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February 13, 2018

Mr. Jack Beach Tennessee Department of Environment and Conservation Division of Water Resources 312 Rosa L. Parks Ave. Nashville, TN 37243

Subject: National Pollutant Discharge Elimination Systems (NPDES)

Permit Renewal Application Revision for Albemarle U.S., Inc.

New Johnsonville, Tennessee

Permit # TN0062537

Dear Mr. Beach:

Enclosed please find three (3) copies of the revised pages of the NPDES permit renewal application package for the Albemarle U.S., Inc. facility located in New Johnsonville, Tennessee. The revisions are a result of discussions after your visit along with a subsequent but not directly related internal review and are to further clarify the descriptions and diagram of SW1, SW2, and Outfall 001.

The revised pages consist of the following:

- 1. This transmittal letter
- 2. Figure 2
- 3. EPA Form 2F page 2

The revisions mostly pertain to Outfall SW1 and the sample location. A relatively small area drains storm water directly to Outfall SW1. Outfall SW1 is located at a grassy ditch just downstream of the South Plant water catch basin that receives most of the storm water and process water from the South Plant. Overflow from the South Plant water catch basin has the potential to discharge to Outfall SW1.

Actual flow at SW1 is rare because the area that directly drains to the outfall is small and overflow from the South Plant catch basin is rare. Any overflow from the water retention pond would go the South Plant catch Basin. To

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collect samples of storm water from SW1 we have collected samples from the inlet to the South Plant catch basin. This sample is mostly storm water but also contains most of the wastewater streams from the South Plant. The laboratory analysis of water samples from this sample location are reported on Form 2F as no samples are available from Outfall SW1.

We also modified the North Plant lift station to plural to clarify that there are more than one of these and modified the text on page 2 of Form 2F to clarify these issues. Finally, the wastewater lift station collecting casting wastewater in the South Plant is pumped directly to the water retention pond. This is a recent clarification. The wastewater from this process is substantially more alkaline than other wastewater and is routed directly to the water retention pond to minimize the potential for discharge to Outfall SW2 during major storm events.

These clarifications are not changes to how the wastewater is collected but instead are offered to provide greater transparency to our process. The sample location was discussed in detail with you when you came and visited the site on January 25th and we want the application to match the results of that discussion.

I have signed the revised Form 2F, page 2. If you have any questions concerning this permit application, please do not hesitate to call me at 931-535-6201 or email at Darrell.Fisher@albemarle.com.

Sincerely.

Darrell Fisher

Albemarle U.S., Inc.

Director of Operations - Butyllithium & Specialty Products

| IV. Narrative Description of Pollutant Sources | |
|--|--|
| A For each outfall provide an estimate of the area (include units) of imperior | |

| drained by the outfall. | | | | | | |
|-------------------------|--|--------------------|-------------------|----------------------------|--------------------|--|
| Outfall Number | Area of Impervious Surface (provide units) | Total Area Drained | Outfall Number | Area of Impervious Surface | Total Area Drained | |

| L | Number | (provide units) | (provide units) | Outfall Number | Area of Impervious Surface (provide units) | Total Area Drained (provide units) |
|----|--------|-----------------|-----------------|-------------------|--|---------------------------------------|
| SI | W1 | 2.25 Acres | 7.75 Acres | SW2 | 3 Acres | 6 Acres |
| | | | | | | |
| | | | | | | , |
| | | | | | | |

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

The area that drains to SW1 is that not encompassed by the South Plant production areas and finished product storage sites. The North Plant production area and finished product storage area drain into a lift station that is pumped to the retention pond. Storm water from the South Plant collected in a catch basin is comingled with the facility process wastewater and pumped to the retention pond. As previously noted, the water in the retention pond is treated by a simple pH adjustment system before discharging through 001. During peak storm events at peak hours, some storm water flow may bypass treatment and will be discharged to SW1. The area that drains to SW2 encompasses the rail sidings into the plant, raw material loading & unloading areas located at the North Plant, storm water from the vegetative area to the north of the industrial areas, and storm water from the eastern portion of the facility that flows through a ditch into SW2. All storage and process areas of the North Plant are contained by dikes so that contaminated storm water may be pumped to the retention pond for treatment and discharge at outfall 001. During storm events at peak hours, some discharge to SW2 may occur. No pesticides, herbicides, soil conditioners or fertilizers are applied. The products are highly water reactive and raw materials and products are protected from exposure to water and storm water to prevent product degradation.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

| Outfall Number | Treatment | List Codes from Table 2F-1 |
|-------------------|---|-------------------------------|
| SW1 | See Figure 2 and 3 for details. Storm water drains into the catch basin for solids separation, is | |
| SW2 | pumped to the retention pond, and then for pH treatment and discharge at outfall 001. Treatment includes evaporation, flocculation, sedimentation and neutralization. During peak storm events, some storm water may discharge at the catch basin and other areas without treatment. Storm water is collected from lift stations and pumped to the water retention pond. During heavy storm events, excess storm water may discharge at SW2. Some undeveloped portions of the site also discharge to SW2. | |

V. Nonstormwater Discharges

| Α. | I certify under penalty of law hat the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, | and that all |
|----|---|--------------|
| | nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or From 2E application for the outfall. | |

Name and Official Title (type or print)

Darrell Fisher, Dir. of Operations

Date Signed

2/6/18

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Visual investigation at SW1 & SW2 during dry weather on October 24, 2017.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No significant leaks or spills in over 3 years.

