

March 15, 2019

**VIA EMAIL (matthewa.thompson@wisconsin.gov)
AND U.S. MAIL**

Mr. Matt A. Thompson
Hydrogeologist – Remediation & Redevelopment Program
Wisconsin Department of Natural Resources
1300 West Clairemont Avenue
Eau Claire, WI 54701

Re: Request for Information Related to Wood Waste Burning
Wauleco Site, 125 Rosecrans Street, Wausau, WI 54401
BRRTS #02-37-000006

Dear Mr. Thompson:

As you know, our firm represents Wauleco in connection with the above-captioned site. On behalf of Wauleco, this responds to the Department's January 15, 2019 request for information.¹ The request seeks information in Wauleco's possession concerning the historic burning of wood scraps conducted at the site more than three decades ago. We understand the Department's request to be a request for access to "Waste Records" concerning such burning of wood waste and have limited our response to such historic "records and documents" maintained by the facility related thereto.

Introduction

Although Wauleco is the current owner of the site, its connection to historic operations, and in particular those involving window treating and wood waste incineration, is limited. Multiple companies operated at the site in some form or fashion for more than 80 years. Wauleco's predecessor, SNE, did not acquire the facility until late 1981. All PCP use at the facility ceased in 1986. Manufacturing operations ceased in March 1991 and site demolition was completed by 1993.

Wood surface coating² using a pentachlorophenol (PCP)/minerals spirits/paraffin mixture occurred at the site from approximately 1944 to 1986, or 42 years. Wauleco was involved in the operation of the site for only approximately the last four years of PCP use, or less than 10% of the facility's operating life where PCP was used. When concerns about PCP began to be raised, Wauleco promptly researched alternative products and discontinued PCP use. Despite

¹ The Department provided Wauleco with the information on which it based its January 15, 2019 request. That information consists of an undated newspaper clipping, an excerpt of a report filed in contested litigation, and a 1984 document which contains the phrase: "the wood scraps are burned".

² Although the term "treatment" has been used throughout this project, the correct term is wood "coating." Exterior components of the finished wood window products were dipped in or sprayed with a pentachlorophenol/mineral spirit/paraffin mixture to provide surface protection to the exterior portions of wood window frames. The site never was equipped with or engaged in pressure treating or resulted in production of "treated" wood.

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this limited involvement in site operations, Wauleco has conducted extensive environmental investigation and response actions and remains committed to doing its part to address issues of concern to the Department regarding the site.

To be responsive to the Department's current request, Wauleco conducted a thorough review of the facility's historic files (more than 80 boxes of file material). Following such review, Wauleco produces the attached "records and documents" deemed responsive to the Department's request³. As will be described in more detail below, these documents reveal that (i) wood waste incineration at the site ceased by 1987 and declined markedly by the early 1970s, and (ii) the overwhelming majority of wood burned on-site was uncoated.

Also attached is the requested scope of work or work plan developed by Wauleco's environmental consultant, TRC, pursuant to the NR 700 Wis. Admin. Code rule series. As discussed when we met on March 4, 2019, Wauleco would value the opportunity to meet with the Department to discuss the site investigation approach outlined in the TRC work plan once you have had the opportunity to review this information.

Background on the Facility's Boilers

Based on Wauleco's review of the documents produced, it appears that there were two boilers present at the facility – one wood-fired and one natural gas-fired. These boilers are referred to in the documents as boilers #21 (wood) and #22 (gas). Both were connected to an on-site stack denoted Stack 10. According to the attached documents, boiler #21 (wood) was rated at 4.8 MMBTU/hr and boiler #22 (gas) was rated at 15.3 MMBTU/hr. Boiler #22 (gas) became the facility's primary heating source after 1970 and boiler #21 (wood) was not used after approximately 1987. See, e.g., WCO-WW000028-45⁴, 50-51, 54, 56-92, 113-159, 160-168, 178-179, 182-191, 194-214.

The documents reveal that, although some wood waste burning continued after 1970, the volume burned from that point forward was vastly reduced, with wood burning ceasing at the operation in about 1987⁵. See, e.g., WCO-WW000003, 5⁶, 192-193. In a May 3, 1971 letter to the DNR, Harris-Crestline, a prior owner, reported that it had converted its main boiler – which provided all of the heat and steam for the facility – from waste wood-fired to gas-fired. The letter indicated that "[a]t the present time we estimate that we burn about 300 to 500 pounds" of wood an hour, based on an 8 hour operation day. (WCO-WW000003) This would mean between

³ Wauleco reserves the right to reasonably supplement this response if new or additional information is discovered.

⁴ The documents produced herewith have all been Bates stamped "WCO-WW00000X". Where multiple documents are cited, only the page numbers of the subsequent documents' Bates stamp sequence will be provided.

⁵ As noted above and as with window surface coating, Wauleco's involvement with wood waste burning would have been only for about a five-year period and only after volumes of wood burned had reduced significantly.

⁶ This document is titled "Data for DNR Reports – 1972 Calendar Year." It shows that in 1971, more than 95% of the facility's wood waste was either sent off-site by rail car or to the dump; less than 5% was burned to fuel the boiler. That percentage increased in 1972 to more than 98% of the wood waste, with less than 2% being burned. This supports other assertions in the documents that the gas-fired boiler became the facility's primary source of heat from 1970 onward.

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approximately 48,000 and 80,000 pounds of wood incinerated per month, much less than the “up to 400 tons” (800,000 lbs.) per month suggested in the Department’s letter⁷.

That 1971 letter also mentions Harris-Crestline’s plans to collect most of the wood waste in a system that would “hog” or chip wood waste and blow it into rail cars for off-site transport, further reducing the amount of wood waste available for incineration. Other documents in the production support that this planned development indeed occurred. See, e.g., WCO-WW000005, 24, 93-96, 102-108, 174-175, 227-310.

The 1971 letter then estimates the maximum amount of wood waste burned thereafter would be reduced to “50 to 100 pounds per hour.” This translates to between 4 and 8 tons per month. Later documents suggest the volume of wood burned was much less than that and more in the range of 28 tons per year. (WCO-WW000116)

In July of 1972, DNR issued the facility a special order that acknowledged that “a satisfactory program for control of particulate emissions” had been submitted by the facility at the end of 1971 providing for the cessation of wood waste burning. (WCO-WW000016-19) However, later documents (including emissions studies, stack tests – including tests performed by the Department – and permit application and permit decision materials as late as 1989) reveal that the one wood-fired boiler did continue in partial operation with the knowledge and consent of the Department⁸, although at a much reduced operation level. In fact, the wood-fired boiler was a permitted emission source acknowledged in the Department’s Air Pollution Control Permit Operation Permit No. 7370779310-J01 issued July 13, 1989. (WCO-WW000194-214) Wauleco’s 1985 air permit application noted that “wood sawdust and shavings are the only raw materials passing through the reported processes.” (WCO-WW000113)

A document dated June 6, 1989 indicates that the wood-fired boiler had not been used for about two years and was recommended to be taken out of service; the boiler was removed thereafter. (WCO-WW000192-193)

The documents also reveal that the facility had in place an expansive sawdust collection program consisting of at least four cyclones connected overhead via a pneumatic collection system to two on-site sawdust and shavings silos. This system allowed the collection and storage of sawdust directly off the saws and milling equipment to be used both to fuel the wood-fired boiler and for sale off-site to third-party vendors. See, e.g., WCO-WW000003, 5, 28-45, 93-96, 113-159, 160-170, 178-179, 224-310, 314-318, 342.

⁷ We understand the Department’s assertion appears to be based upon an undated newspaper article. Wauleco has been unable to independently verify this reported volume based on its review of records conducted to date.

⁸ In the early to mid-1970s the country was experiencing an “energy crisis” caused by curtailed production and embargoes from the Organization of Petroleum Exporting Countries (OPEC) during the Carter Administration. This energy crisis is mentioned in the historic documents and could have been a factor in the continued use of readily available scrap wood as a source of heat for the facility. (WCO-WW000098-101)

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The documents reveal that the facility kept the Department apprised of its operations and modifications made to this collection system. A 1978 letter to the Department (and supporting documents) show the facility alerted the Department that it would be mixing via an auger its stored wood chips and sawdust to increase the density and weight of the rail cars it was loading as well as modifying a system designed to release negative pressure to allow even more waste wood to be loaded in rail cars for off-site shipment. (WCO-WW000096)

Background on Manufacturing Operations

The documents produced reveal that prior to about 1970, the facility received kiln-dried lumber via rail car shipments. This raw wood was then cut and ripped to desired width and length at the facility. This "cut stock" was then machined into millwork pieces for assembly into window frames, moldings and sashes. After about 1970, the facility began to receive kiln-dried "cut stock" at the site. (WCO-WW000216-219) After this change, there was no need to cut or rip the wood because it arrived at the facility already cut and ready for machining or assembly. This is further evidence that the volume of wood waste generated at the site would have reduced substantially after about 1970, coinciding with the estimates contained in the May 3, 1971 letter to the Department mentioned above.

After machining was completed, the exterior window parts were then coated in the PCP/mineral spirits/paraffin solution via either a dip tank or spray application method. All cutting and milling/machining would have occurred *prior to* the wood surface protection process. The lone exception would be where certain off-spec or broken finished product would be "reworked" or "remilled" into smaller usable components. The facility operator would have an interest in minimizing the amount of broken or reworked pieces and it is expected that the volume of this material would be minimal by comparison to the wood waste that did not receive any surface protection.

The Overwhelming Majority of Wood Scraps or Sawdust Burned in Boiler #21 Was Uncoated

As noted above, the facility did burn scrap wood generated during the cutting and milling process to fuel boiler #21 during operations. The amount of wood waste incinerated is expected to have reduced substantially after 1970, for the reasons noted above. Facility operations included a multi-cyclone sawdust collection system that transmitted sawdust from the cutting and milling operations to on-site storage vaults and silos. This sawdust was used to fire boiler #21, but records also indicate it was also trucked and railed to other customers. Indeed, in a 1979 letter from the Department to Harris-Crestline, the Department notes that rail cars are being loaded with wood waste and sawdust. (WCO-WW000109-110)

A stack test conducted in 1973 of the wood-fired boiler by Pollution Curbs, Inc. showed compliance with particulate emission standards of the time and "showed emissions to be in compliance with normal millwork cuttings being used as fuel." (WCO-WW000028-45) The Department conducted a particulate emissions (stack) test on the wood-fired boiler #21 in August of 1976, reporting on the results on January 26, 1977. (WCO-WW000056-92) By this time the Department noted that the boiler was "primarily used to incinerate wood blocks that

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cannot be chipped for resale. Most of the byproduct wood wastes from various woodworking processes are collected for recycling at this facility Boiler No. 21 has been restricted to firing only untoned and unpainted wood blocks. No plastic or vinyl, fines, sawdust, shavings or chips can be fired” (WCO-WW000060) The DNR report notes that this boiler provides only supplemental heating during the winter and the gas-fired unit (boiler #22) “is responsible for meeting the space heating demands of this facility throughout the year.” (WCO-WW000060)

The documents indicate that the manufacturing process was not a process where the frame parts would be coated, then cut and assembled, generating sawdust or scraps that had been coated. Rather, “cut stock” was milled/machined and then the exterior parts of the windows would be surface coated prior to assembly. To the extent there was any wood burned that had been surface coated, it would have been a very small percentage by comparison to the uncoated wood scraps and sawdust generated by the ripping/milling process, prior to assembly and then prior to final coating and drying. Any defective pieces that had been coated would have first been re-machined into smaller components in an attempt to salvage pieces and minimize waste. (WCO-WW000216-219, 173)

Employees Taking Home Uncoated Wood Scraps

The Department’s letter references the ability of facility employees to “take wood scraps home and burn them.” We have not been able to discover records concerning this practice and have no documentary evidence concerning what people did with the wood once it left the facility. Documents indicate that Wauleco discontinued providing “passes” for employees to take home wood scraps in 1986, as confirmed in a memorandum to employees dated October 30, 1986. (WCO-WW000171) This change appears to have been motivated by concerns raised about employees taking home wood pallets (not scrap wood).

Work Plan and Additional Soil Testing

On August 20, 2018, the Wisconsin Department of Health Services (DHS) provided its risk assessment following analysis of all dioxin data generated during soil sampling conducted in the area since 2006. That assessment included a site visit by the state toxicologists and was updated on February 7, 2019 by DHS’s “Response to Comments” document.

The risk assessment DHS performed assumed visitors to Riverside Park would be near the culvert outfall⁹ three times a week for 35 of the 52 weeks a year. The assessment also assumed exposure to the “worst case” highest sample result for the residential exposure scenario. The state toxicologists concluded that under these conditions there is “no apparent health hazard” for Riverside Park users or Thomas and River Street residents from dioxins.

After concluding its review, DHS stated: “Based on the analysis of available data, DHS concludes that exposure to dioxin in surface soil at Riverside Park and at the Thomas Street

⁹ The culvert at Riverside Park had the highest dioxin level of the samples included in the DHS assessment. The culvert outfall does not drain the Wauleco site and runs beneath a former railroad track bed.



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area are unlikely to be harmful to people.” DHS also recommends further investigation of dioxin in soils in the area to better understand the situation. We believe the work planned by Wauleco as a part of this effort, as well as the City of Wausau’s expressed intent to perform further sampling or assessment at Riverside Park, can assist in this effort.

Conclusion

We trust that the Department will find Wauleco’s response to the January 15, 2019 request for information thorough and compliant. We look forward to discussing this information and the work plan with the Department.

Very truly yours

MICHAEL BEST & FRIEDRICH LLP



David A. Crass

Enclosures

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