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September 6, 2023

Electronic Submission

Mr. Michael College, P.E. Susquehanna River Basin Commission 4423 N. Front Street Harrisburg, PA 17110

RE: Cherokee Pharmaceuticals LLC, a wholly-owned subsidiary of Merck Sharp &

Dohme LLC

SRBC Docket Extension Request Docket: 20090310, 20090311

Riverside Borough, Northumberland County

Mr. College:

The Cherokee Pharmaceuticals LLC facility is currently operating under the following active Dockets:

- 20090310: Consumptive Water Use of up to 0.999 MGD (Peak Day) for Pharmaceutical and Chemical Production.
- 20090311: Surface Water Withdrawal of up to 34.392 MGD from the North Branch Susquehanna River for Pharmaceutical and Chemical Production.
- 20090312 Groundwater Withdrawal (30-Day Average) of 0.600 MGD from Recovery Wells RW-1D, RW-2, RW-4, RW-9, RW-0BS-6, and HSR-1, for Treatment of Groundwater Contamination.

We request the extension of Dockets 20090310 and 20090311 through 2028 to support our efforts detailed below.

The facility plans to cease manufacturing operations on December 31, 2024. Following the cessation of active manufacturing operations, a comprehensive decommissioning process is planned over the ensuing several years. Although the final disposition of

each building and system is undetermined, we have no plans for in-kind use of the facility or transfer of the dockets, facility, or equipment for the approved water uses.

We are preparing a GP-01 permit application for coverage of the groundwater withdrawal associated with the groundwater remediation system required under US EPA HSWA Corrective Action Permit PAD003043353.

An overview of the anticipated timeline of operations and water uses is as follows:

- 2023-2024: Pharmaceutical Manufacturing Operations.
 Consumptive water use and surface water withdrawal are expected at rates substantially consistent with past operations, dependent upon operational levels and activities. Of note, decommissioning activities are planned to begin as soon as active manufacturing operations cease for each individual process.
 Dependent upon final production schedules, we may experience both active pharmaceutical manufacturing and decommissioning operations during this time.
- 2024-2028: Decommissioning Operations.
 Consumptive water use is expected to decrease as manufacturing processes are terminated. Certain operations (including decommissioning) will continue to use water. Surface water withdrawal will continue to provide source water for utilities systems, including: potable water, fire water, boiler water for steam, thermal oxidizer and scrubber unit operation, and cooling tower makeup water.
- During decommissioning operations, utility systems are each operated in respect of overlapping regulatory compliance drivers and facility operational needs. Specific examples include:
 - Operation of thermal oxidizer and scrubber unit is required to control emissions until sources are shut down or otherwise not required to be controlled;
 - Operation of the boilers is required to support the detox system, potable water production, and the Wastewater Treatment Plant (WWTP);
 - Potable water production is required to support thermal oxidizer and scrubber unit operation, boilers, cooling towers, and other direct potable water uses; and,
 - River water is the source water for producing potable water and as supply to the fire suppression system, the latter of which must remain operational until the fire-protected buildings and systems are fully out of service or demolished.

We propose the following use limitations for the extension term:

- 20090310: Consumptive Water Use of 0.200 MGD (Peak Day).
- 20090311: Surface Water Withdrawal of 5.100 MGD from the North Branch Susquehanna River.

Thank you for your continued support and guidance as we navigate this extension period. If you have any questions or require additional information, please contact Phillip (Ben) Bahner at (570) 271-2116 or phillip.bahner@merck.com.

Sincerely,

Daniel Morris