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17 June 2021

## Via Email: cstroech@arnoldandbailey.com

Christopher P. Stroech, Esq. Arnold & Bailey, PLLC 208 N. George Street Charles Town, WV 25414

Re: Professional Engineering Concern Roxul RAN-5 Facility WV/NPDES Multi-Sector Stormwater General Permit Ranson, Jefferson County, West Virginia Langan Project Number: 270112301

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Dear Mr. Stroech:

As you are aware, I was asked to review, and if appropriate, opine on the above referenced matter. On April 20<sup>th</sup> 2021, I prepared and issued a summary of my opinions as they relate to the design, permitting, and operations of the Roxul RAN-5 facility. Amongst the numerous opinions in my report, I identified and expressed serious concern regarding the design and operation of the site's stormwater conveyance system. Specifically, I noted in my Opinion 3A that "inlets are clearly undersized and are shown to pond during simulated rainfall events. In some cases, the extent of the ponding will spread laterally more than 50 feet from an inlet location creating a widespread flooding condition on the site resulting in uncontrolled transport of polluted waters to unintended site areas."

In response to my opinion, Mr. James Hemme, Roxul's engineer, dismissed my concern stating that the "spread associated with the inlet entrances are associated with significant design storms and large rainfall depths that are infrequent and have relatively short durations of peak flow." Unfortunately, Mr. Hemme is incorrect and he did not properly evaluate the concern in the best interest of the public and the environment. Had Mr. Hemme actually evaluated the design of the conveyance system, he would have realized that ponding occurs at numerous storm drain inlets during various storm events including the more common 2 and 10 year events and that the ponding is not limited to or a result of "large rainfall depths"; but an insufficient design.

As stated in my report, "If not corrected immediately, the RAN-5 Facility will not drain effectively or as portrayed in Figure 3 of The SWPPP resulting in a flawed pollution prevention analysis subjecting the surrounding surface and groundwater to risk of contamination."

Simply put, the designed, approved, and constructed drainage system will not properly manage site runoff leading to uncontrolled ponding that will then overtop curbs and convey industrial stormwater in a manner that by-passes the engineering best management practices designed to treat or capture impacted water. Therefore, should the facility be allowed to operate and store

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Professional Engineering Opinions Roxul RAN-5 Facility WV/NPDES Multi-Sector Stormwater General Permit Ranson, Jefferson County, West Virginia Langan Project Number: 270112301

industrial waste, a 2 year, 10 year, or greater rainfall event would result in industrial runoff leaving the developed site limits entering one of the many known downstream karst features via direct discharge or infiltration. Left uncontrolled and untreated, industrial water entering the groundwater that flows through the below grade karst matrix in this area would then result in irreparable harm to the groundwater and surrounding environment.

In closing, neither the Stormwater Pollution Prevention Plan (SWPPP) nor the Groundwater Protection Plan (GPP) address this concern and are thus deficient. To protect the health and safety of the public, I strongly urge that the Roxul RAN-5 facility not be allowed to operate, create, or store industrial waste until this and other concerning matters are adequately addressed.

Very truly yours,

Langan Engineering and Environmental Services, Inc. By an C. Linthicum, P.E., LEED AP Senior Principal / Senior Vice President

State of <u>Virginia</u> County of <u>Arlington</u>

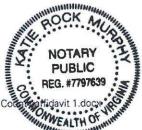
On this <u>6/17/2021</u> (enter date) before me <u>Katie Murphy</u> (enter notary's name), Notary Public, personally appeared <u>Ryan Linthicum</u> (insert name of person signing) who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or entity upon behalf of which the person acted, executed the instrument

I certify under penalty of perjury under the laws of the State of <u>Virginia</u> that the foregoing paragraph is true and correct.

Witness my hand an official seal:

Signature: My commission expires

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