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Section 2.2: The last paragraph in this section (text page 4) discusses population density in the Site vicinity. While this may be pertinent to the discussion of surrounding human receptors, the MCP does not require any such population estimate for a RAM Completion Report. [The only MCP requirement for estimating nearby population is at 310 CMR 40.0483(1)(a)6, which pertains to requirements for a Phase I - Initial Site Investigation Report.] If Vertex choses to include an estimate of population density for general information purposes, CMG recommends using the most current available (2020) census data. These data show the population of Wayland as 13,943 (and the population of neighboring Sudbury as 18,934). Since the land area of Wayland is 15.9 square miles, that is a population density of 877/mi2 (Sudbury is 24,6 square miles, so its population density is 770/mi2). However, the population within 1/2 mile is not half of that, since the area of a circle 1/2 mile in diameter is 0.785 square miles (not 0.5 mi2). Thus the actual population within 1/2 mile of the Site (based on density) would be between 600 and 700, not "between 100 and 200" as stated in the Draft RAM Completion Report. The Town of Wayland requests that Vertex either use the most up-to-date population data (and correct math) to estimate nearby population, or remove this paragraph from he final RAM Completion Report since it is not an MCP requirement.	This paragraph has been removed from the final RAM Completion Report.
Section 3.1.2: CMG noted the same error in two places - in the last paragraph on text page 8 (section 3.1.1) and the last paragraph on text page 12 (section 3.1.2). In both places Vertex refers to DEP's EPH methodology as "MassDEP Method 04.01" which is incorrect since DEP has not assigned a method number to it. The full name of the written procedure is "Method for the Determination of Extractable Petroleum Hydrocarbons (EPH)" and its most recent revision (2.1) is dated December 2019. The standard way to refer to this procedure is "EPH by Massachusetts DEP methodology." The Town of Wayland requests that Vertex remove the text "Method 04.01" at both instances and simply use "MassDEP methodology" in their final RAM Completion Report.	This has been updated in the final RAM Completion Report.
Section 3.2: Vertex collected composite soil samples for characterization in the former police firing range at the Property (see pages 14-18 of the draft RAM Completion Report). While this procedure is common for waste classification analyses, CMG would recommend against if for assessment purposes. The process of compositing averages out contamination concentrations in the discrete aliquots which comprise the composite sample. Therefore, one should compare the results of composite samples to significant lower values than discrete aliquots in case only one of the discrete aliquots exceeds the applicable standard and the remainder are below laboratory reporting limits. This comparison value would be the applicable standard divided by the number od discrete samples that comprise the composite (thus for a four-point composite the comparator should be 25% of the applicable standard, for a five-point composite it should be 20%, etc.) Nonetheless, Vertex compared the samples of composite samples directly to RCS-1 standards. It is likely that composite samples with higher lead detections (such as sample V-312 [2-4'], which exhibit 150 mg/Kg total lead) had one or more discrete aliquots that exceeded the 200 mg/Kg standard, which suggests that Vertex may have left soil in place which they should have excavated for proper off-site disposal. This practice also calls into question Vertex's assertion that total "lead impacts in the firing range at concentrations exceeding the applicable MCP RCS-1 Reportable Concentrations did not extend deeper than 2 feet bgs" (text page 16). The Town of Wayland requests that Vertex re-evaluate its conclusions regarding full horizontal and vertical delineation of total lead impacts in the former firing range portion of the Property.	VERTEX is confident that the calculated Exposure Point Concentrations do not underestimate the mean metal concentrations. The sampling locations were biased to be in the areas of highest remaining residual concentrations and any potential future exposure to Site soils would not be limited to the area of sample collection. VERTEX collected a five-point composite sample from each test pit advanced within the firing range to assist with vertical delineation. Each test pit was approximately 5 feet wide by 10 feet long, advanced within the center of each of the identified characterization cells. Each composite sample was collected to generate data representative of each cell at the given depth interval, rather than relying on one 8-ounce sample collected from a single location. This sampling method would not underestimate the true mean EPCs, to which the cleanup standards should be compared. Therefore, VERTEX is confident in the delineation of impacts within the firing range as the conclusions presented in this report are supported by the data set collected as a whole.

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Section 4.1.3: Vertex states hat they conducted phosphoric acid remediation of soils that exhibited leachable lead over 5 mg/L "within the footprint of the former firing range" in April and May 2021 (see text pages 10 & 21 of the draft RAM Completion report) and subsequently collected post-stabilization groundwater samples from monitoring wells V-106, V-202, and V-201 (reportedly hydraulically upgradient, nearby downgradient, and further downgradient, respectively). However, the "Approximate Groundwater Flow Direction arrow" on Figure 2 indicates that flow is south-southeasterly through this portion of the Property, which makes each of these three wells hydraulically cross-gradient to the former firing range. Furthermore, CMG is not certain that groundwater flowing under the former firing range (hence the phosphoric acid remediation area" could travel all the way to well V-202 (let alone V-201) in the time given between phosphoric acid remediation and groundwater sampling, even were those wells directly downgradient of the remediation area. Vertex does not provide an exact location of the phosphoric acid remediation area, but well V-202 is at least 30' northeast of the former firing range's northeasterly extent, and above 120' northeast of the range's southwesterly extent. Groundwater flow information from Vertex's February 17, 2022 draft DPS Opinion report states that the hydraulic gradient at the Property ranges from 1.0x10-3 to 1.5x10-3 feet/foot, and the GeoHydroCycle, Inc. "Hydraulic Evaluation" report appended to that document provides a geometric mean hydraulic conductivity value of 209 feet/day. The standard equation for groundwater velocity yields an estimated velocity of 0.6 to 0.9 feet/day. Thus it would take between 36-81 days for groundwater to flow the estimated 60-90' from the remediation area to well V-202 (ignoring contamination retardation and assuming well V-202 is directly downgradient, which it does not appear to be). Vertex conducted phosphoric acid remediation on April 12 & May 14, 2021 and sampled groundwater at V-202 on April 16 & May 24, 2021. Even the best-case scenario (4.12.21 to 5/14/21, 42 days) gives barely enough time for the most optimistic projection of groundwater to reach well V-202 (26 days, assuming maximum groundwater gradient and minimum distance). The initial "Post-Stabilization" sampling was only 4 days after the initial phosphoric acid treatment (and 42 days before the second treatment) - clearly insufficient time for potential contaminants to travel to the sampling point. Therefore, CMG concludes that Vertex did not meet MCP requirements regarding monitoring for remedial additives and/or byproducts set forth at 310 CMR 40.0046(4)(c). The Town of Wayland requests that Vertex conduct additional groundwater monitoring directly downgradient of (and perhaps also directly at) the location where they conducted lead stabilization using dilute phosphoric acid, in conformance with 310 CMR 40.0046(4)(c).	The location of VERTEX's monitoring wells, while although ultimately shown to not be directly downgradient of the point of Remedial Additive application, was based on the wetland location which was assessed to be the closest potentially sensitive receptor, and based on the potential for application of remedial additives to create temporary mounding of groundwater and flow to the wetland. VERTEX monitoring well V-202 was installed approximately 30 feet from the area of phosphoric acid soil stabilization area, therefore, given the average calculated groundwater velocity of 0.75 feet/day, if impacts were to have occurred, they would be detected within V-202 within 40 days of application. The application of Remedial Additives to stabilize the largest volume of soil was undertaken on April 12, 2021, and a second application was conducted on May 24, 2021 to stabilize a smaller volume of soil. VERTEX sampled groundwater 42 days after the first stabilization to assess whether groundwater had been impacted by the Remedial Additives or Remedial Additive by-products. Impacts to the groundwater as a result of the stabilization is highly unlikely due to: • The completion of stabilization within a consolidated mound of soil on the surface and not in the subsurface; •Following stabilization the treated soils were placed on polyethylene sheeting; •The stabilized soil was covered with polyethylene sheeting immediately after application of the Remedial Additives to prevent stormwater infiltration; •The slightly viscous nature of the additive which aids in the adsorption of the additive to the soil and reduces the potential for it to freely drain from the soil; •The application of the additive at a rate of 0.5% by volume, which is a small fraction of the likely porosity of the soil, which would be expected to range from 25 to 35% by volume, thereby well within the adsorptive capacity of the soil; and •The Remedial Additives would have been fully absorbed by the soil and the volume of additive was not sufficient to have created a saturated condition that would leach to groundwater. Based on the above, VERTEX is of the opinion that additional groundwater monitoring to assess potential impacts from Remedial Additives is not necessary.
Section 4.2.3: The table in this section of the draft RAM Completion Report (text pages 27-28) indicates that Vertex supervised the off-site transport of a total of 70,016.19 tons of soil material from the 32,000 cubic yard and 4,500 cubic yard stockpiles formerly located at the Property. This works out to 1.92 tons per cubic yard of material, which is 28% higher than the 1.5 tons per cubic yard typically used to estimate soil volume from its weight. The Town of Wayland requests that Vertex explain this discrepancy - was it due to underestimating the actual volume of the stockpiles, over excavation of material beneath the stockpiles, or some other reason?	The increased tonnage taken off-site was due to a variety of reasons including: •The presence of asphalt and/or concrete, as well as increased moisture content in soils within the stockpile is expected to have generated a heavier soil volume than the typical 1.5 ton/cubic yard estimate. •Some areas of the site were over excavated in support of construction purposes. •While the volume calculations for both stockpiles were completed using surveyed drawings, there is always a chance that due to the size and difficulty associated with exact volume estimates the stockpiles could have been underestimated. Enough representative characterization samples were collected to meet receiving facility requirements and were verified by facility measurements of truck weights.

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Section 4.3.1: On page 29 of the draft RAM Completion Report, Vertex notes there were three one-hour intervals on April 5, 2021 when measured dust levels exceeded the 0.15 mg/m3 action level. Vertex states they implemented dust control measures "promptly following the exceedances" but do not indicate if they implemented these measures after each action level exceedances, or after the third such exceedance on that day. Table 9 (Summary of Dust Monitoring Data) does not indicate when Vertex implemented dust control measures. The Town of Wayland requests that Vertex include this information in their final RAM Completion Report for RTN 3-36013.	This has been updated in the final RAM Completion Report.
Section 5.1.1: At page 32, four lines up from the bottom of the page, please clarify the language to state that in the eighth monitoring well V-304, PFAS was detected but not above the RCGW-1 Reportable Concentration.	This has been updated in the final RAM Completion Report.
Table 10: I) Top banner where the sample locations and dates of sampling are listed, please also state the groundwater depth at which each sample was taken. II) For those single reporting entries where it appears that more than one sample may have been collected on a given day, please clearly indicate on the table the results obtained for each of the samples. III) In the text of the report, please provide an explanation of why wells V-201 and V-301, as compared to the remaining wells, were tested on more than one date.	I) The monitoring well screened interval has been added to the table in the final report. II) Duplicate Samples have been identified on the table. III)Additional text has been added to Section 5.1.2.
Figure 3: In viewing the figure, it does not seem that sufficient data has been collected to claim a definitive groundwater flow direction. There is not much of a gradient nor can one tell from the data collected what is or is not "downgradient".	Groundwater elevations were measured across various seasons and years to establish groundwater flow across the site. Based on the groundwater elevations measured, groundwater flow is toward the Sudbury River in an east-southeasterly direction, which is also as expected based on topography and the location of the river. Additional descriptions regarding the calculation of groundwater flow are included in the Downgradient Property Status Opinion Report.