



September 24, 2021

SENT VIA EMAIL

Wisconsin Department of Natural Resources
DNR NORTHEAST REGION
Attn: Mr. David Neste
Department of Natural Resources
2984 Shawano Avenue
Green Bay WI 54313

**RE: Response to Review of Off-Site Liability Exemption Request
Appleton Wire (Former) – Site 2
908 N. Lawe Street, Appleton, WI
BRRTS No. 02-45-587658 / DNR FID# 445035910**

Dear Mr. Neste:

On behalf of Luvata Appleton LLC (Luvata), ENVOCOR LLC (Envocor) submits the following response to the Wisconsin Department of Natural Resources's (WDNR) letter, dated August 17, 2021 (the WDNR Response Letter), regarding its review and associated comments to Luvata's Off-Site Liability Exemption Request, dated June 18, 2021 (the June 18 Request Letter).

As a preliminary matter, Luvata would note that the June 18 Request Letter sought both an "off-site liability exemption" and a "liability clarification" from the WDNR pursuant to Wis. Stats. § 292.13 and § 292.55. The WDNR Response Letter's initial denial and associated comments did not distinguish between the two requested exemptions. For purposes of this submittal, Luvata has assumed the initial denial applied equally to both.

While Luvata disagrees with the WDNR's position that insufficient information has been presented to date to justify the issuance of either exemption, it has included additional information to further assist with the WDNR's consideration of such matters, as further summarized below.¹

¹ For purposes of this submission, all applicable information referenced and attached to the submission, dated [September 2021], by EnviroForensics on behalf of Albany International Corp.

WDNR COMMENT NO. 1:

Insufficient information has been provided to rule out Luvata's current on-site operations as a potential source. More details and information on operations and processes conducted at the site, as well as details on specific chemicals involved should be presented to rule out current operations as a potential source.

LUVATA RESPONSE NO. 1:

As noted in the June 18 Request Letter, a detailed review by Luvata of its prior and current operations identified that it has never used PFAS compounds, and more specifically the compounds that were identified by Albany's prior PFAS site sampling event. To help further expand on this point, a brief history of operations conducted by Luvata and others at the subject site, along with a more detailed explanation of current operations, is provided here:

As WDNR is aware, as of the 1940s, Appleton Wire Works Company occupied the site, which ultimately Albany's Cast Wire Division operated at the site beginning in 1963 until approximately 1984, when a predecessor-in-interest to Luvata took over on-site operations. Luvata's operations at the subject site involve brass and bronze copper alloy wire manufacturing. The major operations conducted at the facility consist of casting, rolling, annealing, drawing, electroplating, pickling and rewinding of brass wire products. Luvata and its predecessors-in-interest have only manufactured bare brass and bronze wire and rod, without any casing or coatings. Accordingly, the need for PFAS-related resistance was not, and has not, been present as part of its operational needs.

To further elaborate, Luvata's operations can be classified into two distinct categories, both of which are described in detail below:

WIRE AND ROD MANUFACTURING

The same processes have been used on-site by Luvata and its predecessors-in-interest since starting site operations in 1984 for the manufacturing of brass and bronze wire and rod. This process is fairly straightforward. Virgin copper and zinc are mixed with varying levels of clean scrap metal and melted in small electric induction furnaces, where the molten metal is "updrawn" from the melt through cooling dies to produce coiled rod that is approximately one inch in diameter.

Further processing of the rod requires it to be passed through wire drawing machines to reduce the diameter to customer specifications. The wire drawing machines utilize a mixture of various emulsified petroleum and hydrocarbon based wire drawing lubricants to keep the drawing dies

lubricated. The vast majority of the lubricants consist primarily of heavy paraffinic hydrotreated distillates.

Some wire drawing machines use pure powdered soap in lieu of emulsified wire drawing lubricants for the drawing die. This soap, manufactured by the Dial Corporation, consists of C14-18 and C16-18 unsaturated, sodium salts and C8-18 and C18 unsaturated, sodium salts.

As stated in the June 18 Request Letter, Luvata, through its consultant Envocor, conducted an exhaustive review of over five hundred (500) Material Safety Data Sheets (MSDSs) and Safety Data Sheets (SDSs) on record, and found no organic fluorides or PFAS compounds to be listed as a component or ingredient in any of the materials that were used from both a current and historical perspective. This is consistent with the nature of on-site manufacturing operations, as the resistance benefits of PFAS would not be needed for the end-product being provided to its customers.

Periodically, depending on how many times the wire must be drawn down to a customer specified smaller diameter, it must be annealed to soften the metal. The annealing processes is simply an electrically heated furnace that heats the metal in an inert atmosphere of nitrogen and hydrogen gases. No chemicals are involved.

Once the wire or rod has reached it specified diameter, it is pickled and rinsed with water before being readied for shipment to Luvata's customers. The pickling solution is proprietary information, but Luvata can confirm that it definitively does not include any PFAS constituents. In some cases, it may be electroplated in-house (as described below), which is the second manufacturing category that occurs on-site. Again, this operation does not include any PFAS constituents.

ELECTROPLATING

Luvata provides tin electroplating on certain wire products, and has done so since 2001, when a new state-of-the-art tin line was installed. In 2004, a second tin electroplating line was installed. In 2007, a third electroplating line for nickel was installed, but was subsequently decommissioned and removed in 2018 due to changes in Luvata's product offerings. To date, both tin electroplating lines are still in operation. All process tanks are comprised of stainless steel and/or plastic and are located above the concrete floor. There have never been any releases from these tanks to the floor, much less the soils underneath the floor that could impact groundwater.

Here again, Envocor, on behalf of Luvata, reviewed all MSDSs and SDSs for the plating lines and found no chemicals that listed PFAS compounds as an ingredient in the chemical product.

Based on the above information, and without revealing detailed trade secrets on its processes and the chemicals employed, Luvata can say that PFAS compounds were not and are not used in any of the on-site operations during its and its predecessors-in-interest tenure.

WDNR COMMENT NO. 2:

Provide additional data to establish groundwater flow conditions and contaminant fluctuations. Also provide information as to the distribution of NR 140-compliant wells across the Property and use collected data to develop isoconcentration lines for individual PFAS compounds.

LUVATA RESPONSE NO. 2:

As indicated by Albany in its response to a similar WDNR initial liability exemption request denial, there has not been enough data developed from Albany's investigation and remediation project for hexavalent chromium contamination at the subject site to develop isoconcentration contours of PFAS compounds. Recall, Albany is solely responsible for that remedial program, including management, inventory, and operation of all NR 140-compliant wells. It is Luvata's understanding that this information has been provided to the WDNR through various submittals provided over time, for which such information is hereby incorporated by reference.

While Luvata understands there is not a basis to develop specific isoconcentration contours on PFAS constituents of concern, given the range of data and groundwater sampling activities conducted to date, there is a strong understanding of the flow direction and modeled hydrogeologic flow, which directly implicates an off-site source, which in this case, is Appvion. Accordingly, without further data generated by an upgradient, off-site source, the ability to generate appropriate models is not likely.

We trust that the WDNR has sufficient information (as can all be viewed on the BRRTS website) that shows nearby and adjacent properties upgradient and side-gradient to the subject site to be contaminated with numerous and varying contaminants from industries known to use PFAS compounds. These industries include the historical manufacturing and R&D of paper products by Appvion, which would be expected to have included non-food grade paper products in the past that are known to have used PFAS compounds. PFAS compounds are known to be used for the manufacture of food-grade paper products, and their use is even authorized by the U.S. Food and Drug Administration according to their website accessed on September 24, 2021

<https://www.fda.gov/food/chemical-contaminants-food/authorized-uses-pfas-food-contact-applications>).

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Consequently, Appvion should not be ruled out as a potentially responsible party simply because they are currently engaged in the manufacture of food-grade paper products.

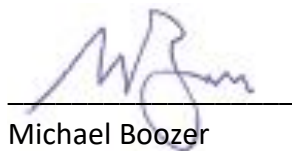
Appvion is located immediately to the South of the subject site and it must be stressed that PFAS contamination was identified to exist on their property. A second BRRTS Site, Sulpaco, located directly upgradient and adjacent to Luvata, experienced a wide variety of contamination from the handling, mixing, formulation, and management of printing inks, which is another industry known to have used PFAS compounds.

We believe a thorough review of the thousands of pages associated with these two potentially responsible parties, which Luvata has had ENVOCOR do an initial review, will lead to the clear need for additional PFAS sampling to occur on their properties, which can then be used to develop isoconcentration lines, which Luvata believes will show that any PFAS contamination on the subject site is originating from off-site sources. As such, Luvata will not be proceeding with generating any additional data or information associated with this matter and would recommend WDNR further engage known off-site potentially responsible parties, such as Appvion, Sulpaco, or other parties known to have impacted groundwater quality within the immediate vicinity.

Thank you for your time and consideration. Should you have any further questions regarding this submittal, feel free to contact me directly at your convenience.

Respectfully Submitted,

ENVOCOR LLC



Michael Boozer
President

Attachments

cc: Mr. Sam Edwards – Luvata Appleton LLC
Mr. Michael Hecker, Esq. – Hodgson Russ LLP