

Howard T. Odum Florida Springs Institute 18645 High Springs Main Street High Springs, Fl 32643

December 1, 2025

Bill White Rainbow River Conservation, Inc. PO Box 729 Dunnellon, FL 34430

Dear Bill,

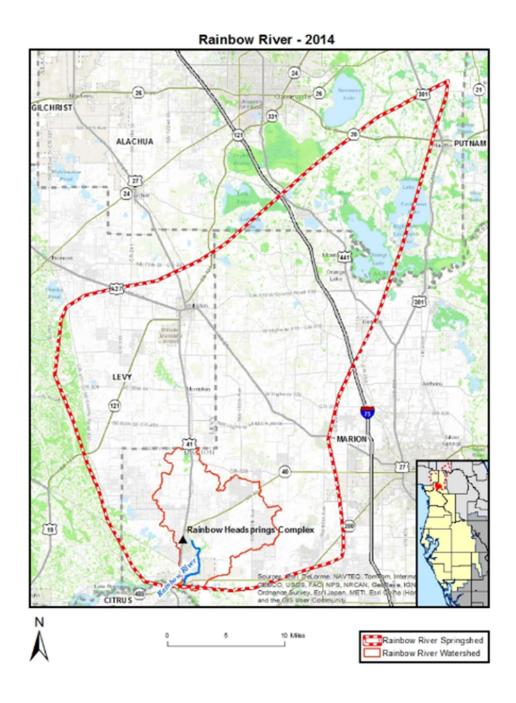
After speaking with my colleagues and studying the issue further, we would like to offer our thoughts on the hazards of permitting a creosote-treated railroad tie shredding and grinding facility less than 1,000 feet from the Rainbow River in unincorporated Marion County.

As the Rainbow River Conservation (RRC) well knows, the Rainbow River and its springs have received a great deal of attention over the past decades to ensure nitrogen levels are limited through BMAPs and adequate water flows are maintained through MFLs. While progress has been made, both the BMAP, MFL, and recreational use continue to be priority management issues for all regulators and stakeholders of Rainbow River.

The newest threat to Rainbow River, in the form of hazardous, toxic chemicals associated with creosote treated wood disposal, represents an unprecedented threat to Rainbow River. No longer are polluting nitrates, low flows, or too much boat traffic impacting the Rainbow River, now the lower river and surrounding human communities have a new threat from known hazardous, toxic, and carcinogenic chemicals being permanently introduced to their backyard. The hazardous chemicals known to be associated with creosote contaminated material are not just a water pollution issue, but air and soil contamination can be expected to accompany Creosote wood shredding operations. This in addition to any aerosolized or runoff particles, would bring this chemical into the water cycle of Rainbow River. Creosote falls into a group of chemicals known as dense non-aqueous phase liquids (DNAPL), which allow for small but

potentially significant chemical contamination in the subsurface. This is fully detailed in the "Groundwater Contamination By Creosote" report from the University of Waterloo linked <a href="here">here</a>.

The proposed hazardous material disposal location is known to have sandy soils with rapid groundwater infiltration and movement and is within the springshed and river watershed (FDEP BMAP and SWMWMD SWIM plans).



In the Wetland Solutions Inc. and Howard T. Odum Florida Springs Institute 2013 Rainbow Springs Restoration Action Plan (see <a href="here">here</a>), we classified aquifer vulnerability across the Rainbow Springshed (see Exhibit 2-8), which includes the proposed railroad tie shredding site. The site is in an area where the aquifer is Vulnerable to Most Vulnerable, meaning that the creosote from these ties would likely permeate into the groundwater supply. The proposed hazardous material processing site is also against the intention of Marion County's Spring Protection Zones, and directly against their regulations<sup>1</sup>.

As RRC, and the applicable State's agencies know, whatever occurs on the lands of the Rainbow River springshed and watershed, will eventually be reflected in the groundwater feeding the springs of Rainbow River. If toxic chemicals enter the groundwater or surface waters of the Rainbow River, then this contamination will also travel via the confluence with the Withlacoochee River, to the Gulf waters along Levy and Citrus Counties.

The activities which would be expected to occur at a hazardous material contaminated wood shredding and grinding facility should be expected to impact air, soil, and water conditions in proximity to the site. Fine particulates containing toxic materials can only be contained through HEPA filtration. Soil and wood particulates will be created and transported through timber processing and can only be contained in a sealed building. Water contamination will occur from direct runoff of creosote treated timbers, as well as the contamination of the soil from timber pieces and particulates generated through disposal. Any rain event will provide the physical means to transport contaminants off site unless a fully lined facility is constructed that has zero off-site discharge of stormwater and groundwater.

From the perspective of springs health, there is no defensible reason to dispose of (or store) hazardous material where it will contaminate the groundwater and surface water of an Outstanding Florida Spring. From a human and environmental health perspective, it is probable and likely that significant hazardous and toxic pollution would be introduced to the area surrounding the storage and disposal site. The local communities should prepare for the difficulty in dealing with creosote toxins based on the lessons learned at the historic Cabot Koppers Superfund site in Gainesville, Florida. This site, designated by the US EPA as a

<sup>&</sup>lt;sup>1</sup> The following ordinances have been adopted by Marion County for the protection/ preservation of Rainbow River:

<sup>(1)</sup> Ordinance No. 09-17 established Springs Protection Overlay Zones within the Land Development Code. Various land use prohibitions were established, as well as implementation of best management practices concerning karst feature protection and manure management; additional design requirements were put in place concerning landscaping, stormwater, and wastewater systems. In 2013, the design requirements were incorporated throughout the code, recognizing that wherever you are in Marion County, the land use will impact groundwater and a springshed.

Superfund site in 1983, have shown minimal success in remediation for the aquifer and surrounding lands. The Gainesville Cabot Koppers Superfund site required years of federal study requiring millions of dollars of public funds. Remediation began in the 1990s and now after 35 years of intensive cleanup at a cost more than \$55M dollars the site remains under Consent Decree and contaminated. There is no set date for the consent decree to be removed, as the final site cleanup is still ongoing. The consent decree will be removed once Beazer East (formerly Koppers) completes all the required remedial actions at the site, which is contingent on resolving ongoing legal and engineering disagreements.

We recommend that stakeholders for Rainbow River, the City of Dunnellon, and Marion County continue to oppose the permitting and operation a creosote-treated railroad tie shredding and grinding facility less than 1,000 feet from the Rainbow River in unincorporated Marion County. Local, state, and federal political pressure will be required to counter the economic pressure to dispose of hazardous materials in a rural, economically disadvantaged location. Railways which utilize creosote should treat their hazardous materials at existing, industrialized operation centers where a state-of-the-art hazardous material disposal plant should be designed, constructed, and operated by the generator of the hazardous waste. Longer term efforts to replace creosote timbers with concrete timbers may reduce the market for creosote use as well.

Please reach out to us if you have any questions. Thank you for everything you do to protect Rainbow River and springs.

Sincerely,

Sky Notestein, Environmental Scientist

TJ Comer, Environmental Scientist

Haley Moody, Director

Howard T. Odum Florida Springs Institute 18645 High Springs Main Street High Springs, FL 32643 (386) 454-9369

