

North Carolina Department of Environmental Quality
Department of Waste Management, Hazardous Waste Section
1646 Mail Service Center, Raleigh, NC 27699-1646
Attn: Ms. Mary Siedlecki

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Subject:

Response to 5-Year Review Comments dated July 27, 2016

Dear Ms. Siedlecki:

On behalf of Ashland Inc. (Ashland), Arcadis G&M of North Carolina, Inc. (Arcadis) is submitting this response to the 5-year review comments from the North Carolina Department of Environmental Quality (NCDEQ) Hazardous Waste Section (Section) dated July 27, 2016. Section comments are provided in bold typeface followed by the responses in standard typeface.

- 1) Ashland Raleigh is in full compliance with post-closure care, including RCRA Cap inspection and maintenance, Facility security, and compliance monitoring.**

Ashland Agrees with the Section comment and will continue annual RCRA Cap monitoring.

- 2) Continue environmental monitoring on an annual basis until such time that Ashland Raleigh requests re-evaluation of the sampling regime.**

Ashland plans to request re-evaluation of the sampling program and transition to biennial sampling starting after the 2017 sampling event. Ashland will submit a formal request for reduction of sampling frequency to the Section in September 2016.

- 3) Although the potential for vapor intrusion issues has been evaluated on offsite property, the potential for vapor intrusion in onsite structures has not been evaluated. Currently, there is one large warehouse building onsite. Action Item: The Section requires that a work plan to evaluate the potential for indoor air impacts be submitted within thirty**

ENVIRONMENT

Date:

August 27, 2015

Contact:

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Our ref:

OH009000.NC20

days of receipt of this letter. Should indoor air sampling results exceed applicable health-based standards, the Section will require that the large onsite warehouse be retrofitted with vapor intrusion controls.

Ashland will submit a work plan to the Section by August 27, 2016 to evaluate the potential for indoor air impacts within the on-site building.

- 4) Furthermore, although an Environmental Covenant does exist, there is no means by which the Section can ensure continued compliance with the specified restrictions. The Section will contact the current property owner regarding a Declaration of Perpetual Land Use Restrictions (DPLUR). The primary purpose of the DPLUR will be to provide a mechanism for annual certification of continued compliance and thereby ensure the protection of human health and the environment. The Section will contact the property owner regarding the DPLUR in August 2016.**

Ashland will work with the Section and the property owner as needed to secure the DPLUR.

- 5) The Section does not require, but encourages Ashland, Inc., to consider an augmented remedial strategy to address the onsite source area and to accelerate groundwater remediation. This action is voluntary. Should Ashland Raleigh opt to consider augmented remediation actions, a work plan should be submitted to the Section prior to construction and implementation.**

Based on computer modeling performed during the corrective measures evaluation phase, the removal of all source mass at the Site would have very little effect on the groundwater concentrations over a 30 year timeframe. Ashland will continue with the current MNA strategy for now, but will evaluate treatment options in the event that conditions at the Site change unexpectedly.

- 6) Ashland Raleigh has financial assurance in the amount of \$240,497. Projected costs include environmental monitoring, RCRA cap inspection and maintenance, project management, and agency oversight. With the exception of RCRA cap inspections, costs are estimated from 2013 through 2042 (~30 years). RCRA cap inspections are only estimated through 2022 (not the full 30 years).**

The Section requires that the cost estimate be revised to reflect RCRA cap inspection and maintenance through 2042. Furthermore, unless

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Ashland anticipates formally requesting a reduction in monitoring frequency in 2017, environmental monitoring costs are underestimated. The cost estimate must be revised to include cap inspection/maintenance through 2042 and continued environmental monitoring on an annual basis. The Section requires that the revised cost estimate be submitted within thirty days of receipt of this letter.

Ashland will revise the financial assurance cost estimate to include annual RCRA Cap inspections through 2042 and will submit the cost estimate to the Section by September 26, 2016. Per the conversation between Arcadis and the Section on August 22, 2016, the Section agreed to extend the due date of the financial assurance cost estimate to 60 days from the date of the 5-Year Review Letter. Ashland is planning to formally request in September 2016 a reduction in the groundwater monitoring frequency to biennial after the 2017 sampling event. If approved by the Section, Ashland will update the financial assurance cost estimate to include biennial sampling events through 2042, rather than the existing 5-year sampling estimated from 2027 to 2042.

Sincerely,

Arcadis G&M of North Carolina, Inc.



Ryan Gerber, PE
Project Engineer

Copies:

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