

## Council of the District of Columbia 1350 Pennsylvania Avenue, N.W. Washington, D.C. 20004

MARY M. CHEH
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January 21, 2022

Director Tommy Wells District Department of Energy & Environment 1200 First Street NE Washington, DC 20002

**Dear Director Wells:** 

As you know, DC Water is preparing to begin work on its long-planned sewer rehabilitation project in Soapstone Valley Park. This project aims to rehabilitate aging and defective sewer pipes in the park, primarily through a process known as cured-in-place pipe, or CIPP, lining. CIPP is a "trenchless" technology, meaning that excavation—and the disturbance to residents, their property, and the environment that comes with it—is largely not necessary to rehabilitate the pipeline. The technology involves insertion of a special lining coated with resin into the pipe, which is then cured; the curing process is typically accomplished through one of three methods: steam, hot water, or UV light.

Residents living adjacent to Soapstone Valley, including commissioners of the affected ANC, 3F, have raised significant concerns about DC Water's plans to use steam-cured or hot water CIPP for the rehabilitation work occurring in Soapstone Valley; I've attached ANC 3F's resolution on the project here for your convenience. Residents' concerns are specific to the potential for air and water contamination from the use of both steam- and hot water-cured CIPP. In fact, they have shared a number of analyses with me, undertaken by Professor Andrew Welton of Purdue University, that suggest that both steam- and hot water-cured CIPP may pose a substantial health and safety risk.

Professor Welton's findings are deeply concerning, especially since DC Water intends to use this technology not just in Soapstone Valley, but across the District, including at its next project site in Glover Archibald Park. I believe that DOEE's Air Quality Division has previously reviewed this technology, including the degree to which CIPP results in the release of any air-borne toxins; please provide me with a summary of that Division's findings for each type of CIPP. In addition, it has been suggested to me that contaminants released as part of the CIPP process may end up not just in the air, but in our water system, by leeching into water from the

rehabilitated pipes or as contaminants in our groundwater. Has DOEE's Water Quality Division assessed the CIPP technology, as well? If so, please also provide me with the results of those assessments. If not, I would ask that the Division take up such an assessment as soon as possible. And, in either instance, please share with me whether you believe that use of CIPP should require a permit from the Water Quality Division, in addition to Air Quality.

Finally, it is my understanding that, while DC Water's plans for this project have undergone an environmental assessment, that assessment was completed by DC Water itself, not a third party, and that DC Water did not examine the impact of CIPP technology on Soapstone Valley broadly enough; that is, it did not weigh the different environmental impacts of steam-, hot water-, and, in particular, UV light-cured CIPP. Can you provide me with information on the scope of this environmental assessment, and whether these various technologies were separately considered? If not, it would be prudent for a second, more thorough assessment to be completed before work on this project commences—and for that assessment to be completed by an entity other than DC Water.

Thank you for your attention to this matter. Should you wish to contact Professor Welton regarding his findings, I understand he may be reached at <a href="https://www.awhelton@purdue.edu">awhelton@purdue.edu</a>.

Sincerely,

Councilmember Mary M. Cheh

cc: Lucinda Babers, Deputy Mayor for Operations and Infrastructure David Gadis, General Manager, DC Water Peter May, Associate Area Director, National Park Service

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# ANC 3F Resolution Urging Immediate Action to Halt Permitting Process for Use of Thermal CIPP Methods in Soapstone Sewer Rehabilitation Project January 18, 2022

#### **Background**

WHEREAS, the District of Columbia ("DC") owns sanitary sewers and manholes, and stormwater sewers and outfalls (collectively, the "Assets") in Soapstone Valley, located in ANC 3F in Northwest Washington, DC;

WHEREAS, DC has entrusted the management, operation, and maintenance of the Assets to DC Water ("DCW");

WHEREAS, the Assets are situated on land managed by the National Park Service ("NPS") and on nearby DC-owned rights of way ("ROWs") managed by the District of Columbia Department of Transportation ("DDOT");

WHEREAS, Soapstone Valley Park is administered in part by Rock Creek Park, a unit of the NPS;

WHEREAS, rehabilitation of some or all of the Assets, dating to 1908, has been under consideration by DCW since 2009, leading to the Soapstone Valley Creek Bed Sewer Rehabilitation Project (the "Soapstone Project");

WHEREAS, in 2010, DCW hired two engineering firms it often consulted - Greeley and Hansen, and Delon, Hampton & Associates - to inspect the Assets and assess their condition, resulting in the March 15, 2011 Sewer Assessment report, rich in data, context and analysis, which recommended the ultraviolet cured-in-place pipe ("UV CIPP") method for the Soapstone Project;

WHEREAS, the Soapstone Project involves the rehabilitation of 6,200 linear feet of sanitary sewer pipes and 29 manholes, and protection of exposed pipes at six stream crossings, and the repair of two MS4 stormwater outfalls;

WHEREAS, since at least June 18, 2013, DCW has participated in meetings involving nearby residents and other community stakeholders reporting on the status of the Soapstone Project,

and such updates, opinion articles and reader commentary have been covered extensively by the *Forest Hills Connection* ("FHC"); and

WHEREAS, ANC 3F and ANC 3F's Parks & Trails Standing Committee have conducted site visits, drafted recommendations, passed a formal resolution, and sought information about the Soapstone Project over the years.

#### The NEPA Process

WHEREAS, the National Environmental Policy Act ("NEPA") directs federal agencies (including the NPS), when planning projects or issuing permits, to conduct environmental reviews and analyses, and highlight adverse environmental impacts of proposed actions so that decisionmakers have complete information on whether and how to proceed, guaranteeing public input during such processes;

WHEREAS, the NPS is the lead federal agency, responsible for preparing the required Environmental Assessment ("EA"), and reviewing, approving and permitting DCW's proposed Soapstone Project;

WHEREAS, the NPS shifted its responsibility to prepare the required EA of the proposed Soapstone Project to DCW, which in turn contracted with the firm of Hazen and Sawyer;

WHEREAS, following Hazen and Sawyer's EA, dated June 4, 2019, the NPS issued a Finding of No Significant Impact ("FONSI") on April 14, 2020 stating that "NPS prepared the EA" (despite NPS having had DCW prepare the EA - the same agency that proposed the very project that was the subject of the EA)<sup>1</sup>;

WHEREAS, Hazen and Sawyer's EA recommended the "selected alternative" of the "trenchless technology," cured-in-place pipe ("CIPP") – but *did not* distinguish among CIPP methods and *did not* assess the environmental or human health risks and benefits of each CIPP method, rather "leaving it up to the contractor to choose...."<sup>2</sup>;

WHEREAS, CIPP is the industrial manufacture of plastic in the open air, and Hazen and Sawyer's EA failed to evaluate and address the polluting impacts of any CIPP method on air or water, including impacts from the removal of hundreds of trees to be cleared for heavy equipment<sup>3</sup>;

ANC 3F

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<sup>&</sup>lt;sup>1</sup> 20200401 ROCR Soapstone Valley Park Sewer Rehabilitation FONSI (SIGNED).pdf https://parkplanning.nps.gov/document.cfm?parkID=198&projectID=47855&documentID=103088

<sup>&</sup>lt;sup>2</sup> FONSI, Appendix C, Topic: Alternative Solutions <u>20200401 ROCR Soapstone Valley Park Sewer Rehabilitation</u> FONSI (SIGNED).pdf.

<sup>&</sup>lt;sup>3</sup> DCW has stated that the majority of trees are being removed or pruned to allow for heavy equipment access, required by the steam CIPP method. The extent of tree loss and damage is vague; FONSI states: "371 trees will be removed, 74 trimmed, that the construction contractor will finalize tree removal within the LOD. Trees outside of the LOD will also be impacted, as well as trees adjacent to the LOD."

WHEREAS, Hazen and Sawyer's EA failed to consider the human health risks associated with the use of different CIPP technologies;

WHEREAS, ANC 3F unanimously passed a Resolution, dated July 23, 2019, "urging DC Water to take needed steps outside the EA [including] consideration of UV curing for the lining method and to provide additional justification for DC Water's preferred choice of steam" and stating that "UV may be superior environmentally for some or all of this CIPP as well in DDOT ROW, and that UV CIPP entails less heavy equipment (HE) and tree removal," also identifying a need for improvements in transparency and cooperation in the NEPA process [see <u>Exhibit A</u> for ANC 3F's July 23, 2019 Resolution];

WHEREAS, DCW hired a contractor for the Soapstone Project that practices only the steam and hot water CIPP methods (both of which are thermal processes), but not the UV CIPP method, even though studies show that the UV technology is three to five times stronger, less polluting, and carries a smaller environmental footprint, albeit, a more expensive option;

WHEREAS, ANC 3F's July 23, 2019 Resolution and related requests from the community to consider environmental and health impacts during the NEPA process have been ignored;

WHEREAS, significant discrepancies between the 2011 Sewer Assessment report and Hazen and Sawyer's EA have never been addressed by DCW despite repeated inquires by the public, community stakeholders, the FHC and ANC 3F<sup>4</sup>; and

WHEREAS, ANC 3F has repeatedly informed DCW that their NEPA process lacked necessary transparency and communication with stakeholder parties.

#### **Human Health Risks & Environmental Impacts**

WHEREAS, with respect to adverse health and environmental impacts, steam and hot water CIPP (together "thermal CIPP") are essentially the same because both heat resins which contain volatile organic compounds or "VOCs";

WHEREAS, thermal CIPP methods raise serious health and safety concerns for children in a nearby preschool, and residents of neighboring homes and large apartment buildings, as well as adjacent businesses<sup>5</sup>;

ANC 3F

 $<sup>^4\</sup> https://www.foresthillsconnection.com/news/opinion-ive-seen-a-rich-thoughtful-analysis-of-the-soapstone-sewers-the-2019-ea-isnt-it/$ 

<sup>&</sup>lt;sup>5</sup> Two months ago, a middle school in Wisconsin had to close because of a nearby steam CIPP project where children and staff were found with carbon monoxide in their blood and styrene indoors. https://www.wpr.org/spooner-middle-school-reopens-identifies-chemical-exposure-sickened-64-students-and-staff

WHEREAS, a wide range of news coverage, including the journal *Scientific American* (2019), reports serious concerns about air and water pollution caused by CIPP, coupled with the lack of regulations specifying environmental and public health protections;

WHEREAS, peer-reviewed articles in academic journals document growing concerns about the environmental impacts on air, water and trees, and the human health risks of thermal CIPP – the method that DCW has selected;

WHEREAS, to date, at least 150 health incidents across 29 states have been reported, many involving children, and several states, including Virginia, have placed temporary bans on thermal CIPP processes and required stricter containment, monitoring and public advisories;

WHEREAS, Wall Street analysts report that the safest and most effective technology, and one that will experience enormous growth in the next few years, is UV CIPP<sup>6</sup>;

WHEREAS, DCW did not select the UV CIPP method for the Soapstone Project even though its own 2011 Sewer Assessment report recommended UV CIPP;

WHEREAS, although the FONSI states that "NPS has determined that the Selected Alternative [CIPP] can be implemented without significant adverse effects as defined in 40 CFR 1508.27," CIPP (the industrial manufacturing of plastics in the open air) discharges high amounts of toxins including suspected carcinogens, hazardous pollutants, and suspected endocrine-disrupting compounds<sup>7</sup>;

WHEREAS, Soapstone Park is designated a national historic site, and the Clean Air Act and Clean Water Act give NPS the legal responsibility to protect air and water quality and sensitive resources in parks;

WHEREAS, ANC 3F has repeatedly informed DC Water that efforts to contact and inform residents around Soapstone Valley have been inadequate;

WHEREAS, DCW, having never considered the UV CIPP method, entered into a contract with IPR

ANC 3F 4

<sup>&</sup>lt;sup>6</sup> UV-Cured resins market is likely to witness an impressive CAGR of 7.9% during the forecast period. Stringent regulation towards VOC emission and increasing demand for environment-friendly products are the major factors propelling the demand for UV-cured resins in the global market. (from *Stratview Review*, covering the period 2020-2025).

<sup>&</sup>lt;sup>7</sup> The waste from the manufacture of plastic is a mixture of partially-cured resin droplets, particulates, organic vapors (styrene and more than 29 other measurable VOCS and SVOCs) and some water vapor. https://pubs.rsc.org/en/content/articlelanding/2020/EM/D0EM00190B

https://www.foresthillsconnection.com/news/opinion-upcoming-soapstone-sewer-work-will-use-a-method-thats-toxic-to-humans-and-the-environment-there-is-another-way/

Northeast, a steam and hot water CIPP contractor in July, 2021;

WHEREAS, certain required permits from the NPS and other agencies have not yet been granted, residents have requested that NPS delay the Special Use Permit; and

WHEREAS, the DC Department of Energy and Environment ("DOEE"), whose director simultaneously serves as DCW Board Chair, has not been actively engaged in the entirety of the process for the Soapstone Project (apart from the outfall permit).

#### **THEREFORE, ANC 3F urges:**

- 1. **Mayor Bowser** to (i) pursuant to DC Code Section 8-101.05, exercise her authority to safeguard and preserve air quality in the District of Columbia, and (ii) pursuant to DC Code Section 8-101.5g, order suspension of the process for permitting the Soapstone Project;
- 2. DCW to (i) immediately suspend its plans for the Soapstone Project and the related permitting process in light of the irreparable environmental harm and human health risks that could result if permits are granted and the Soapstone Project proceeds using the steam or hot water CIPP method without adequate systems for monitoring, capturing and disposing of waste; and (ii) conduct a thorough review of the UV CIPP process and its feasibility in different regions of the Soapstone Project area of work, and generate a report with analyses and recommendations that will be reviewed by an independent, impartial third-party expert;
- 3. **DOEE** to (i) regulate thermal CIPP and not make the irrelevant distinction between "steam" and "hot water" CIPP methods; (ii) require DCW to obtain a Chapter 2 air pollution permit to construct and operate a stationary source of air pollution; and (iii) require proof of Clean Air Act and Clean Water Act pollution permits prior to commencement of the Soapstone Project; and (iv) engage an independent, impartial third-party expert to review the reports (e.g., analyses, EAs, generated in connection with the Soapstone Project going forward)<sup>8</sup>; and
- 4. **NPS** <u>not</u> to issue any permits for the Soapstone Project until there is the equivalent of a new EA or analytic study that evaluates the health risks and environmental impacts of both the UV and the thermal CIPP methods in comparison to each other, and establishes a system of controls and mitigation for monitoring and capturing emissions and disposing of waste off site (including a shutdown process), which will be reviewed by an independent, impartial third-party expert <sup>9</sup>.

ANC 3F 5

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<sup>&</sup>lt;sup>8</sup> In his March 31, 2021 letter to incoming EPA Administrator Michael S. Regan, Professor Andrew Whelton documents the overwhelming trend and scientific evidence resulting in application of the Clean Air Act and Clean Water Act to other industries (e.g., fiberglass boat manufacturers), and that these Acts should be and will be applied to CIPP. He emphasizes that with appropriate controls, now not in place, "the CIPP practice can likely be used without jeopardizing human health and the environment."

<sup>&</sup>lt;sup>9</sup> There are more than 29 volatile (VOC) and semi-volatile (SVOC) compounds confirmed to be in the air alone during a steam CIPP installation. During the curing process, particulates, droplets, partially cured resin, organic vapors and water vapor are created and released.

BE IT FURTHER RESOLVED, that Commissioners Mehta and Wall are authorized to speak on behalf of ANC 3F regarding this matter.

ANC 3F approved this resolution at its meeting on January 18, 2022, which was properly noticed and at which a quorum was present, by a vote of 6 in favor, 0 opposed, and 0 abstaining.

Claudette David Chair, ANC 3F

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