

Mr. Andy Crump  
Sunrise Cooperative  
215 Looney Road  
Piqua, Ohio 45356

August 3, 2017

RE: Results of Phase II Environmental Assessment of Former Sunrise Cooperative Engineering-Seed Hub Facility, 255 South Main Street, Botkins, Ohio

Dear Mr. Crump:

In accordance with your authorization, Renz & Associates, Inc conducted a limited Phase II Environmental Assessment of the former Sunrise Cooperative Engineering-Seed Hub Facility located at 255 South Main Street, Botkins, Ohio. The study was initiated based upon the results of a Phase I Environmental Assessment which identified the following "*Recognized Environmental Conditions*":

- Two underground storage tanks were removed from the front of the property in the late 1980s but no documentation regarding soil analysis was available.
- Five in-ground hydraulic lifts were once present on the property but have been removed. No documentation regarding soil analysis was available.

To determine if residual contamination was present, soil borings were installed in each of these areas of concern. A single boring was installed into the center of the former underground storage tank pit. The chemicals of concern were benzene, toluene, ethyl benzene, total xylenes, MTBE (gasoline compound) and poly nuclear aromatic hydrocarbons (diesel compounds) and total petroleum hydrocarbons in both gasoline range and diesel range. Soil borings were installed between and adjacent to, each of the five in-ground hydraulic lifts inside of the building. The chemicals of concern were volatile organic compounds (including solvents), poly nuclear aromatic hydrocarbons (hydraulic oil) and oil range total petroleum hydrocarbons. The sampling locations are indicated on Figure 1.

Drilling operations were performed on July 26 2017 by Renz & Associates, Inc. Prior to commencement of field work, Renz & Associates, Inc. buried utilities were marked by the Ohio Utilities Protection Service.

## **Field Procedures**

The proposed boring locations were examined by the project geologist and a representative of Sunrise Cooperative prior to installation to identify utilities not marked by OUPS.

The borings were installed during using a Model 4220 GeoProbe™ owned and operated by Renz & Associates, Inc. As a direct-push instrument, the GeoProbe™ produces a borehole which is only 1.5 inches in diameter and generates no soil cuttings. Soil samples are collected with the GeoProbe™ at discrete intervals using a stainless steel sampling barrel measuring 2.0 feet in length and 1.3 inches in diameter. The sampling barrel is sealed with a retractable drive tip, which is actuated through hollow stem drive rods upon reaching a specified depth. Once the tip is retracted, the sampling barrel is driven a maximum of two feet into the undisturbed soils and a core sample is collected. The sampling barrel is fitted with a disposable, cellulose acetate butylate (CAB) liner to contain the soil sample and reduce the potential for cross contamination of samples. CAB is a chemically inert material. Upon retrieval, soil samples were examined by a geologist.

As part of the examination, the soil cores were screened for organic vapors indicative of petroleum contamination using a photoionization detector. Upon retrieval, each soil sample was split in half for processing. One half of each sample was labeled and archived in a sealed CAB liner for possible laboratory analysis, pending the sample screening results. The remaining portion was placed in a zip-lock plastic bag for field screening, labeled with the sampling location and time and staged to allow the sample to warm to the ambient temperature of approximately 75 degrees. The volume of sample used for field screening was uniform for all samples in order that the results could be compared. Once each sample had been staged for 10 minutes, the tip of a Photovac model 2020 photoionization detector was inserted into the sample bag and the concentration of volatile organic compounds in the atmosphere of the bag was measured. Prior to use, the Photovac was calibrated with a 100 part per million standard of isobutylene and ambient air as a zero point.

The sample from each boring which produced the highest concentration of organic vapors from each borehole was selected for laboratory analysis. The samples selected for chemical analysis were transferred into 250 milliliter borosilicate glass jars fitted with Teflon lined lids, labeled and packed on ice for transport to the laboratory. The samples were transported by Renz & Associates, Inc. under a controlled and documented chain of custody to Advanced Analytics for chemical analysis.

In the event that ground water was encountered, samples were to be collected using a GeoProbe® Screen Point 15 Groundwater Sampler. This device consists of a 3.5 foot long stainless steel well screen with a standard slot size of 0.004 inches. The well screen is contained within a sealed segment of casing and fitted with a disposable drive point. The casing serves as a sheath for the unit which prevents it from coming into contact with materials above the water table. The well screen is driven, sealed within its sheath into the saturated

materials. The sampler sheath is then retracted, exposing the stainless steel well screen to the saturated formation. It should be noted that the well screen sheath is a water tight casing; therefore, no cross contamination of the screen from overlying sediments can occur. The device functions as a temporary stainless steel monitoring well. The borings were designated GP-1 through GP-5. Boring GP-1 was installed in the center of the former tank pit. Borings GP-2 through GP-5 were installed adjacent to the former hydraulic lifts. The locations are indicated on the attached figure.

### **Phase II Results**

All five borings encountered homogeneous deposits of dense brown clay with a trace amount of silt and few pebbles. The borings were extended to approximately 15 feet below grade. No saturated conditions were encountered. All field screening results were negative and no organic vapors were encountered. No odors, stains or other indications of contamination were encountered in any of the soil samples recovered. The sample from GP-1 in the former tank pit was collected from the bottom of the pit as this is the location where any fugitive petroleum would be encountered, if present. Samples were selected for laboratory analysis at a depth of six to eight feet next to the former hydraulic lifts as this is typically the depth of the oil reservoirs in most lifts. The samples were analyzed for a broad range of volatile organic compounds using US EPA method 8270, polynuclear aromatic hydrocarbons using EPA method 8270 and oil range total petroleum hydrocarbons using EPA method 8015. All results were below laboratory detection limits.

### **Conclusions**

The results of the Phase II Environmental Assessment did not reveal any evidence of impact from the Recognized Environmental Conditions identified by the Phase I Environmental Assessment.

Respectfully submitted,  
Renz & Associates, Inc.

*Michael E. Renz*

Michael E. Renz  
Geologist

Attachments: Figure 1 - Soil Boring Locations  
Photographs of Field Operations  
Boring Logs  
Laboratory Reports & Chain of Custody Record