INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

July 2, 2024

Elizabeth A. South
770 N. High School Rd
Indianapolis, IN 46214

Re: **Initial Site Investigation Report (Number 2)**
Harvestland Co-Alliance Cooperative, Inc.
2021 West U.S. 40
Dunreith, Indiana
State Cleanup Site #0001175

Dear Ms. South:

The Indiana Department of Environmental Management (IDEM) has reviewed the document titled *Initial Site Investigation Report (number 2), Co-Alliance Cooperative, Inc. 2021 West U.S. 40 Dunreith, Indiana 47337 IDEM State Cleanup Site Number: 0001175 American Project Number: 431049* (ISI), prepared and submitted by American Environmental, 8500 Georgetown Road Indianapolis, Indiana 46268. The ISC was submitted in response to a release(s) of hazardous substances at the Harvestland Co-Alliance Cooperative Site located at 2021 West U.S. 40, Dunreith, Henry County (Site). The ISC is available in IDEM's Virtual File Cabinet (VFC) as document #83514056. The VFC is located on IDEM's website at https://vfc.idem.in.gov/.

The document was evaluated based on IDEM's *Risk-based Closure Guide* ("RCG" or "R2") and *State Cleanup Program Guide* non-rule policy documents and *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW846) Third Edition, Update III. Non-rule policy documents are located at: https://www.in.gov/idem/resources/nonrule-policies/effective-nonrule-policies/. Based on the data submitted, results for the on-site potable well must be included and blind drilling is not permissible. The following IDEM comments must be addressed in the ISI:

Comments

1. As with the previous investigation, the consultant indicates that samples were analyzed for volatile organic compounds (VOC)s using United States Environmental Protection Agency (USEPA) Method 8260, pesticides using USEPA Methods 8081 and 8141, herbicides using USEPA Method 8151A, ammonia using USEPA Method 350.1, and for nitrogen (nitrate/nitrite) using USEPA Method 353.2. However, not every sample was analyzed for all these parameters. The consultant appears to have selected individual parameters for each boring, but no criteria for these selections were provided. The

rationales for the parameter selections must be provided. Until these are provided, IDEM cannot determine the soil direct contact exposure risk.

2. The 12 borings were converted to permanent monitoring wells and sampled in January 2024. Monitoring well (MW)-10 yielded 1,2,4 and 1,3,5-trimetholbenzene (TMB) above the ground water published levels (GWPL)s level, 60 parts per billion (ug/l) at 235 and 220 ug/l, respectively. Pentachlorophenol was present above the GWPL of 1 ug/l in MW-12 at 13.6 ug/l. Nitrogen (nitrate) was detected above the GWPL of 10,000 ug/l in six of the samples at concentrations ranging from 29,500 ug/l in MW-4 to 330,000 ug/l in MW-11. These collective results indicate the need for a remedy. Additional delineation is required.

3. The consultant sampled the on-Site potable well later in January, but the results were not included in the document. The consultant indicates that another round of sampling will be conducted in the second quarter of 2024 and the potable well results will be provided with the submittal associated with that sampling event. Additional delineation must include the identification and sampling of nearby potable wells.

4. In December 2023, the consultant installed twelve monitoring wells (MW-1 through MW-12) to 15-20 ft-bgs with 10-foot screens. AEC indicates that MW-8 through MW-12 were blind drilled as they were in the proximity of previously advanced soil borings; however, each well appears to be depicted on the map as being more than 5 feet from the soil boring based on the map scale (in particular MW-8) and MW-8, MW-10, MW-11, and MW-12 were each installed 5 feet below the bottom of their corresponding soil borings (B-9, B-2, B-7, and B-1, respectively). Per the IDEM Non-rule Policy Waste-053, monitoring wells installed within five feet from a previously made boring do not have to be continuously sampled if adequate samples and a log from the nearby boring were obtained. The ambiguity of the wells' locations and the fact they were installed below the logged interval of the previous soil borings renders blind drilling unacceptable and requires location clarification and/or soil sampling of unlogged intervals.

5. The consultant concluded that soil analytical results indicate that no further investigation is required as contaminants of concern (COC)s above R2 residential published levels (RSPL)s and excavation worker soil published level (XSPL)s are not present. IDEM finds this conclusion premature, in particular for the surface soil exposure pathway, as only five surface soil samples have been collected across an approximately 11-acre property. In addition to the limited soil sampling across a large area, not all COCs have been analyzed at each location. The soil exposure pathway remains uncharacterized and additional surface soil sampling is necessary. The consultant proposes to complete an additional groundwater monitoring event in the 2nd quarter of 2024 to confirm COC concentrations, groundwater flow direction and determine the next investigative steps. This is acceptable and IDEM requires that all ground water samples be analyzed for each COC. The consultant indicates that the on-Site potable well was sampled in January 2024 and the results will be included in the next submittal.

6. One groundwater sample was collected from each of the 12 wells on January 3–4, 2024. Samples were collected using disposable bailers. The consultant did not state whether wells were purged; therefore, the groundwater results are estimated. In future reports, the consultant should state whether wells were purged (and purge volumes) prior to sample collection.

7. IDEM requires that all future samples be analyzed for all COCs rather than select COCs, as this will support the development of a more complete site understanding.

8. Several typographical errors are noted in Table 12 consisting of reporting dates and concentrations as percentages.

9. The laboratory quality assurance/ quality control (QA/QC) documentation partially met the R2 Level II minimum data documentation requirements(MDDRs). The IDEM QA/QC documentation recommendations can be found in Section 2.2.9 (Table 2-B) of the R2, or online at: https://www.in.gov/idem/files/nrpd_waste-0046-r2_attch.pdf.

10. Soil analytical results for DCPA (dacthal) are estimated biased low due to out-of-control matrix spike/ matrix spike dup[locate MS/MSD recoveries. Soil results for merphos-oxone are estimated due to out-of-control calibration. Site-specific groundwater MS/MSD analysis was not performed; therefore, the groundwater analytical results are estimated. Site-specific MS/MSD samples should be collected during all future sampling events.

Conclusions

Further characterization is required to complete delineation of the contamination identified in the second ISI. A further Site investigation (FSI) event and a report submittal to IDEM is required. The FSI must include the appropriate MDDRs and MS/MSD requirements.

IDEM must be provided a minimum of two weeks' advance notice for field activities. Please submit the FSI Work Plan to IDEM within 30 days of the date of this letter.

To reduce paper usage, reports are required to be submitted via **State Cleanup's e-Submission Portal (ESP)**. Paper copies are no longer required or accepted; however, paper copies of figures and tables may be requested by the Project Manager.

To request access to the ESP, complete State Agency Form 57103, available on IDEM's website at idem.in.gov/myesubmission. Please note that the size limit for an electronic document remains at 75 megabytes (MB) per IDEM Office of Land Quality electronic document submittal guidelines, which are available online at: www.in.gov/idem/landquality/2368.htm.

If you have any questions or comments concerning this matter, please contact me by phone at 317-691-6370 or by email at kmcdanie@idem.in.gov, or you may call IDEM's toll free number at (800) 451-6027 and ask for Mr. Kenneth C. McDaniel.

Sincerely,

Kenneth C. McDaniel

This document signed electronically

Kenneth C. McDaniel
State Cleanup Section
Office of Land Quality

ec: IDEM Site #0001175

cc: Chris White, C.H.M.M. #28395, Senior Project Manager, American Environmental Corporation 8500 Georgetown Road Indianapolis, Indiana 46268

Henry County Health Department, Suite 101 and 208, 1201 Race Street, New Castle, Indiana 47362

If a technical dispute arises and cannot be resolved in a timely manner, please see IDEM's website for information about appealing technical decisions through the Office of Land Quality's Technical Review Panel pilot program at: www.in.gov/idem/cleanups/2370.htm.