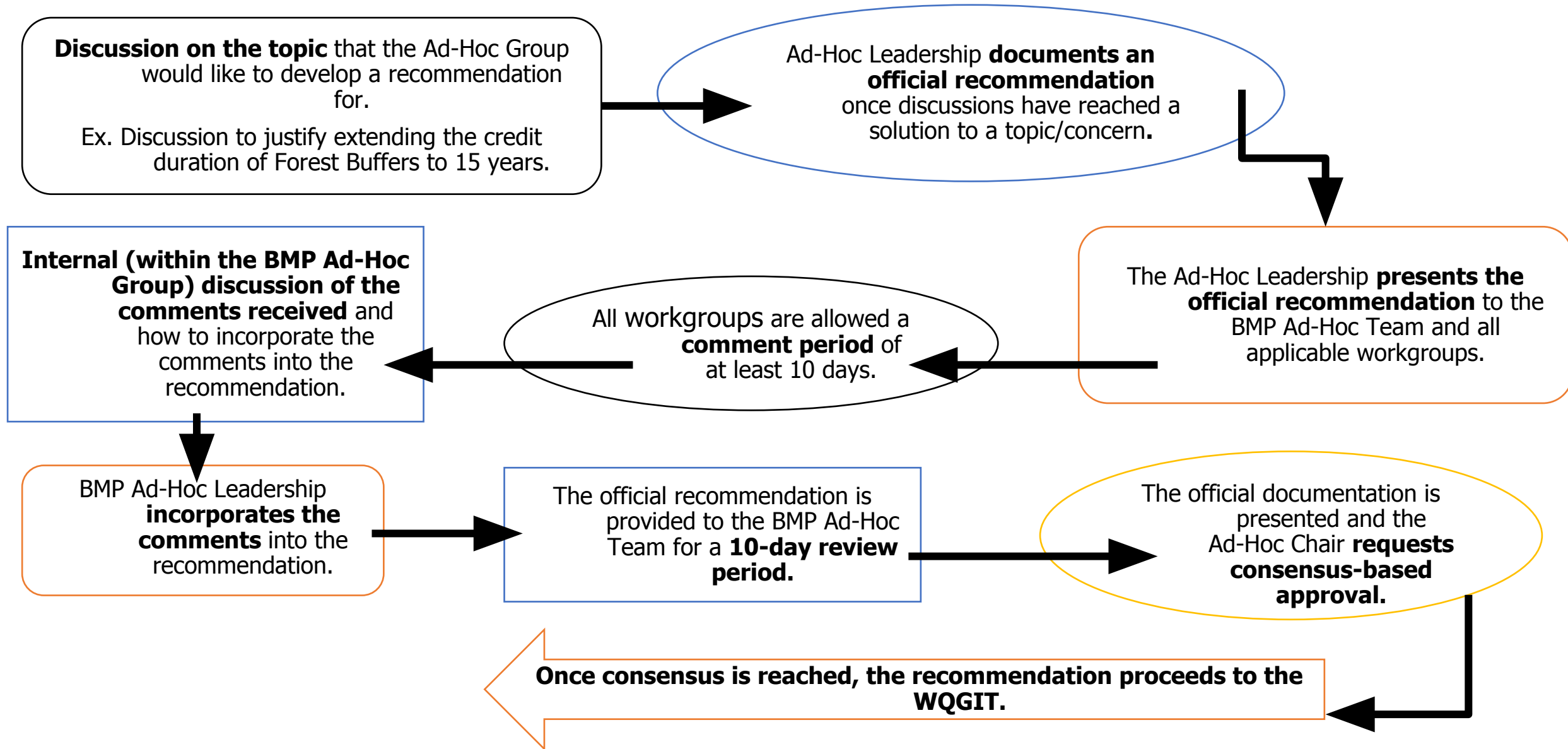
The BMP Ad-Hoc Team is led by:

- Chair - Dr. Elliott Kellner from WVU
- Co-Chair – Jason Keppler from MDA

THE CHAIN OF APPROVAL



(10 Steps with approved recommendations proceeding to the WQGIT)



Tasks Charged Directly to the Action Team

The Action Team was charged with two tasks from the Management Board and has two years to fulfil those tasks (until September 2022).

1) Revisiting Credit Durations of Practices of Interest to Stakeholders

- Potentially extend the credit durations of priority practices that have the justification to be extended.

2) Alternative to the “All-or-nothing” Approach

- Address the issue members have with practices past their credit duration (that have not been reverified) being removed from the model entirely (without any residual load reduction credit remaining).

Task 1: Re-Evaluating Credit Durations

Forestry Practices highlighted by the Group:

- Ag Riparian Forest Buffers
- Exclusion Fencing with Forest Buffer
- Exclusion Fencing with Narrow Forest Buffer
- Narrow Forest Buffer
- Urban Forest Buffers
- Urban Narrow Forest Buffer
- Ag Tree Planting
- Urban Tree Planting
- Urban Forest Planting

The FWG is currently developing recommendations for these practices.



Task 1: Update from the Forestry Workgroup

Forestry BMPs (Pink= forest plantings Blue-=tree plantings)	Practice Life Span		Credit Duration		Back Out ¹
	Current	Proposed	Current	Proposed	Proposed
Ag Forest Buffer (w/o fencing- crop)	40 years ¹	80 years	10 years ²	15 years	15 years
Ag Forest Buffer (w/ fencing- pasture)	30 years ²	80 years	10 years ²	15 years	15 years
Urban Forest Buffer	40 years ²	40 years	10 years ²	15 years	(15 years)
(Urban) Forest Planting	28 years ²	40 years	15 years	15 years ¹	15 years
Ag Tree Planting	40 years ²	(80 years)	15 years	No change	15 years
Narrow forest buffers (w/o fencing)	40 years ²	40 years	15 years	No change	15 years
Narrow forest buffers (w/ fencing)	25 years ²	40 years	15 years	No change	15 years
Urban tree planting	40 years ²	40 years	10 years	No change	10 years

Task 1: New Practice to Discuss Wetland Restoration

1. Wetland Reserve Easements (WRE): Projects remain in perpetuity or under a 30-year easement contract.
2. Conservation Reserve Program (CRP): 10 to 15 years
3. Environmental Quality Incentives Program (EQIP): maximum 10-years
4. Maryland Agriculture Water Quality Cost-Share: Minimum 15-year maintenance
5. NRCS Agricultural Conservation Easement Program: 30-year or permanent easements – NRCS Wetland Projects are primarily accomplished through this program.



From the Wetlands Section of the Framework Document:

- *Most wetland projects are designed to minimize long-term maintenance and, therefore, should remain effective indefinitely. Wetland restoration practices implemented under **CRP/CREP** have a **fifteen-year contract**; however, in most cases, the wetland continues to exist and **function beyond the contract period**. Wetland projects enrolled in WRE must be maintained for the duration of the easement, **either 30 years or in perpetuity**.*

Task 1: Re-Evaluating Credit Durations

Agriculture Practices highlighted by the Group:

- Animal Waste Management Systems
- Barnyard Runoff Control
- Loafing Lot Management
- Grass Buffers
- Narrow Grass Buffers
- Exclusion Fencing with Grass Buffers
- Exclusion Fencing with Narrow Grass Buffers



The BMP Ad-Hoc Team is currently discussing the credit durations of these practices.



Task 1: Preliminary Results from Barnyard Runoff Control Discussion

Argument For Extending Credit Duration to 15 Years

1. **558 Roof Runoff Structure**, a closely related NRCS practice, has a NRCS Practice Lifespan of 15 years. **States often report gutters (NRCS lifespan 15 years)**, which are Roof Runoff Structures. See reported practices from NEIEN below for further information on this topic.

2. CBP AWMS has a credit duration of 15 years. BRC is a supporting practice. -- It is simpler to verify all related/supporting practices at the same time since they can be installed together to support each other. **PA is in favor of 15 years to verify the entire system as a whole.**

3. The practice lifespan of related NRCS practices define a minimum amount of time (years) a practice is expected to be fully functional if proper O&M is performed. The system is designed to outlast the minimum practice lifespan (if maintained properly).

4. 85% of BRC practices (**Barnyard Clean Water Diversion Resource Improvement Practice**) past their expiration that MD looked at were still present and meeting the standard.

5. Landowners contribute financially to NRCS funded projects = incentive to maintain and retain practice. These projects address a specific resource concern.

6. **Infrastructure is in place and can exceed minimum lifespan.**

Argument For Keeping Credit Duration at 10 Years

1. Credit durations were established to **be conservative/considerate** of the minimum lifespan of related NRCS practices. **There is a desire to be conservative with the amount of time we allow practices to go without inspection. Other reported practices can be less than 15 years, such as Diversion (10 years).**

2. The CBP AWMS was established based on **NRCS 313 (Waste Storage Facility) or NRCS 359 (Waste Treatment Lagoon)** that have 15-year practice lifespans.

3. A maximum amount of time that a LLM practice will last (assuming proper maintenance) is undefined. Without proper maintenance, the practice is not designed to last the minimum amount of time defined by the practice lifespan.

4. MD was only able to view 19 BRC practices and we do not have retention data for other jurisdictions. **These practices were resource improvement practices, not CBP Barnyard Runoff Control Practices.**

5. **Animal numbers (an example of a resource concern) can be far in excess what the practice is designed to manage.** We are unaware of how fast these operations are going.

6. **Infrastructure potentially undermined by new ownership.** Ex. Amish Farmers in Lancaster Co. Often do not mechanized equipment. Can be simpler to allow runoff to run. (Potentially 8-10 of farms inspected in a county like Lancaster.) We do not know which time window new ownership occurs in on average [10-15 or 15-20 years?].

Task 1: Preliminary Results from Loafing Lot Management Discussion

Argument For Extending Credit Duration to 15 Years

1. CBP AWMS has a credit duration of 15 years. LLM is a supporting practice. It is simpler to verify all related/supporting practices at the same time since they can be installed together to support each other. **PA is in support of verifying an AWMS in its entirety.**

3. The practice lifespan of related NRCS practices define a **minimum amount of time (years)** a practice is expected to be fully functional if proper O&M is performed.

4. Landowners contribute financially to NRCS funded projects = incentive to maintain and retain practice.

5. 53% of LLM practices past their expiration that MD looked at were still present and meeting the standard.

6. **Infrastructure is in place and can exceed minimum lifespan.**

Argument For Keeping Credit Duration at 10 Years

1. The CBP AWMS was established based on NRCS 313 (Waste Storage Facility) or NRCS 359 (Waste Treatment Lagoon) that have 15-year practice lifespans. The practices most closely related to LLM: HUAP, Access Roads, and Trails and Walkways; have NRCS practice lifespans of 10 years. **Outside of the 10-year window, there is a greater potential these practices are not being maintained as expected or operations have changed.**

Please see how states report LLM in NEIEN below.

3. A maximum amount of time that a LLM practice will last (assuming proper maintenance) is undefined. **Without proper maintenance**, the practice is not designed to last the minimum amount of time defined by the practice lifespan.

4. Funds provided address a specific resource concern. **Animal numbers (an example of a resource concern) can be far in excess what the practice is designed to manage.** We are unaware of how fast these operations are going.

5. 47% of LLM practices did not meet standards, were not present or did not have animals. **According to MD, poultry pads (which do not qualify under the definition of "Loafing Lot Management" were included in the "present without animals" numbers.** Vanessa will contact MD to see if these values can be removed from the data.

6. **Infrastructure potentially undermined by new ownership.** Ex. Amish Farmers in Lancaster Co. Often do not mechanized equipment. Can be simpler to allow runoff to run. (Potentially 8-10 of farms inspected in a county like Lancaster.) We do not know which time window new ownership occurs in on average [10, 15 or 15, 20 years?]

Task 1: Continued Discussions on Barnyard Runoff Control

- MD, PA and NY provided verification/inspection information related to Barnyard Runoff Control Practices.

State	Amount Inspected	Amount Passed	Percentage Passed Inspection
Maryland	501	397	79%
Pennsylvania	775	775	100% (Correction: 43% of 1802 expired practices have been inspected.)
New York	177	175	98.8%

Average age of inspected practices across all states included in this dataset = 14 years old

Task 1: Continued Discussions on Loafing Lot Management

- MD, PA and NY provided verification/inspection information related to Loafing Lot Management Practices.

State	Amount Inspected	Amount Passed	Percentage Passed Inspection
Maryland	490	441	90%
Pennsylvania	261	261	100% (Correction: 39% of 663 expired practices have been inspected.)
New York	131	128	97.7%

Average age of inspected practices across all states included in this dataset = 13.6 years old

Task 1: Closing out the Barnyard Runoff Control and Loafing Lot Management Discussions

Where we currently stand as a group:

Practice	Yes	No	Tentative	Stand Aside
Barnyard Runoff Control	8	9	2	2
43% No, 38% Yes				
Loafing Lot Management	7	11	1	2
52% No, 33% Yes				

Task 1: Closing out the Barnyard Runoff Control and Loafing Lot Management Discussions

Rationale Behind the Support of this Change:

- The infrastructure can remain in place for longer than 10 years (for Barnyard Runoff Control).
- NRCS Practice Lifespans are the minimum amount of time the practices can remain on the ground, if maintained, not the maximum.
- Data from jurisdiction inspections show that the practices have an effective value of longer than 10-years.
- While supporting BRC practices may have shorter NRCS lifespans, the primary hardscape (non-vegetative) practices, like gutters, have lifespans of 15-years.
- It is in the farmer's best interest to maintain their practices.

Task 1: Closing out the Barnyard Runoff Control and Loafing Lot Management Discussions

Rationale Behind the Opposition to this Change:

- Components of Loafing Lots are sensitive to livestock density.
- The AgWG established 10-year credit durations to provide oversight for when NRCS contracts ultimately expire. With some NRCS contracts being 10-years, the AgWG chose to be conservative in assigning credit durations.
- Uncertainty around the statistical validation of the data provided.
- The data provided is not enough justification to change expert recommendations made by the Partnership.
- A frequent inspection program is needed to ensure that the required maintenance is being achieved on the land.
- While some practices can be maintained and repaired for innumerable years, Practices can also fail due to lack of maintenance, change in ownership, large rainfall event, and even in some cases, animal damage. There are too many ways for the practice to fall out of specifications.
- There is potential for abuse of a system or undermining a system's structural integrity due to, for example, change in ownership.
- No BMPs should go without inspection for beyond 10 years. 15 years is a very long time without verification.
- We are unsure of the impacts of climate change on stormwater control and infrastructure.

Task 1: Closing out the Barnyard Runoff Control and Loafing Lot Management Discussions

Action Items prior to the April Meeting:

- A report with compiled information will be given to all Ad-Hoc Team members at least 10 days prior to the official vote (March 29th).

Decision Item April Meeting which will be held on April 9th from 9:00am to 11:00am:

- Utilizing consensus, we will vote on whether to extend the following from 10 years to 15 years by asking the question “Is new information compelling enough to change the previous decision made by the partnership?”:
 - Barnyard Runoff Control
 - Loafing Lot Management
- If consensus is not reached, we have the option to strive as a group to continue to find new solutions before again seeking consensus on this issue.

Task 2: Alternatives to All-or-Nothing Approach

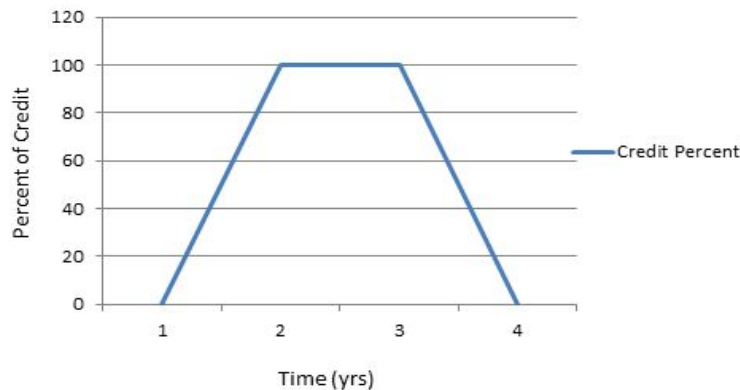
- Preliminary Discussion will begin once the credit duration task gains more traction. (Potentially in May 2021.)
- Initial Rational for and Comments that led to Requesting An Alternative to the “All or Nothing” Approach:
 - “Can there be gradual or partial credit over a period of time as opposed to zero credit for those BMPs that cannot be verified?”
 - “Perhaps there is room for a compromise that’s acceptable, particularly for those BMPs that are NRCS practices.”
 - “A one-size fits all approach will not work for verification.”

Task 2: Alternatives to All-or-Nothing Approach

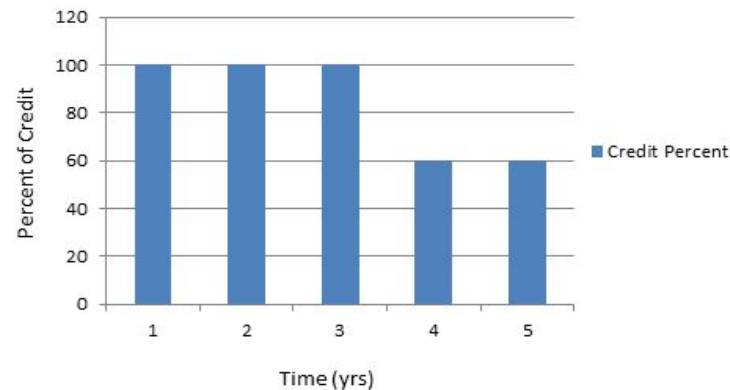
Recommended approaches to introducing a Partial Credit:

- Phase In/Phase Out or Ramp Up/Ramp Down Option
- Stepped Approach
- Static Discount
- Unless the operation ceases to operate there should be a partial variable credit

Ramp Up/Down



Static Discount



Looking Ahead: Goals and Upcoming Discussions

Goals:

- Approve recommendations for credit duration alterations by September 1, 2021 (the CAST-21 deadline).
- Complete MB Charge by September 2022.

Recap of Past and Upcoming (Tentative) Discussions:

February 2021:

- Continued Barnyard Runoff Control (BRC) and Loafing Lot Management (LLM) Discussion
- Initial Presentation on FWG Progress for Forestry Practices

March 2021

- Reviewed the Survey results and gave final presentation on state data with corresponding discussion.
- Provided a second update from the FWG on Land Use Imagery and the practice life and credit duration proposals.

April 2021

- Vote on the Barnyard Runoff Control and Loafing Lot Management Credit Durations utilizing Consensus Continuum.
- Begin discussion on Grass Buffers.

May 2021

- Introduce the All-or-Nothing “Partial Credit” topic
- Continue discussion on Grass Buffers

Any Questions?

Please contact Vanessa Van Note,
vannote.vanessa@epa.gov with any questions.

Thank you!