RESOLUTION FOR THE MINUTES

A RESOLUTION for the Minutes to provide for the analysis of microplastics and per- and polyfluoroalkyl substances (PFAS) in historic (2007-2012) and fresh sediment cores.

WHEREAS, by Resolution No. 2006-13 on July 19, 2006, the Commission authorized the Executive Director to enter into an agreement with the Academy of Natural Sciences ("Academy"), which subcontracted with the University of Delaware for the collection and analysis of sediment cores from the marshes fringing the Delaware River Estuary and Bay (the "Project"), at a cost that was shared among DRBC, the Academy, the University of Delaware, and the Delaware Department of Natural Resources and Environmental Control ("DNREC"); and

WHEREAS, over a period of six years commencing in 2007, the Project team collected 15 sediment cores from marshes fringing the Delaware River Estuary and Bay, and performed physical and chemical analyses, including radiometric dating, to determine time of deposition, grain size, and the presence and concentrations of nutrients, polychlorinated biphenyls ("PCBs"), and polycyclic aromatic hydrocarbons ("PAHs"); and

WHEREAS, radiometric dating results showed that the collected sediment core slices dated from as early as 1900; and

WHEREAS, core slices remaining from the 2007-2012 collection have been preserved and archived by the Academy (now known as the "Academy of Natural Sciences of Drexel University" or "ANSDU"); and

WHEREAS, ANSDU staff have developed a scope of work for analyzing microplastics from a subset of the archived core slices to establish spatial and historical microplastics contamination trends and composition changes; and

WHEREAS, the number of sites to be analyzed initially is to be limited to six (6) to test the viability of the approach; and

WHEREAS, the ANSDU proposal includes the collection and analysis of additional cores from the top approximately 25 centimeters of sediment ("fresh cores") at six of the historic collection sites to capture sediments deposited over the past 14 to 19 years; and

WHEREAS, DRBC and the basin states are interested in ANSDU's proposed microplastics analysis, but also in temporal and spatial trends for the presence of PFAS in the same group of archived and fresh sediment cores; and

WHEREAS, the integration of historical and fresh datasets will provide a comprehensive assessment of contamination trends in the Delaware River and Bay, supporting future monitoring efforts and management strategies for mitigating the impacts of these emerging contaminants; and

WHEREAS, the DRBC budget for Fiscal Year 2026 includes the sum of approximately \$50,000 in General Fund monies for this effort, and DNREC is expected to contribute approximately \$110,000 to the effort; now therefore,

BE IT RESOLVED by the Delaware River Basin Commission:

1) The Executive Director is authorized and directed to enter into an agreement with the Academy of Natural Sciences of Drexel University in an amount not to exceed \$86,000 for the purposes of:

- a) collecting fresh sediment cores as described above;
- b) analyzing microplastics from archived and fresh sediment cores from six sites; and
- c) preparing sediment slices from six archived and six fresh sediment cores and providing these to DRBC's contract laboratory, ALS, for PFAS analysis; and

2) The Executive Director is further authorized and directed to issue a work order to ALS for analysis of PFAS from archived and fresh sediment cores from six sites, at a cost not to exceed \$64,000.

3) Because the services to be provided are of a specialized and professional nature, in accordance with Section 14.9(5) of the Delaware River Basin Compact, the requirement for use of competitive bids for the above-described services is hereby waived.

BY THE COMMISSION

ADOPTED: June 11, 2025