UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION III

STATEMENT OF BASIS

Lyondell Chemical Company

Newtown Square, Pennsylvania

EPA ID NO. PAD 046538211

I. Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) for the Lyondell Chemical Company (Lyondell) located at 3801 West Chester Pike, Newtown Square, PA. EPA's review of available information indicates that there are no unaddressed releases of hazardous waste or hazardous constituents from the Facility. Based on that assessment, EPA's proposed decision is that no further investigation or cleanup is required. EPA has determined that its proposed decision is protective of human health and the environment and that no further corrective action or land use controls are necessary at this time. This SB highlights key information relied upon by EPA in making its proposed decision.

The Facility is subject to EPA's Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. (Corrective Action Program). The Corrective Action program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and hazardous constituents that have occurred at their property. The Commonwealth of Pennsylvania (Commonwealth) is not authorized for the Corrective Action Program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the Commonwealth for the Corrective Action Program.

The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed decision is based. See Section V, Public Participation, for information on how you may review the AR.

II. Facility Background

The facility is bordered to the north by vacant land and residences. Properties to the east, west, and south of the facility are primarily residential with some commercial properties intermixed. The property has been approved for redevelopment, which will include office, retail, and residential uses. Currently, the 312-acre property consists of approximately 20 percent impermeable surfaces (buildings and paved areas) and 80 percent permeable surfaces (vegetation and stormwater ponds).

III. Summary of Environmental History

Lyondell was constructed in 1979 and began operating in 1981 as a research and development (R&D) center focusing on chemicals (primarily propylene oxide and its derivatives) that are used to make consumer end products. Research conducted at the facility ranged from small bench-scale experiments performed in its laboratories to pilot plants. No commercial chemical manufacturing was performed at this facility.

On July 25, 1980, Lyondell submitted its initial Notification of Hazardous Waste Activity to the USEPA for its Research and Engineering Center. The facility filed as a generator; and as a treatment, storage, and disposal (TSD) facility.

On November 10, 1980, Lyondell submitted its Part A application to USEPA for storage of hazardous wastes generated from its chemical research laboratories. The application indicated

that the facility would store drummed hazardous wastes onsite for subsequent offsite disposal. The application also indicates that the facility was constructing a solid waste incinerator in which flammable solvents generated from pilot plant operations would be utilized as supplementary fuel. A permit for the solid waste incinerator was granted by PADEP.

Two reported incidents occurred at Lyondell in 1982 and 1996. According to a February 27, 1982 newspaper article, a one-liter container of 98% solution of acryloyl chloride ruptured while being transferred from a truck at the facility's loading dock. Strong fumes were reported and the facility was evacuated. Six employees exposed to the chemical were taken to a nearby hospital.

On August 22, 1996, a leak of propylene oxide occurred from an underground storage tank at the facility. The facility foam system was activated and the leak was stopped. However, some propylene oxide pooled in the area, which was contained within a concrete diked area. It was determined that the leak was emanating from a manometer on the aboveground piping. Responding personnel cleaned up the spill and placed the UST back in service.

Lyondell recently installed 14 monitoring wells to assess groundwater conditions at the facility. Lyondell sampled the wells annually over 4 years, with the most recent sampling completed in September 2014. The groundwater was analyzed for VOCs, SVOCs, and RCRA Metals. The results were compared to EPA's Regional Screening Level (RSL) for tap water. The results indicate that groundwater is not contaminated.

IV. Environmental Indicators

EPA sets national goals to measure progress toward meeting the nation's major environmental goals. For Corrective Action, EPA evaluates two key environmental indicators for each facility: (1) current human exposures under control and (2) migration of contaminated groundwater under control. The EPA has determined that the Facility met these indicators on March 27, 2015.

V. Public Participation

Before EPA makes a final decision on its proposal for the Facility, the public may participate in the remedy selection process by reviewing this SB and documents contained in the Administrative Record (AR) for the Facility. The AR contains all information considered by EPA in reaching this proposed decision. It is available for public review during normal business hours at:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Grant Dufficy
Phone: (215) 814-3455
Fax: (215) 814-3114
Email: dufficy.grant@epa.gov

Interested parties are encouraged to review the AR and comment on EPA's proposed decision. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. You may submit comments by mail, fax, or e-mail to Grant Dufficy. EPA will hold a public meeting to discuss this proposed decision upon request. Requests for a public meeting should be made to Grant Dufficy.

EPA will respond to all relevant comments received during the comment period. If EPA determines that new information warrant a modification to the proposed decision, EPA will modify the proposed decision or select other alternatives based on such new information and/or public comments. EPA will announce its final decision and explain the rationale for any changes in a document entitled the Final Decision and Response to Comments (FDRTC). All persons who comment on this proposed decision will receive a copy of the FDRTC. Others may obtain a copy by contacting Grant Dufficy at the address listed above.

Date: 4.9.15

John A. Armstead, Director
Land and Chemicals Division
US EPA, Region III