

Salt Management Strategy (SaMS)

3rd Non-Traditional BMPs Workgroup Meeting

October 3, 2019

The third meeting for the Non-Traditional BMPs Workgroup for the Salt Management Strategy (SaMS) was held from 1:00 pm – 3:30 pm on October 3, 2019 at Northern Virginia Regional Commission at 3040 Williams Drive, Fairfax, Virginia.

Attendance

Nine individuals, including two Virginia Department of Environmental Quality (DEQ) staff and one staff from the Interstate Commission on the Potomac River Basin (ICPRB; DEQ's contractual support), participated in the meeting.

Andy Alden, VA Tech Transportation Institute[†]
Heidi Bonnaffon, MWCOG[†]
Glenda Booth, Friends of Dyke Marsh
Dennis Cumbie, Loudoun County[†]
Will Isenberg, DEQ*

Lauren Mollerup, Virginia Department of
Transportation (VDOT)
Jonathan Murray, Fairfax County
Erfaneh Sharifi, ICPRB*
Sarah Sivers, DEQ*

*Facilitator

[†]Participated via conference call

Meeting Highlights

At this meeting, workgroup members discussed materials drafted in response to action items identified at the last meeting.

- Draft content was presented to the workgroup that promotes best practices directed towards residents and drivers/commuters. Members supported the recommended practices and DEQ working with their Communications staff to develop materials targeted towards those audiences using that content for inclusion in the SaMS document.
- The workgroup members discussed presentation of alternative deicers in the SaMS document. A matrix providing a comparison and general product information on more standard non-chloride deicers was supported. Discussion on piloting new non-chloride deicers generated discussion and suggestions for additional considerations, but overall support to keep this as a recommendation pending additional coordination internally by member organizations.
- The workgroup decided not to proceed with drafting a recommendation that addresses winter maintenance contracts for properties and parking lots due to concerns of limited expertise to advise on topics with potential legal ramifications. The group recommended this topic be a future recommendation for consideration.
- The workgroup recommended the comparison of certification and training programs for winter maintenance activities be presented in the final SaMS document as a resource with a recommendation to review in the future after some experience in implementation.

Notes for Other Workgroups / Potential Areas of Overlap:

- Outreach materials directed to residents and drivers/commuters will be developed using content developed by the Non-Traditional BMP Workgroup. These outreach materials will be a useful additional resource for the outreach toolkit being developed by the Education and Outreach Workgroup.
- Follow-up with the Government Coordination Workgroup on whether there localities have existing ordinances that address salt storage piles.

Follow-up Action Items:

1. Develop outreach materials using the content for best practices directed towards residents and drivers/commuters. Draft materials will be shared with the workgroup for their review and feedback. *Volunteers: DEQ (including Communication staff), Laurent Mollerup (and possibly their Communications staff) - VDOT and Martin Hurd (nominated by Jonathon Murray) - Fairfax County. Others are encouraged to join.*
2. Revise the deicer piloting framework to address comments received during the meeting. Revised materials will be shared with the workgroup for their review and feedback. *Volunteers: DEQ*
3. Revise the comparison summary of existing certification and training programs to include Snow and Ice Management Association (SIMA), which was inadvertently excluded. *Volunteers: DEQ, ICPRB*
4. Poll workgroup on preference for wrapping up workgroup efforts through either a conference call or an in-person meeting. The date range when the call or meeting will be held is the end of January 2020, and will use the results from the recent Doodle poll. *Volunteers: DEQ*

Meeting Summary

Introductions

The meeting opened with brief introductory remarks from DEQ. Participants then briefly introduced themselves, providing their name and the organization they represent.

The second Non-Traditional BMPs Workgroup meeting (held on March 3, 2019) highlights, workgroup action items, and notes from other workgroups are available [online](#).

[Discussion topics](#) at the meeting focused on the best practices for residents, commuter/driver best practices, non-chloride deicers, contracting for property management winter maintenance, comparison of existing certification/training programs, and how the final SaMS report should frame the workgroup's recommendations. The meeting facilitators encouraged workgroup members to focus more on the content of the materials they would be discussing rather than the presentation or exact wording as those details will be worked out in the final SaMS document. Additionally, DEQ mentioned at this time that their Communications staff was providing support to in the development and/or revision of some of the documents that they would be discussing.

A workgroup member asked about the term “non-transportation contract” in the context of winter maintenance contracting recommendations. The term refers to property maintenance, parking lots, sidewalks, and stairs to the front of the buildings. In general, the term “non-transportation” refers to non-highway and road maintenance. A member clarified that industry term for paved areas within properties that receive vehicular traffic are not “roads” but are called “travel ways.”

Best Practices for Non-Professionals of Winter Maintenance

Best Practices for Drivers/Commuters

DEQ presented the [Draft Driver/Commuters Best Practices](#) document and noted the difficulty in directly associating best practices for drivers addressing the overuse of salt. DEQ asked for the workgroup's comments on the content, whether they support inclusion of this type of information as a recommendation in the final SaMS document. DEQ noted that their Communications staff was willing to develop the content into material suitable for use in outreach efforts.

Discussion points:

- All-wheel drive and 4-wheel drive does not improve traction when breaking.
- Emphasize the responsibility of community members in helping VDOT and property managers clear the roads.
- Emphasize the use of public transit as an alternative to driving by moving this up higher in the document. This statement should be matched with a prompt for people to check for changes in public transit service as a result of the winter weather.
- The primary message should be to avoid driving, getting on the road.
- The introduction needs to speak to the public.
- Consider social media to deliver the message to people. Links in the document including AAA and VDOT's travel snow page are useful and are good as-is in the document.
- VDOT and Fairfax County volunteered to assist in development of material suitable for outreach efforts.
- There is a general agreement on the content of the Commuter/Driver Best Practices document.
- The document is going to be short and visually easy to use.

The discussion concluded with the workgroup supporting the content be included as a recommendation in the SaMS. They also supported, with assistance by communications staff and workgroup volunteers, development of outreach materials using the content for best practices directed towards residents and drivers/commuters. Draft materials will be shared with the workgroup for their review and feedback.

Best Practices for Residents

DEQ presented the [Draft Residential Best Practices](#) materials. Workgroup members discussed the content of the materials and provided some comments.

Discussion points:

- Workgroup members recommended adding a note about choosing what needs clearing during maintenance and recommend using as little deicer as necessary and to do so strategically.
- Wood ash is a better abrasive material compared to its deicer capabilities. Workgroup member experience is that it is a very good abrasive.
- "Human health impact" of the chloride deicers should be emphasized at the top of materials to help the user identify with the impacts from over use of salt.
- A workgroup member recommended to:
 - Encourage people to install salt-tolerant plants for reducing the effect of salt.
 - Communicate strategically and minimally with HOAs.
 - Pets and children should be mentioned to get people's attention.
 - Identify what substances are illegal to sell in Virginia (i.e. products containing urea).

- VDOT and Fairfax County volunteered to assist in development of materials suitable for outreach efforts.

The discussion concluded with the workgroup supporting the content be included as a recommendation in the SaMS. They also supported, with assistance by communications staff and workgroup volunteers, development of outreach materials using the content for best practices directed towards residents and drivers/commuters. Draft materials will be shared with the workgroup for their review and feedback.

Non-Chloride Deicers

Non-Chloride Deicer Matrix

Erfaneh Sharifi, ICPRB, presented the [Draft Non-Chloride Deicer Summary Matrix](#). DEQ mentioned that the reasons for selecting these materials was these deicers do not contain chloride and show promise to work as a deicer.

Discussion points:

- These are the currently known, effective non-chloride deicers.
- The matrix did not generate much discussion or concerns from the members present.
- Somewhat relatedly, one member recommended pilot projects be conducted on non-chloride deicers, beyond those identified in the matrix. The specific comment, provided in written form during the meeting, is provide below:
 - “That the Virginia Departments of Transportation and Environmental Quality conduct research, including pilot programs, on non-chloride deicers based on paved surfaces to identifying the efficiency, potential, availability, and economic viability and cost benefits of deicing alternatives to chloride deicers with fewer human health and environmental effects.”
 - Discussion surrounded this idea would need vetting as this recommendation was new for this workgroup and suggested possible framing the recommendation in the SaMS with a degree of flexibility.

No additional revisions to the matrix based upon discussions were identified. The comment recommending piloting of non-chloride deicers will be reviewed for inclusion as a recommendation in the SaMS.

Deicer Piloting Process

Will Isenberg, DEQ, presented the [Process for Piloting New Deicers/Mixtures document](#). Workgroup members discussed the document and provided some comments.

Discussion points:

- VDOT has a research council and could potentially support piloting research on non-chloride deicers. They mentioned they have a process and are coordinating this draft material internally with the relevant department for input.
- There is a big gap between results in laboratory studies on non-chloride deicers from results from field studies. A workgroup member wondered if it might be worth changing the order of the document from “lab→environmental→field” to “lab→field→environmental”. DEQ explained the rationale for putting the testing for environmental impacts before field tests, since

it seemed reasonable to understand environmental impacts before introducing it to the environment. The workgroup member agreed.

- Chronic toxicity effects, in addition to acute toxicity effects, should be mentioned in the write-up.
- Environmental thresholds for toxicity and life cycle analysis of the non-chloride deicers should be added to the document.
- Difficult to determine if the results are “favorable” without parameters of what that means.

The draft piloting process will be revised to address the comments received. Draft materials will be shared with the workgroup for their review and feedback.

Contracting for Non-Transportation Winter Maintenance

Sarah Sivers, DEQ, lead the discussion on follow-up to an action item pertaining to strengthening winter maintenance contracts for properties (sidewalks, parking lots, travel ways) to support of enhanced best practices. The discussion was guided by material drafted, “Contracting for Non-Transportation Winter Maintenance” which was heavily informed by the [City of Edina’s winter maintenance contract template](#) and its accompanying [explanatory memorandum](#).

Discussion points:

- Fairfax County is currently in the process of redoing some of the existing winter maintenance contracts for property management.
- The pricing section of the City of Edina’s contract document acknowledges that BMP use has an impact on costs, which could be higher or lower than costs that do not employ best practices.
- It is important to highlight “How is the BMP use incentivized?”
- Potential for liability relief is important to highlight as it is an important incentive. However, the members expressed concern of this group making such a statement due to the legality surrounding that topic. Therefore, the group felt it was premature at this time to pursue this topic due to need for involvement of legal staff.
- Workgroup members agreed that while this aspect has merit for future consideration, at this time they do not support recommendations in the SaMS that address winter maintenance contracts. They recommended it be a future recommendation, something that is revisited after SaMS has been implemented for a sometime and after the City of Edina’s winter maintenance contract template has had experience in implementation as well.

No further work on this action item is needed due to the decision of the workgroup not to proceed on this topic.

Comparison of Existing Certification and Training Programs

Erfaneh Sharifi, ICPRB, reviewed the [Comparison of Salt Management Certification Programs](#). This comparison provided a more in-depth review of 4 programs that were identified to be applicable to Virginia, both in that those address best practices proposed to be recommended in the SaMS and persons in Virginia could access the training. Workgroup members discussed the certification programs.

Discussion points:

- DEQ noted that at the last meeting when an overview of 10 programs was provided, the workgroup requested a more detail review of 5 of those programs. Due to an oversight, the

current document only reviewed 4 programs. The document will be updated to include the 5th certification program, SIMA.

- A workgroup member suggested looking at Maryland's certification program (MD Snow College).
- A note should be added about where and how the training is offered. Such as if training is available online or if the person must travel, since that would entail additional costs, such as traveling to conferences for the American Public Work Association (APWA).
- Workgroup member asked if any of the programs were offered in other languages, such as Spanish, which would expand the programs availability.
- Incentives for certification programs should be discussed in SaMS.
- The workgroup discussed how this material should be presented in the SaMS. If it should remain a resource or if the workgroup wanted to consider development of a recommendation that would further either its or support. The workgroup decided the material should remain a resource for the SaMS. .

The materials will be revised based upon the comments received during the meeting. The revised draft will be shared with the workgroup for their review and feedback.

Meeting Wrap-up:

At the conclusion of the meeting, it was unclear whether finalizing the group's recommendations for incorporation into the SaMS is better served by an in-person meeting, a conference call, or through email exchange. Following the meeting, DEQ proposed to poll the workgroup on their preference of a conference call or an in-person meeting, to enable any discussions that may benefit from either of those formats.

DEQ reiterated the follow-up action items identified during the meeting. Materials still needing revision will be shared with the workgroup for review with associated review deadlines. Following that round of review, a meeting or conference call will be held in January 2020 (to be scheduled using the results of a recent Doodle Poll) to provide opportunity for additional discussions prior to those materials being incorporated into the SaMS document.

Handouts from the meeting are available on the SaMS Meeting Materials [website](#).

All information, questions, additional resources, etc. should be emailed to Will Isenberg (william.isenberg@deq.virginia.gov) and Sarah Sivers (sarah.sivers@deq.virginia.gov) to reduce email traffic among NTB workgroup members.

Meeting notes were prepared and submitted by the Interstate Commission on the Potomac River Basin.

Additional Feedback Contributed to the Follow Up Survey:

A survey was shared with workgroup members following the meeting to capture any additional thoughts members may have had following the meeting. Feedback is arranged below based on the sections of the agenda. Only sections where additional thoughts were provided are included:

Best Practices for Non-Professionals of Winter Maintenance:

“Finding that soft but educational approach to BMPs to reach those Project/Community Managers so it can reach the Residents”

Deicers

“There is still some research that needs to be looked at for this area and shared throughout the NCR. I think we are headed down the right path, we have to be careful not to force cost on any one jurisdiction”

“Still hoping we can do more on alternatives to salt.”

Contracting for Non-Transportation Winter Maintenance

“My concerns are the same, we need further review. Keep it just needs more investigation.”

Other

“It was also helpful to have a description of our process, what’s behind and what’s ahead.”