



Matthew Thompson
Department of Natural Resources
1300 W Clairemont Ave
Eau Claire, WI 54701-6127

August 13, 2019

Dear Mr. Thompson,

Thank you for providing Citizens for a Clean Wausau (CCW) with the opportunity to submit comments on the Wauleco Remedial Action Alternatives Plan. As you know, CCW is a grassroots environmental group in Central Wisconsin. We are comprised of area volunteers. CCW works primarily on issues related to defining the extent and nature of industrial contamination in a footprint on Wausau's southwest side, so that it can and will be remediated.

COMMENTS ON WAULECO'S BACKGROUND INFORMATION

Prior to commenting on the LNAPL/groundwater remedial options, we would like to address some of WAULECO's stated background information, as this background can be found in Attachment B of the TRC PDF and is labeled "Wauleco Background Information."

1. Historical Quality and Nature of Surficial Soils on the Site

The department has stated in the past that there is a "lack of surficial soil contamination at the site."¹ **However, based on CCW's research revealing the extent of past waste burning at the property,² there is no longer a factual basis to make such assertions until extensive testing of the on-site surface soils is undertaken at the WAULECO site.** Even if such a future study were to indicate that levels of contaminants in the site's surface soils are now currently within acceptable parameters, it would seem there is no possible way to demonstrate that past storm water runoff did not contribute to off-site soil contamination, as those wider historical studies of the site's surface soils never occurred, but clearly should have, given the waste burning. **Furthermore, the results and locations of the 1978 soil samples taken by Crestline and analyzed by Koppers – those which had not been properly disclosed to the department by the company – were "indicative of extensive surface contamination that could only be caused by reckless handling practices or direct surface disposal of spent product," according to Stantec.³**

CCW will be presenting separate comments on WAULECO's air deposition soil study. We will note now that we find the timing and quantity of the off-site samples to be inappropriate and insufficient, respectively.

2. Preferential Migration in Utility Corridors / Sanitary Sewer Interceptor

WAULECO cites a 1990 Keystone utility study which concluded that the utility corridors were not preferential migration pathways. **Key samples from that study were never analyzed⁴ and the sampling execution deviated greatly from the stated testing plan⁵, without apparent explanation.**

¹ <https://wausaupilotandreview.com/2018/09/11/thomas-street-residents-alarmed-as-dust-dirt-flies-from-contamination-site/>

² https://dnr.wi.gov/botw/DownloadBlobFile.do?docSeqNo=98921&docName=20181108_99_Crestline_Air_Article_19700911.pdf

³ Stantec Summary of Opinions, July 2012, Page 53

⁴ B-400 Series Borings (B-402 & B-405 – NA – "Not Analyzed"): Pre-Remedial Soil Analytical Table, Wauleco, Inc.

⁵ Testing Plan defined in a December 4, 1989, letter from Keystone to WDNR. Plan apparently not followed according to data in August 1993 Warzyn letter/attachments to the WDNR.

Both matters raise substantial questions about Keystone's past conclusion about utilities and preferential pathways, as the data gaps appear to challenge the notion that such a definitive conclusion could be made. Additionally, since the 1990 report, two separate investigations have confirmed PCP in manholes and the sanitary sewer throughout the neighborhood, and records indicate that sewer lines may intersect – or reside below – contaminated groundwater in specific areas. Unfortunately, many of the utilities in the neighborhood were recently disturbed – or simply removed and replaced – during the Thomas Street reconstruction project, rendering a more thorough and appropriate investigation of utility migration and preferential pathways impossible.

3. Vapor Intrusion

WAULECO cites an April 2019 letter report regarding its conclusion that there are no potentially complete vapor intrusion pathways associated with the WAULECO site. CCW feels the investigation related to the April 2019 letter was too limited to be representative of a broad determination. **It also does not take into account 1) recent sewer backups reported in the neighborhood 2) potential recent basement floodings in the neighborhood and 3) new boring data from the City of Wausau showing a depth to groundwater on a residential property on Thomas Street of only 7.7 feet⁶ – which, if other similar shallow depths would exist on residential properties – implies that certain depths to groundwater found below or near homes in the neighborhood may have been grossly overestimated over the course of WAULECO's decades-long remediation effort.** Residents who live near the vapor study, including myself personally, were dissatisfied with the limited scope of the investigation, and found it unsatisfactory in addressing residents' well-founded concerns about potential vapor intrusion.

4. Groundwater Discharge to Surface Water

WAULECO cites a "diffuse/non-point" discharge into the Wisconsin River; nevertheless, recently, *County of Maui, Hawaii v. Hawaii Wildlife Fund* determined that "the Clean Water Act requires a permit when pollutants originate from a point source but are conveyed to navigable waters by a nonpoint source, such as groundwater" and will now be taken up by the Supreme Court.⁷ In 2016, the department itself stated that recent levels from this continued non-point discharge of PCP into the river are not in accordance with state laws.⁸ Historically, PCP and dioxins/furans were detected in past sediment and surface water samples in this area of the river,⁹ although those results are now dated, and the discharge of contaminated groundwater into the river has continued for decades with no reassessment from actual sampling of what the long-term impact to the river may be, nor an up-to-date biological assessment within the relevant section of the river.

COMMENTS ON WAULECO'S REMEDIAL OPTIONS

1. Excavation should not be removed as a process option for consideration and should be leveraged as a key component of future remediation, not only for LNAPL removal, but for permanent removal of source contamination. We are concerned that without excavation, source contamination could perpetually contaminate the groundwater and, in the future, result in PCP rebounds downgradient of the site.

WAULECO states that this is not "considered viable in consideration of the depth to residual phase LNAPL, up to ~ 30 feet below ground surface."

However, deep and expansive excavation of soils heavily contaminated with wood-treatment preservatives has not only proven to be "viable," but effective. Consider the Federal Creosote Superfund Site in Manville, NJ, which excavated as deep as 34 feet below ground surface, and then transported 450,000 cy of contaminated material properties for offsite thermal treatment or landfill disposal.¹⁰

⁶ Factual Report of Subsurface Investigation, Proposed Riverfront Wall, January 2019, Depth of Boring B-1C, Page 3

⁷ <https://www.scotusblog.com/case-files/cases/county-of-maui-hawaii-v-hawaii-wildlife-fund/>

⁸ https://dnr.wi.gov/botw/DownloadBlobFile.do?docSeqNo=74074&docName=20160831_82_ROAR_Not_Appr.pdf, Page 5 of PDF

⁹ <https://dnr.wi.gov/botw/GetActivityDetail.do?siteId=644000&adn=0237000006>

¹⁰ <https://sevenson.com/project/federal-creosote-superfund-site/>

WAULECO has – in fact – removed complete excavation from consideration options in the past, but its rationale for eliminating the option appears to change over time.

For example, in the 1989 screening of remedial options in the WAULECO, Inc. Wausau Site Feasibility Study, Keystone states:

"Complete excavation at the WAULECO site would not be practical because most of the site is occupied with commercial operations, crossed by numerous utilities and large portions of the site are under roof and within buildings. Complete excavation was eliminated from further consideration."¹¹

However, after the demolition of nearly all of the buildings on the WAULECO site, extensive excavation could have occurred. Coincidentally, a post-it note message from the WDNR on that 1989 file captures and succinctly reflects our position: "IF demolish Building Site Excavation possible."¹²

Complete excavation

Complete excavation is an accepted practice that can achieve environmentally acceptable results. Contaminant removal of the waste by this method can assure that all of the wastes have been addressed. Excavation above the water table can be performed using standard road construction equipment.

Excavation also requires site restoration activities such as backfilling, grading for natural drainage management, and planting a vegetative cover over the excavated areas. Backfilling can be achieved using treated soil, uncontaminated soils from an on-site borrow area or may require obtaining suitable soils from an off-site location.

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4 - 9

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Our concern is that WAULECO dismisses this option due to its cost apprehensions, and not out of effectiveness considerations regarding the removal of source and secondary contamination.

We remind the department that in 1985, the preferred option of WAULECO (read: SNE) was essentially to do nothing – "Monitoring and Natural Attenuation In-Place."¹² The option then attempted was a passive removal process instead of immediately implementing a depression pumping system.¹² The department's warning that a passive removal approach was not going to be successful and that a depression pumping system should be used went unheeded at that time, and the passive system failed to be successful as predicted by the WDNR. CCW feels that there has been a pattern of valuable time being lost throughout the history of this remediation effort due to various delays in both investigations and remedial actions.

¹¹ https://dnr.wi.gov/botw/DownloadBlobFile.do?docSeqNo-84154&docName-0237000006_Site_File_1989.pdf

¹² https://dnr.wi.gov/botw/DownloadBlobFile.do?docSeqNo-84149&docName-0237000006_Site_File_1985.pdf

2. CCW strongly supports Alternative 6, which should be part of remedial consideration and subsequent implementation: Off-Site Pump and Treatment System

We disagree with WAULECO's and TRC's characterization that "Installation/expansion of the pump and treat system to off-site locations to contain groundwater off-site would be no more effective in protecting human health and the environment in the short and long term than Alternative 1, as there are no receptors, other than groundwater that discharges to the river or, potentially, to a sanitary sewer interceptor."

Given the historical contamination of the sanitary sewer system with PCP through joint leaks, and recent reports of sewer basement backups and potential groundwater basement flooding in the neighborhood, this alternative would indeed appear more protective of human health and the environment than Alternative 1 alone. Had this alternative been implemented early on (as the WDNR desired per its notes¹³), perhaps the outcome may have decreased the possible risk to receptors from sewer backups and basement floodings – a risk and reality that, decades later, has still not been sufficiently investigated or monitored, in our opinion (despite over thirty years of awareness of the neighborhood properties likely to experience groundwater basement flooding¹⁴).

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implement a system that we feel meets our goals,
but may be very expensive and may have large
logistical hurdles, such as piping and
withdrawal wells on other's property. I think
such a system is practical at this time

5/15

John says that he thinks SNE is
willing to implement a practical alternative. I recall
that they said they weren't willing to commit to
contain the plume and remove the floating layer at
the meeting in March. John didn't think they had
that position now. However, they want to do
enough study to be sure ~~it~~ will work.
What they implement

13 DNR representative's handwritten notes on discussions with SNE and Koppers, 1986 (photo taken during review of files, WDNR Office, Eau Claire, WI). Notes indicate that "SNE would not be willing to implement a system that we feel meets our goals, but may be very expensive and may have large logistical hurdles, such as piping and withdrawals well on other's property. I think such a system is practical at this time."

