

From: skarlin@triverus.com
To: [Larson-Pugh, Laurie J](#)
Subject: RE: Follow up from MCV pervious cleaning demo at NEBC Washington.
Date: Tuesday, December 1, 2020 8:54:44 AM
Attachments: [image001.png](#)
[image002.png](#)

Yes, we do. The technology works great with both.

We have also done pavers, with improvement, but the process can remove a fair amount of aggregate between the pavers as part of the process, meaning it has to be cleaned and reinstalled. It works, but to me, it is a sloppy and work intensive process when that side effect is considered.

Here is the link to the UNHSC study.

https://triverus.com/wp-content/uploads/2020/05/Triverus-infiltration-and-cleaning-report_FINAL_10-19-UNHSC-1.pdf

Thanks for the call. I am looking forward to participating in your meeting in whatever way works for you all.



Steve Karlin
Marketing and Operations Director VT
Triverus Cleaning and Environmental Solutions LLC
Phone 920-252-9314
www.triverus.com

From: Larson-Pugh, Laurie J <laurie.larson-pugh@wsu.edu>
Sent: Tuesday, December 1, 2020 10:48 AM
To: 'skarlin@triverus.com' <skarlin@triverus.com>
Subject: RE: Follow up from MCV pervious cleaning demo at NEBC Washington.

Good morning Steve,

It was great to speak with you this morning. I forgot to ask if you maintain both of the porous materials, concrete and asphalt?

Laurie Larson
Municipal Program & MuniCon 2021 manager
WSU Puyallup Research Center & Washington Stormwater Center
2606 W. Pioneer, Puyallup, WA 98371-4500
253-445-4593o 360-271-8032c



From: skarlin@triverus.com [<mailto:skarlin@triverus.com>]

Sent: Monday, November 30, 2020 8:18 AM

To: Larson-Pugh, Laurie J <laurie.larson-pugh@wsu.edu>

Subject: FW: Follow up from MCV pervious cleaning demo at NEBC Washington.

Good morning, Laurie.

I assume you took some good time off for Thanksgiving. I am just checking up if you got my email below about a presentation to your group? Thanks.

Steve Karlin
Marketing and Operations Director VT
Triverus Cleaning and Environmental Solutions LLC
Phone 920-252-9314
www.triverus.com

From: skarlin@triverus.com <skarlin@triverus.com>

Sent: Monday, November 23, 2020 4:17 PM

To: 'Larson-Pugh, Laurie J' <laurie.larson-pugh@wsu.edu>

Subject: RE: Follow up from MCV pervious cleaning demo at NEBC Washington.

Hi, Laurie

Thanks for the invite. I think I can put together a reasonable presentation for you. The sample presentation you linked me to was around 35-40 minutes long if I remember right. But I doubt if I could fill your entire 2-1/2 hour gap without resorting to my hand-shadow show! I would probably put something together based on the maintenance guide I think you referred to, and a pervious recovery study we participated in at the University of New Hampshire Stormwater Center. Does that sound like it would work?

Steve Karlin
Marketing and Operations Director VT
Triverus Cleaning and Environmental Solutions LLC
Phone 920-252-9314
www.triverus.com

From: Larson-Pugh, Laurie J <laurie.larson-pugh@wsu.edu>

Sent: Monday, November 23, 2020 3:49 PM

To: 'skarlin@triverus.com' <skarlin@triverus.com>

Subject: RE: Follow up from MCV pervious cleaning demo at NEBC Washington.

Steve,

I was asking for the Regional Operations and Maintenance Program (ROAD Map) which is:

To address requirements in the permit related to municipal operations and maintenance (O&M) activities, as well as collaboration between permittees, a regional coordination program was developed in July of 2007. ROAD MAP (Regional Operations and Maintenance Program) was created to serve as a forum for identifying, discussing, and developing strategies for implementing O&M-related permit requirements. Local jurisdictions were invited to participate in a series of meetings and to serve on committees dealing with various permit elements.

I was asking for the ROAD Map Dec. 8 between 1-3:30. You can view the last meeting presentations at: <https://www.wastormwatercenter.org/road-map/>

Would you be able to present at the Dec. 8 ROAD Map meeting?

Laurie Larson

Municipal Program & MuniCon 2021 manager

WSU Puyallup Research Center & Washington Stormwater Center

2606 W. Pioneer, Puyallup, WA 98371-4500

253-445-4593o 360-271-8032c



From: skarlin@triverus.com [<mailto:skarlin@triverus.com>]

Sent: Monday, November 23, 2020 8:25 AM

To: Jayakaran, Ani <anand.jayakaran@wsu.edu>; Larson-Pugh, Laurie J <laurie.larson-pugh@wsu.edu>

Subject: RE: Follow up from MCV pervious cleaning demo at NEBC Washington.

Hello, Laurie and Ani.

Thanks for this follow up email. I am flattered that my little NEBC presentation and follow up message has found a result!

I will gladly talk to you about a presentation or helping you in any way I can. Hans had previously told me about his work with WSU, but I assumed the stormwater center was in Pullman. I did not know you had a place in Puyallup.

I just signed up as an exhibitor for the NEBC Business and the Environment Conference on December 8-9. It is suspicious that these dates match your inquiry. Is that what you are talking about?

By the way, that same week we are supposed to do a pervious cleaning demonstration for the city of Puyallup weather permitting.

Feel free to call me at 920-252-9314 at your convenience to discuss. Thanks.

[Redacted]

Steve Karlin
Marketing and Operations Director VT
Triverus Cleaning and Environmental Solutions LLC
Phone 920-252-9314
www.triverus.com

From: Jayakaran, Ani <anand.jayakaran@wsu.edu>
Sent: Saturday, November 21, 2020 12:58 PM
To: Larson-Pugh, Laurie J <laurie.larson-pugh@wsu.edu>; skarlin@triverus.com
Subject: FW: Follow up from MCV pervious cleaning demo at NEBC Washington.

Hi Steve,

I wanted to introduce myself and my colleague Laurie Larson – we are both with the Washington Stormwater Center - WSU. I work on improving GSI design, installation, and maintenance. Laurie works with local municipalities providing them resources to help them meet their stormwater permitting needs.

Karen Dinicola suggested in September (see email thread below) I get in touch with you to talk more. However the last couple of months have been crazy, and promises to be till the end of the year. I hope we can talk more substantially in 2021. I have met Hans Vogel, he's even been out to our facility in Puyallup to demo the MCV.

I am writing today because my colleague is looking for possible speakers to present their ideas at a meeting on 12/8. She asked me, but I can't do it. Plus, I think your material will be better.

Laurie – see this email thread below with Karen. There is a huge need for me to develop content on cleaning of permeable pavements. But it sounds like Steve might be your guy for your presentation needs, if he is available and willing.

I will leave it to the two of you to decide if Steve can present. If not, that's fine too of course - and Steve, I will be in touch later to schedule a one on one with you.

Thanks,

Ani

Ani Jayakaran, PhD PE - Associate Professor
Washington State University Extension
Puyallup Research and Extension Center
2606 W Pioneer Ave, Puyallup, WA 98371
253-445-4523 (Pronouns: he/him/his)
<https://labs.wsu.edu/jayakaran/>

From: Jayakaran, Ani <anand.jayakaran@wsu.edu>

Date: Thursday, September 17, 2020 at 2:04 PM

To: Dinicola, Karen (ECY) <KDIN461@ECY.WA.GOV>

Subject: RE: Follow up from MCV pervious cleaning demo at NEBC Washington.

Thank you Karen, I have met Hans Vogel in the past, he actually came out and cleaned our pavements in Puyallup a couple of years ago. I will reach out to Steve though. Thank you for making the connection. - Ani

From: Dinicola, Karen (ECY) <KDIN461@ECY.WA.GOV>

Sent: Wednesday, September 16, 2020 12:41 PM

To: Jayakaran, Ani <anand.jayakaran@wsu.edu>

Subject: FW: Follow up from MCV pervious cleaning demo at NEBC Washington.

Hi Ani, I'm following up on my chat.

It's a commercial vendor, but his presentation was interesting and included a "myths and facts" approach to sharing info that could be a compelling approach to transfer knowledge to and among permittees. If you contact Steve he might share the presentation or spend some time sharing his thoughts/knowledge/sources of info.

Karen Dinicola, LG, LHG, EIT | Senior Policy Lead | Ecology Water Quality Program HQ | (360) 407-6550

From: skarlin@triverus.com <skarlin@triverus.com>

Sent: Wednesday, September 16, 2020 9:29 AM

To: skarlin@triverus.com

Subject: Follow up from MCV pervious cleaning demo at NEBC Washington.

Good morning:

Thanks for taking the time to watch our pervious cleaning demo tape at NEBC stormwater last week. There is nothing like a virtual demonstration at a virtual conference!

I am attaching a digital copy of our pervious maintenance guide in case you did not download a copy from our sponsor page during NEBC. The intention of the maintenance guide is to help municipalities plan out an effective maintenance program for their current pervious surfaces, or be aware of best maintenance practices from the early stages of their stormwater planning. A combination of conventional sweeping and high pressure flushing can provide excellent pervious performance over the long haul at a reasonable cost.

MCV cleaning technology can also lift and contain adhered solids, oil and gas residue, and heavy metals from non-pervious surfaces, removing them from your stormwater outflows,

The same cleaning technology can be used to beautify decorative pavements in downtown and other public spaces. An optional walkaway unit, not shown in the demo video, allows close cleaning around and behind bike racks, benches, and other decorative obstructions.

We do have an MCV in the Northwest that is available for both demonstrations and contract services.

Thanks again for your interest.



Steve Karlin
Marketing and Operations Director VT
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