December 31, 2024

Jonathan Rice, Chief
Industrial and General Permits Division
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

**RE: Monthly Progress Report – December 2024**
**Perdue AgriBusiness LLC**
**AI#2087, State Permit No. 15-DP-0359, NPDES Permit No. MD0000060**
**6906 Zion Church Road, Salisbury, Maryland 21804**
**Langan Project No.: 220210101**

Dear Mr. Rice:

Langan Engineering and Environmental Services, LLC (Langan) has prepared this progress report for December 2024 on behalf of Perdue AgriBusiness LLC (PAB) regarding the Zion Church Road (ZCR) facility located at 6906 Zion Church Road in Salisbury, Maryland (the "Facility"). This report was prepared in response to the *Request for Action to Address PFAS in Wastewater* letter issued to PAB in November 2024, by the Maryland Department of the Environment (MDE), Water and Science Administration, Wastewater Pollution Prevention and Reclamation Program (the "Department").

The Department's November 8 letter contained the following two substantive requests:

1. ***Monitoring and Reporting:*** *As soon as possible, but no later than 15 days from the date of this letter, collect your first monthly sample at Outfall 001 for PFAS and submit it for testing using EPA Method 1633. Samples shall be collected every month until further notice. Sample results shall be provided to the Department via email to jonathan.rice@maryland.gov no later than 7 days after you receive each lab report.*

2. ***Source Identification:*** *As soon as possible, but no later than 5 days from the date of this letter, begin a comprehensive assessment of the Facility's processes, materials, and any third-party waste streams to identify sources of PFAS that may enter the Facility's discharges, stormwater runoff, or sludge. Progress reports regarding the evaluation, including any preliminary results or final findings, shall be submitted to the Department on a monthly basis. Monthly reports shall be provided to the Department via email to jonathan.rice@maryland.gov by the final date of each month, with the first report due on November 30, 2024. Based on the findings, a mitigation plan may be necessary to propose a strategy to reduce or to the extent practicable eliminate PFAS-containing materials entering the Facility's wastewater, stormwater runoff, or sludge.*

This is the second report submitted in accordance with the Department's request for monthly progress reports to be submitted by the final date of each month, starting on or before November 30, 2024. This monthly progress report provides a summary of per- and polyfluoroalkyl substances (PFAS) monitoring and reporting activities (Section "A" below), a summary of PFAS source assessment activities (Section "B" below), and plans and recommendations for groundwater monitoring (Section "C" below).

Langan and PAB are currently developing a standard operating procedure (SOP) for PFAS wastewater sampling. A copy will be provided to the MDE upon its completion.

## A. Monitoring and Reporting

Langan performed initial sampling of the Facility's effluent on November 20, 2024. At the Department's request and pursuant to Department guidance[1], the sample (ID WWTP_Effluent_WB_112024) was collected as a 'composite–grab' sample, via four individual grab samples collected at evenly-distributed intervals within an 8-hour period. A field blank (ID "EB-1_112024") was also collected at the start of the sampling event to confirm no PFAS cross-contamination occurred during sampling, transport, and storage. The samples were submitted under chain of custody to Pace Analytical (formerly Alpha Analytical) laboratory in Mansfield, Massachusetts for analysis of 40 PFAS using EPA Method 1633. The results of this initial sampling event were provided to the Department on December 26, 2024. They were also attached to the December 2024 Discharge Monitoring Report (DMR). The sum of detected concentrations for the 40 PFAS ("total PFAS") was 118 parts per trillion (ppt).

A second monthly sampling event occurred on December 17, 2024. Sample analysis has a standard turnaround time of 10 business days, and Langan will validate the results with an anticipated turnaround time of 5 business days. Sampling events will occur monthly. Results will be provided to the Department within 7 days of completing data validation and management and will also be attached to the Facility's monthly DMR.

Langan may recommend replacing 'composite-grab' sampling with grab sampling, if appropriate (e.g., the source(s) of PFAS in the wastewater are determined to be continuous/non-transient, PFAS concentrations are stable or exhibiting steady trends per monthly monitoring results, etc.).

## B. Source Identification

PAB has been conducting a comprehensive and systematic inventory and assessment of products and chemicals currently used in its processes and throughout the Facility.

The source assessment at the Facility is ongoing. To date, PAB has not identified any PFAS-containing products or chemicals used by PAB in any of its operations at the Facility. At this time, the only known PFAS-containing product or chemical at the Facility is aqueous film-forming foam (AFFF), which is stored for use in the fire suppression system at the soybean crush plant. The

[1] Maryland Department of the Environment, Water and Science Administration: *PFAS Sampling Guidance Document for Wastewater Analysis* (revised September 10, 2024), accessed at: https://mde.maryland.gov/programs/permits/WaterManagementPermits/Documents/WPPRP-PFAS-Guidance.pdf.

last known release of AFFF at the Facility was in approximately 2018. At that time, the AFFF in the fire suppression system was Ansulite AFC–3A. The fire suppression system currently contains Ansulite AFC-3B.[2] PAB is evaluating other potential fire suppression systems that would not contain PFAS.

Langan performed a site visit on November 12, 2024 to observe and assess process areas that generate wastewater, and is in the process of gathering additional information regarding the AFFF fire suppression system and associated/nearby process water infrastructure. Historical AFFF use and fire suppression system operations are also being assessed. As part of PAB's ongoing hazardous substance response site assessment, Langan is preparing a workplan for initial soil and groundwater sampling in certain areas of interest at the Facility, including the area surrounding the AFFF fire suppression system. It is anticipated that this workplan will be submitted to MDE for review in January 2025. Sampling conducted as part of the workplan will also be used to support PAB's identification of potential sources of PFAS in Facility wastewater.

Groundwater is used in the Facility's operations and therefore could be a source of PFAS in Facility wastewater. Accordingly, PAB is evaluating and implementing options for treating groundwater prior to use at the site.

## C. Groundwater Monitoring

In July 2024, six temporary, multi-level PFAS groundwater monitoring wells were installed on the western portion of the PAB property and sampled for PFAS, under a plan that was approved by MDE in May 2024. The results were submitted to MDE in a report dated September 2024. Those wells were resampled in December 2024 as part of the quarterly monitoring schedule contemplated in the MDE-approved plan.

As discussed above, PAB has asked Langan to prepare a workplan for initial soil and groundwater sampling at the Facility as part of its ongoing hazardous substance response site assessment. That investigation—in addition to data obtained from the ongoing sampling of private drinking water supply wells—will inform the development of an integrated groundwater monitoring program that accounts for PAB's evolving understanding of PFAS distribution in groundwater. This integrated groundwater monitoring program will involve a more diverse network of monitoring wells representing key locations and depths and will substantively replace the ongoing groundwater monitoring previously approved by MDE. As discussed with MDE, PAB anticipates that the next quarterly sampling called for by the groundwater monitoring plan approved by MDE in May 2024 will be supplanted by the sampling workplan in the revised monitoring plan, also to be approved by MDE, and thus PAB hereby requests that the existing quarterly sampling protocol be discontinued in favor of the forthcoming workplan.

## D. Closing

As stated above, NPDES PFAS sampling will continue to occur monthly as required in MDE's November 8 letter. Scheduling for source assessment and sampling continues to be developed,

[2] Ansulite AFC-3B does not contain any of the six PFAS compounds for which EPA has established drinking water standards.

and quarterly groundwater monitoring will continue to occur per the May 2024 groundwater monitoring plan until MDE approves otherwise.

Sincerely,
**Langan Engineering and Environmental Services, LLC**

Jillian Terhune
Senior Project Manager

cc: Jaclyn Mays, PAB
Herb Frerichs, PAB