Project 201942



March 4, 2021

Mr. Joe Martella Environmental Engineer III RI Department of Environmental Management 235 Promenade Street Providence, Rhode Island 02908

Re: Response to February 5, 2021 Email Residential Property 32-33 Exchange Street East Greenwich, RI

Dear Mr. Martella:

Redwood Environmental Group, LLC (Redwood) is providing a formal response to an email from you dated February 5, 2021 regarding the above noted address, the Site.

Redwood agrees with your summary of Site activities involving contaminated soils with one exception. Grenier Group plans to utilize geotextile fabric and 1-foot of either crushed stone or 1-foot of clean fill as a Site-wide cap during and after the project is completed. As you have further stated, Air Quality Monitoring (AQM) for contaminated fugitive dust at the downwind property perimeter will be conducted from the start of the project, during all activities involving the disturbance of contaminated soils, until the Site-wide cap is completed, and no contaminated soils are exposed. All other dust control best management practices (BMPs) requested by RI DEM and/or stated in the SIR Addendum No. 2 will be performed during the project, as needed. Should contaminated soils be disturbed after the cap is fully installed, the AQM and BMPs will be utilized to such time that the cap is fully restored.

As for the three numbered questions in the email, here are the responses:

- Grenier has performed a cost benefit analysis of excavating and disposing of 2-feet of contaminated soil to installing geotextile fabric and 1-foot of clean fill above current Site soils. Based on cost, the decision was made to utilize the geotextile fabric and 1-foot of crushed stone/clean fill. As such, it is not anticipated that soil will be excavated and disposed of off-Site as originally planned. However, Grenier reserves the right to dispose contaminated soils off-Site at a licensed facility, as needed. The AQM will be utilized during all phases of disturbance of contaminated Site soils.
- 2. This description is provided in the Step-by-Step process below.
- 3. The existing Site structure has a basement. The new building to be constructed along Exchange Street will also have a basement. The new building will utilize most of the former structure footprint. Any excess area outside the footprint will be filled with Site soils and then capped with geotextile fabric and 1-foot of crushed stone or clean fill. The basement floor of the new building will be finished with plastic and then a concrete floor poured capping the contaminated soils below.

## Step 1- Install Air Quality Monitoring System and Wash Station

Prior to any work at the Site, the AQM system will be installed to monitor contaminated soil fugitive dust. The system includes two air quality monitoring instruments and one weather station unit. The AQM units will be placed downgradient at the Site perimeter by professionally trained engineers to properly record fugitive dust during the disturbance of contaminated soils. After capping is complete, the AQM will not be needed unless additional contaminated soils will be disturbed. Should the AQM results suggest contaminated fugitive dust has been generated, a reassessment of best management practices (BMPs) to suppress the dust will be performed.

A small wash station will be installed at the entrance to the Site. This station will be used to wash equipment/vehicles before leaving the Site and during the period of time that equipment/vehicles are handling or in contact with contaminated soil. After the Site is capped, the wash station will not be needed. If contaminated soils are to be disturbed and equipment/vehicles will be leaving the Site, the equipment or vehicles will utilize the wash station.

# Step 2- Demolition of Existing Building

Heavy equipment is expected in the rear of the building to demolish the building and load the debris into roll-off containers. Grenier plans to install geotextile fabric and 1-foot of crushed stone on the south and east sides of the building for heavy equipment, roll off containers and trucks to traverse. The geotextile fabric along with the 1-foot of crushed stone will eliminate the disturbance of the contaminated soils and prevent contaminated fugitive dust generation.

# Step 3- Excavation of Foundation for New Building along Exchange Street

A new building will be located at the entrance to the Site along Exchange Street. Excavation of contaminated soils will be necessary to install the foundation. The excavated soils will be stockpiled and covered with 6-mil plastic and will eventually be used as backfill for the foundation. The elevation of the backfill around the foundation will be 1-foot minus to allow for the installation of the geofabric and 1-foot of clean fill. Any areas outside the footprint of the new building which requires backfill will be filled with Site soils and properly capped. Concurrent with the foundation installation, the new entrance of the Site will be covered with geotextile fabric and capped with either 1-foot of crushed stone or clean fill.

#### Step 4- Cap Driveway to Rear of Site

Working from west to east, the driveway area (which will be driveway and parking area at project end) to the rear of the Site will be capped with geotextile fabric and either 1-foot of crushed stone or 1-food of clean fill. This capped area will provide access for vehicles to the rear (eastern portion) of the Site, limit exposure to contaminated soils and limit generation of contaminated fugitive dust.

### **Step 5- Installation of Three Building Foundations**

Foundations will be excavated for three buildings at the rear of the Site. Contaminated soils generated from the foundation excavations will be stockpiled on Site and covered with 6-mil plastic until such time that the soils can be re-used as backfill as stated above in Step 3. These buildings will not have basements. Plastic will be placed over the contaminated soils within the foundation walls and concrete poured to seal the contaminated soils beneath. Contaminated soils generated from the foundation installation will be re-used around the foundations. If excess contaminated soils exist, these soils will be stockpiled and covered with 6-mil plastic for future use below the Site cap or

disposed off-Site at a proper facility. Geotextile fabric and 1-foot of clean fill will be installed around the foundations and the rear of the Site capping this portion of the Site. At this time, the entire Site should be capped with geotextile fabric and either 1-foot of crushed stone or clean fill.

# **Step 6- Utility Installation**

Utilities will be excavated from Exchange Street to the interior of the Site. Using the geotextile fabric as a guide, clean fill or stone will be removed and temporarily stockpiled for re-use. Excavation of contaminated soils will be performed to install the necessary utilities at the Site. The contaminated soils will be stockpiled on and covered with 6-mil plastic until such time that the soil will be re-used to backfill the utility trenches. The backfill will be to 1-foot minus to allow for the installation of geotextile fabric and 1-foot of clean fill. This process will be performed for all utility trenches on the Site.

At this point, the excavation and disturbance of contaminated soils will be complete. The Site will be fully capped with geotextile fabric and 1-foot of stone and/or clean fill and general construction of buildings will commence. The AQM will not be need as disturbance of the contaminated soil will have been completed. If at a future point(s) it is necessary to excavate beneath the cap, the AQM will be utilized for the period of time the contaminated soils are exposed.

I am preparing the Remedial Action Work Plan (RAWP) which will include the aforementioned process and hope for a speedy review. Grenier Group's hope is to begin the demolition of the structure at the Site on April 1, 2021.

If you have any questions regarding this report, please call me at (401) 270-7000. Thank you in advance for your speedy review.

Sincerely,

REDWOOD ENVIRONMENTAL GROUP, LLC

Gary S. Raufman

Gary S. Kaufman Principal/Senior Project Manager