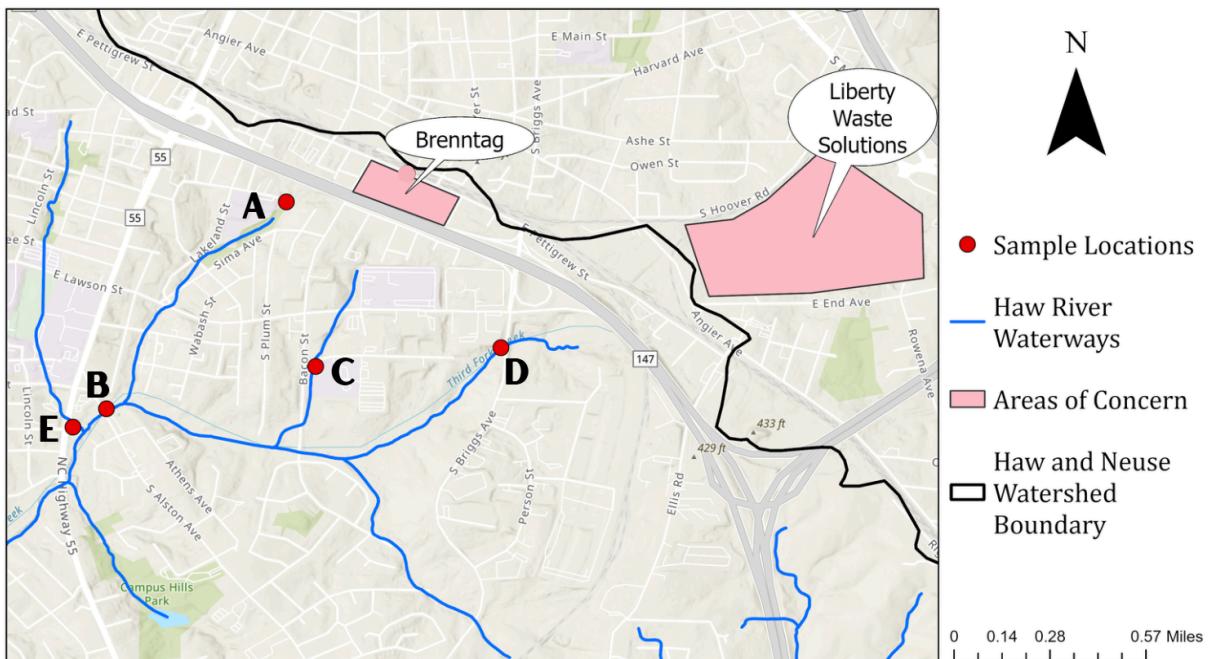


Haw River Assembly Sampling Report

Sample Results:

On September 13th 2025 during Haw River Assembly's (HRA) first round of VOC sampling all samples came back non-detect. This means that the levels of the contaminants in questions were too low for the lab to be able to quantify. The 5 sites we sampled are shown in Figure 1. This sampling occurred during dry conditions which likely led to the low levels observed given the likely source of contamination is from runoff, which occurs during rainfall.

Haw River Assembly Sample Locations



Esri, NASA, NGA, USGS, FEMA, Duke University, Wake County, State of North Carolina DOT, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Figure 1. VOC sampling locations selected by Haw River Assembly. Site A is the stream running through Burton Park and the main target site of the sampling. Site B is downstream of the confluence of the Burton Park Creek and Third Fork Creek. Site C runs through the property of RN Harris Elementary and was selected to see if Brenntag runoff was also impacting this stream. Site D is Third Fork Creek along S Briggs Ave. This site was selected to see if contamination could also be coming from Liberty Waste Solutions but to also provide an upstream sample for comparison. Site E which is a tributary draining NC Central's campus was selected to compare a site that should not be impacted by VOC contamination.

Follow up sampling occurred on Dec 19th 2025 after it had rained that early morning and into the late morning. It rained enough that there was runoff generation. During this sampling event the Burton Park Creek site and the Third Fork Creek site at S Alston Ave both had detectable levels of Acetone. **The small creek flowing through Burton Creek had 3820 ug/L of Acetone and 124 ug/L of Methylene Chloride.** Downstream at Third Fork Creek at S Alston Ave Acetone levels decreased to 350 ug/L and Methylene Chloride was non-detect. Upstream of where the stream flowing through Burton Creek enters Third Fork Creek all contaminants in question were non-detect. All VOC compounds were also non-detect for the stream running through RN Harris Elementary School across Cooper St. The other site (Site E) draining NC Central's campus was not sampled.

Context for Chemicals and Values Observed:

The state of North Carolina does not have surface water standards for either Acetone or Methylene Chloride. However the state does have groundwater standards. Which are as follows:

Acetone: 6000 ug/L;

Methylene Chloride (dichloromethane): 5 ug/L

Alaska has surface water standards for both Acetone and Methylene Chloride and they are as follows:

Acetone: 14,000 ug/L

Methylene Chloride (dichloromethane): 110 ug/L

The levels observed for Acetone were below the surface water standards set by Alaska and the groundwater standards in North Carolina. Methylene Chloride levels observed were higher than the groundwater standard in North Carolina and surface water standards for Alaska. However because there are no surface water standards for either compound there is no violation from a water quality standpoint. **But because the “no discharge” rule implemented by Durham the discharge is still likely illegal.**

Fact Sheet for Acetone:

<https://www.atsdr.cdc.gov/toxfaqs/tfacts21.pdf>

Fact Sheet for Methylene Chloride:

<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-methylene-chloride-or-dichloromethane-dcm-0>

Previous Data Collected by Durham:

Table 3
Surface Water VOCs, SVOCs, Metals, and Oil & Grease Analysis Summary
Brenntag Mid-South Facility
Durham, North Carolina
GTA Project No. 35230785

Sample Location	UT1/GTA-3					UT4/GTA-11					UT5/GTA-12					UT6/GTA-13					15A NCAC 02B Surface Water Target Values*
	Date	6/27/2023	9/5/2023	9/19/2023	10/16/2023	10/30/2023	9/5/2023	9/19/2023	10/16/2023	10/30/2023	9/5/2023	9/19/2023	10/16/2023	10/30/2023	9/5/2023	9/19/2023	10/16/2023	10/30/2023			
VOCs																					
Acetone	4,550	19,600	4,930	2,910	6,710	<0.500	<5.00	8.14	14.7	<0.500	<5.00	19.3	12.6	<0.500	<0.500	7.95	13.0		2,000		
2-Butanone (MEK)	319	491	<5.00	175	323	<0.500	<5.00	<5.00	<5.00	<0.500	<5.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	26,000		
Ethanol	27,900	81,500	42,400	24,200	173,000	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	5,000		
Ethylbenzene	0.54	<0.500	<5.00	<5.00	<5.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	97		
Methyl Isobutyl Ketone (MIBK)	687	702	<5.00	321	695	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	NE		
Toluene	41.6	<0.500	<5.00	<5.00	<5.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	11		
Vinyl acetate	39.7	<0.500	<10.0	<10.0	<0.500	<1.00	<1.00	<0.500	<1.00	<0.500	<1.00	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	NE		
Remaining VOCs	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	Various		
Metals																					
Barium	120	0.294	0.173	0.152	0.398	0.059	0.040	0.033	0.067	0.049	0.030	0.032	0.070	0.050	0.030	0.036	0.062		21,000		
Silver	<LRL	<LRL	<LRL	<LRL	<LRL	0.006	<LRL	<LRL	NA												
Remaining Metals	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	Various		
SVOCs																					
Diethyl phthalate	<10	34.8	<200	<100	<100	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NA		
Remaining SVOCs	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	Various		
TPH																					
Oil & Grease	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL	<LRL		

Notes:
1 = Surface water quality standards are currently undergoing NCDEQ review and updated values are not available
Bold entries = exceeds laboratory reporting limit
LRL = Laboratory Reporting Limit
URL = Existing Groundwater or Surface Water Quality Standard, as applicable
NA = Not Available
SVOCs = Semi volatile organic compounds
TPH = Total petroleum hydrocarbons
VOCs = Volatile organic compounds
Values are in $\mu\text{g/L}$ = micrograms per liter

