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Sent by email to: jing.song@ecy.wa.gov

Subject : AutoNation Ford of Bellevue – 411 116th Avenue NE, Bellevue, WA
Owner Concerns Regarding Seasonal Groundwater Variability, Remedial
Investigation Reliability, and PFAS Considerations

Dear Ms. Song,

As the representative of the property owner for the site currently undergoing voluntary cleanup activities led by AutoNation as the lessee, Adapt Consulting (Adapt) appreciates Ecology's detailed review of the October 2025 Groundwater Monitoring and Sampling Report (Atlas Project No. NPAN2501) and the clear recommendations provided in your January 12, 2026 correspondence.

While we support Ecology's request for additional quarterly monitoring and the expanded analytical requirements for MW-5, we would like to formally document several owner-level concerns regarding the reliability of groundwater monitoring results under current and anticipated climate conditions, the interpretation of analytical data, and the potential presence of PFAS at the Site. We respectfully request that these concerns be incorporated into the ongoing remedial investigation and closure planning.

Concern Regarding Groundwater Monitoring Reliability During Dry Years

Recent climate data and forecasts clearly indicate that Bellevue and the broader western Washington region are entering a notably dry period, following several years already trending toward reduced precipitation. As of early March 2026, the Washington State Climate Office reports statewide snowpack at only 53% of median, with many stations below the 10th percentile, supporting a broader trend toward drying conditions. The NOAA Climate Prediction Center's seasonal outlook anticipates a 40–50% chance of below-normal precipitation for western Washington in the upcoming spring, with warmer and drier than normal conditions expected for the region.

These data collectively indicate that the next several groundwater sampling events may occur during seasonally and climatically suppressed groundwater conditions, which may not reflect contaminant behavior during more typical or wetter hydrologic years.

Seasonal Water Table Fluctuation, Smear Zone Behavior, and Polar Metabolite Considerations

The site's groundwater monitoring data demonstrates significant water table variability. At MW-5, depth to water has ranged from 2.09 feet below top of casing (March 2024, groundwater elevation 84.25 feet amsl) to over 6 feet below top of casing during drier periods. This fluctuation of several feet is significant given that confirmed residual petroleum hydrocarbon contamination (TPH as heavy oil at concentrations of 605 to 918 milligrams per kilogram (mg/kg), with and without silica gel treatment) is documented in soil within the upper 1 to 3 feet in the source area (borings B-24 and B-25, March 2024).

As environmental consultants, we have observed, consistent with broad environmental practice, that smear zones interact with rising and falling water tables in ways that affect both dissolved petroleum concentrations and the production and transport of polar metabolites from biodegradation. When the water table rises during wetter years, it contacts a larger vertical interval of petroleum-impacted soil, which can increase both the dissolved petroleum fraction and the polar metabolite fraction in groundwater. Conversely, lower water tables during dry years tend to produce artificially lower concentrations of both components.

Ecology's November 2023 Guidance for Silica Gel Cleanup (SGC) in Washington State (Publication No. 22-09-059) establishes that petroleum degradation byproducts (polar metabolites) are considered part of the petroleum mixture and carry their own cleanup thresholds. Ecology's earlier 2016 Guidance for Remediation of Petroleum Contaminated Sites (Publication No. 10-09-057) further states that intermediary degradation byproducts "are considered part of the petroleum mixture since they are typically not otherwise considered in a petroleum risk evaluation." This means that even where silica gel treatment reduces the reported petroleum hydrocarbon concentration, the polar organic fraction must independently meet Ecology's cleanup thresholds—and both fractions should be evaluated under representative hydrologic conditions.

The October 2025 sampling event reported polar metabolite concentrations at MW-5 of 422.3 micrograms per litre ($\mu\text{g/L}$), approaching the applicable 500 $\mu\text{g/L}$ threshold under the SGC guidance. Given that this result was collected during relatively low water table conditions, it is reasonable to expect that wet-season sampling, when the water table rises into the contaminated soil interval, could produce higher polar metabolite concentrations that may exceed this threshold.

Arsenic Exceedances and Potential Relationship to Petroleum Degradation Geochemistry

Dissolved arsenic was detected in MW-5 at 14.3 $\mu\text{g/L}$ and in MW-3 at 5.45 $\mu\text{g/L}$ during the October 2025 event, both exceeding the MTCA Method A Cleanup Level of 5 $\mu\text{g/L}$. These exceedances were also documented in the May 2025 sampling event, indicating a consistent pattern rather than a one-time anomaly.

The October 2025 report characterizes the MW-5 arsenic concentration as a background condition, citing Ecology's 2022 Natural Background Groundwater Arsenic Concentrations in Washington State study and noting that the non-parametric upper limit for the Puget Sound Basin is 8 $\mu\text{g/L}$. However, at 14.3 $\mu\text{g/L}$, the MW-5 concentration is nearly double that upper limit. Referencing the basin-wide maximum of 76 $\mu\text{g/L}$ to characterize this concentration as background does not, in our opinion, constitute a site-specific demonstration that arsenic at MW-5 is naturally occurring.

We note that the elevated arsenic at MW-5 co-occurs with the highest TPH and polar metabolite concentrations at the site, and that the geochemical indicators reported for MW-5, including elevated carbon dioxide (342 mg/L), ferrous iron (0.823 mg/L), and depleted nitrate, are consistent with active anaerobic biodegradation of organic compounds. It is well-established in environmental practice that petroleum biodegradation can create reducing conditions that mobilize naturally occurring arsenic from aquifer sediments. We believe this potential relationship warrants evaluation rather than dismissal, particularly given that arsenic concentrations at MW-5 may increase during wetter periods when the water table rises and contacts additional organic-rich soil.

Analytical Data Quality and Sampling Representativeness

We respectfully note several data quality observations from the October 2025 sampling event that support the need for additional monitoring before closure decisions are made.

First, the TPH as diesel results for MW-1 showed an anomalous condition: the silica gel-treated result (123 µg/L) was higher than the non-treated result (118 µg/L). Since silica gel treatment removes material from the sample, the treated result should not exceed the untreated result. This anomaly is not addressed in the report and warrants clarification.

Second, the laboratory QC summary for the October 2025 analytical batch shows elevated relative percent difference (RPD) values flagged with “R” for both the diesel without SGC and diesel with SGC analyses, indicating that analytical precision for this batch exceeded normal quality control bounds.

Taken together, these observations suggest that the October 2025 data set, while useful, should not be considered the sole basis for closure decisions. Additional sampling events under varying hydrologic and seasonal conditions will improve the reliability and defensibility of the data.

Potential PFAS Concerns

We acknowledge that the 2015 Bellevue Fire Department report stated that only water was used to extinguish the April 2015 fire at the site. However, given the site’s long-term use as an automotive dealership and service center, there are additional potential sources of PFAS beyond firefighting foam, including automotive detailing products, surface protectants, and other commercial chemicals commonly used in vehicle service operations.

Washington State began addressing PFAS-containing firefighting foam issues in approximately 2017, and many fire departments historically engaged in training events or equipment testing where PFAS-containing AFFF was used. Given the persistence and mobility of PFAS, and the increasing regulatory focus on these compounds in Washington, we believe it would be prudent for AutoNation’s remedial investigation to include at least a screening-level PFAS evaluation, particularly at MW-5 and in the Sturtevant Creek area adjacent to the site. This step supports future liability protection, reduces the risk of regulatory reopening, and aligns with evolving expectations for contaminated site closure in Washington.

Request: Incorporation of Hydrologic Seasonality and Data Quality Considerations into the Remedial Investigation

To ensure the eventual NFA determination is robust and protective, we respectfully request that Ecology consider requiring AutoNation (as the responsible party under the lease) to address the following in the ongoing remedial investigation and closure planning:

- Evaluate and document seasonal water table fluctuations at the site, including a comparison of groundwater elevations during the next year of sampling with multi-year precipitation norms for the Bellevue area.
- Assess smear zone influences on MW-5 and any other wells historically showing petroleum, polar metabolite, or arsenic impacts, with particular attention to how water table position affects the interaction between groundwater and the documented residual petroleum contamination in shallow soil.
- Evaluate the relationship between petroleum degradation geochemistry and arsenic concentrations at MW-5 and MW-3, rather than attributing arsenic exceedances solely to background conditions without site-specific analysis.
- Consider whether additional sampling during a wetter climatic period should be required before determining that cleanup levels are reliably met. Given current climate forecasts, wet-season sampling may need to continue until the region experiences a more typical or above-average precipitation cycle.
- Include hydrologic justification and data quality assessment in any request for NFA, demonstrating that groundwater monitoring data are representative of a range of seasonal conditions and that the analytical results are consistent and reproducible.
- Encourage or require PFAS screening as part of the groundwater monitoring program.

We believe these measures will strengthen the defensibility of any cleanup decisions and ensure long-term protection of the property and surrounding environment. This approach protects both regulatory integrity and long-term environmental stewardship for the property.

We appreciate Ecology’s continued collaboration and look forward to working together to ensure that the cleanup at AutoNation Ford of Bellevue is thorough, resilient to climate variability, and compliant under both current and future hydrological conditions. Please let us know if Ecology would like to discuss these concerns further or if additional information would be helpful.

Respectfully Submitted,
Adapt Consulting


Daryl S. Petrarca, L.H.G.
Principal

