CITIZENS FOR A CLEAN WAUSAU

Jane Gray
Department of Natural Resources
1701 N 4th Street
Superior, WI 54880

October 22, 2026

Dear Ms. Gray,

As you may be aware, Citizens for a Clean Wausau (CCW) is a grassroots environmental group in Central Wisconsin that was founded in 2018. We are comprised of area volunteers, all of whom are laypeople. 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.

This letter addresses the recent Pump-and-Treat System Shutdown Pilot Test Plan for the Wauleco/Rosecrans Properties site. We are also providing comments on the site-related study for the Wisconsin River, "Sediment and Surface Water Investigation Report – Rosecrans Properties" (July 2026), since part of evaluating whether it is prudent to cease active groundwater remediation right now hinges on potential impacts to the river and receptors.

Our primary concern about the plan to shut off the treatment system right now – and why we are urging regulators not to do so now – is that the timing is concerningly premature. For example, the Responsible Party (RP) has yet to provide definitive scientific proof that the following things are happening, even though the DNR has repeatedly characterized them as prerequisites:

- Biodegradation is the primary natural attenuation mechanism for the groundwater plume, including its central portion.
- This natural attenuation will effectively restore the environment by bringing groundwater contamination levels under the Wisconsin enforcement standard in a reasonable amount of time.
- The site's groundwater pollution does not currently pose a risk to any receptors and would not pose a risk to them if the treatment system is shut down.

In this vein, related standards that the DNR laid out – in an October 30, 2020, technical assistance letter and elsewhere – have not been met. And the proposed pilot plan does not correct the issue.

First, the RP and its consultants have not sufficiently demonstrated that cleanup by natural degradation is the main reason contaminant numbers are dropping, which was a key expectation of the department.

Evidently, the Bio-Trap Study (January 2022) was submitted because additional field studies were "necessary to support the conclusion that biodegradation is the primary natural attenuation mechanism for the central portion of the groundwater plume," according to DNR personnel. But study results only showed that degradation is occurring near the wells.

Importantly, the central portion of the plume, which was the area that the DNR specifically called out – produced the study's weakest results. Only a minority of central footprint wells showed strong "mineralization signals" and the study's concentrations remained 80 to 5,000 higher than the enforcement standard at the time of sampling.

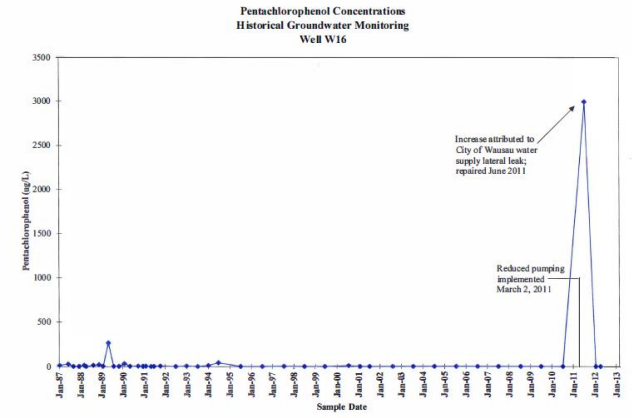
Presumably, the associated 2022 PowerPoint presentations to state regulators attempted to bridge this gap with calculations of half-lives, but highlighted that it could require up to 95 years for LNAPL contamination to resolve through the process. Out of the box, this type of extreme restoration estimate conflicts with most credible notions of a "reasonable period of time," which is another key requirement for natural attenuation.

Given monitoring wells still have concentrations of pentachlorophenol (PCP) thousands of times higher than the enforcement standard, it is evident that approving the proposed pilot plan now unnecessarily lengthens a cleanup timeline by decades, rather than attempting to shorten it to an appropriate period via more active remediation.

In this context, over 40 years after remedial efforts began, around 5,000 pounds of PCP reportedly remain concentrated in an area smaller than one acre, with still-elevated influent concentrations. Yet despite this reality, the site's RPs have pushed back on additional source remediation – even those referenced in the same 2022 PowerPoint presentations – like targeted source excavation on the property. Their rationale seems to be that more active remediation will only provide moderate improvements, but without supporting the assertion with thorough evidence.

That being said, by itself, the optics that some of the largest shifts and declines in the groundwater PCP levels on the southwest side have stemmed from hydraulic events in the last 15 years, not biological trends, should prompt regulators to delay approving a treatment system shutdown.

An important reassurance given against shutdown risk in the plan is that when pumping was reduced in 2011–2012, "no plume expansion was observed" and "concentrations did not increase in downgradient wells." The 2011 and 2012 annual monitoring reports provide more detailed indications that look inconsistent with the plan's assurance. During exactly that period, PCP rose from single digits to the low thousands at several downgradient and plume-edge wells – W29 went from about 8 to about 1,800 ug/L; W16 jumped from non-detect to 3,000 ug/l; W18 rose from about 1.5 to 230 ug/l; W12 went from non-detect to 420 ug/l; W19 rose from 59 to 640 ug/l.



Wells W12, W16 and W18 – A significant rise and fall in PCP concentration was seen at W16 and W18, as shown in the table below.

Date Sampled	W16 (µg/L)	W12 (µg/L)	W18 (µg/L)
July, 2009	<3	<3	1.5
July, 2010	<3	<3	1.5
July, 2011	3000	<1.2	230
July, 2012	<3	420	2.6

This spike in PCP concentrations at well W16 in 2011 compared to other years is likely due to the water lateral leak found near the intersection of Thomas Street and Cleveland Ave. in 2011. The mound of water formed by this leak pushed PCP present south of the leak (e.g., near well W41) further south to W16. After repair of the leak in June 2011, and groundwater flow returned to normal, groundwater with no PCP moved back into the well W16 area. Well W12 is downgradient of well W16, so the 2012 increase in PCP concentration at well W12 is simply the downgradient migration, and attenuation of the 2011 spike at well W16. Well W12 will be sampled in July 2013, and the PCP result will be evaluated at that time.

The cause of the spike at well W18 in 2011 is not as clear as at well W16, but could be related to the water lateral leak as well. Regardless, the PCP concentration has returned to normal low concentrations.

The 2012 report itself states that groundwater containment in 2011 was "adversely affected" and that a City water main leak that year that flooded the site with clean water and pushed contamination outward. The period has an overlap of multiple profound groundwater-altering events and should not now be cited as evidence that reducing pumping is safe – let alone turning the system off entirely.

And when that episode's concentration declines reversed at W22 and W36 once the leaks were repaired, W22 went from 24 back up to 2,600 µg/L, and past characterizations that W22 and W36 were "Evidence of Biodegradation" now seem inaccurate.

Wells W22 and W23 – A significant decrease in PCP concentration was seen at W22 and W33, as shown in the table below.

Date Sampled	W22 (µg/L)	W33 (µg/L)
July, 2009	5,800	7,200
July, 2010	19	7,200
July, 2011	24	2,100

These lower concentrations may in part be due to the water lateral leak on Thomas Street, essentially flooding the area with clean water. Both wells are located within 250 feet of the leak location.

Wells W36 and W22 (Evidence of Biodegradation) – PCP concentrations at well W36, located within the central part of the site, have gone from free product in the early 1990s, to PCP concentrations greater than 6,000 µg/L in the early 1990s to having <10 µg/L currently. The redox conditions at W36 are similar to the redox conditions at W28 (i.e., significant nitrate-N concentrations indicating less anaerobic conditions than in the main PCP plume). Therefore, it appears that biodegradation may have created the reduction in PCP concentrations at W36.

In general, it appears there has been one major hydraulic influence after another for the last 15 years, influencing the shifts in well numbers and the declines in some of them.

The Phase 2 of the 2019 Thomas Street Project, which included complete underground utility removal and replacement in this area, along with dewatering, correlates with big changes in well numbers. It is also worth pointing out that multiple DNR staff still evidently believed that this section's utilities may have served as an "unidentified preferential pathway" for the groundwater contamination, even after Keystone quickly flipped its position decades ago and concluded the utility corridor was not a problem.

And nearly a year and a half of aggressive dewatering at the Wausau Wastewater Treatment Plant looks like it relates to contaminant declines at multiple wells. Moreover, just before some of the changes mentioned in the pilot shutdown plan, water levels rebounded through the corridor after the dewatering ended, and a new steel wall was constructed in 2020 along the River Edge Trail, right where contaminated groundwater had historically discharged.

Overall, these shifts in levels following significant events and construction could be more influenced by movement than bacteria, including shifts in wells outside of the treatment zone It is possible these shifts reflect patterns more than certain causes. And the wall along the River Edge Trail is one such important component whose presence has not been sufficiently ruled out as impacting the behavior of the area's groundwater.

Lastly, we ask that the DNR refrain from approving this pilot treatment system shutdown until it is

completely clear that receptors are not being adversely impacted by current groundwater contamination – and will not be impacted – by turning off the treatment system

On multiple fronts, this clarity is lacking, but we will focus on the Wisconsin River and conclusions that consultants made in the "Sediment and Surface Water Investigation Report" and pilot treatment shutdown plan. We are in the process of finalizing some brief documentation and data on our concerns and will email them to the DNR later today. Briefly in advance, here are a couple examples of the types of concerns we have and address:

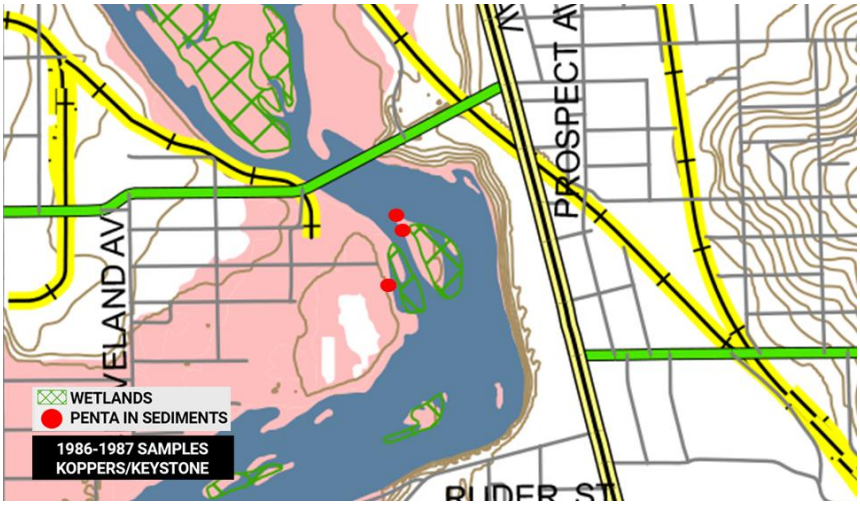
- Even though the sample was not formally included in report analysis due to being over the allowable "hold time" at the lab, the manually calculated TEQ for surface water sample WR-SW-004-RE, if formulated with the same TEFs and methods the consultant used on other samples, (the handling of lab flags, etc.), would appear to be 0.2261 pg/L. This TEQ was not presented in the report's data table, even though the rest of its individual congener results were. If the 0.2261 pg/L is accurate, then regardless of whether the sample was thrown out of consideration for an administrative/procedural exceedance of hold time, its TEQ has profound implications for the main conclusions in the report for receptors, risk to receptors, and the distribution of river contamination in relation to the discharge area vs. "background" area. A 0.2261 pg/L would seem to exceed multiple relevant risk criteria in the report for wildlife and humans alike. And since dioxins and furans are some of the most stable compounds tested, we believe that an additional 10 days of hold time would have little to no meaningful impact on the results (unlike volatile or semi-volatile compounds).

Congener	WR-SW-004-RE (pg/L)	TEF	TEQ Contribution (pg/L)
1,2,3,4,6,7,8-HpCDF	8.6	0.01	0.0860
1,2,3,4,7,8,9-HpCDF	12	0.01	0.1200
OCDD	41	0.0003	0.0123
OCDF	26	0.0003	0.0078
Total TCDD TEQ			**0.2261**

- Another key concern is the report's surprisingly brief, dismissive conclusion on wetlands: "The mapped wetlands are located on the opposite shore or beyond; therefore, they are not impacted by groundwater from the Rosecrans site."

  Coupled with the confirmation in recent years that PCP sanitary sewer infiltration resulted in spikes of PCP discharge to the river through wastewater plant outfalls, the testing done by Koppers/Keystone in

the 1980s identified PCP contamination in river sediment of the wetland area immediately adjacent to this wastewater plant. Furthermore, sediment sample PSS-2, located on the opposite bank of the river in this river section, and away from the plant, tested negative for PCP in Koppers' investigation. From our perspective, for these reasons, portions of this wetland area should have been a focus of the sediment and surface water study. The wetland's soft sediments would also likely pose little problem for the DNR's guidance on sample depths.



Created by CCW based on Koppers results and regional planning maps

Thank you for your consideration in this matter. We will email the DNR our river/receptor concerns and documentation later today. And, where appropriate, we look forward to interfacing with the department to protect our environment, along with those people and things who live within it.

Sincerely,

Tom Kilian
Spokesperson / Citizens for a Clean Wausau