WV DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER & WASTE MANAGEMENT
PROGRAM SUPPORT BRANCH

QUALITY ASSURANCE PROJECT PLAN FOR
CHESAPEAKE BAY POINT-SOURCE DATA COLLECTION

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Approval Sheet

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Section A1 – Distribution List

This document and all supporting materials will be submitted to the following individuals. Distribution format will be electronic and/or paper copies.

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Section A2 – Project Task

This QAPP is intended to cover only point source data collection from Industrial and Municipal facilities along the Chesapeake Bay watershed in West Virginia. Data is collected by the facilities or authorized contracted laboratories which are certified pursuant to 47 CSR 32, Environmental Laboratories Certification and Standard of Performance. It is reported on Discharge Monitoring Reports to WVDEP, which are then analyzed and submitted to US EPA's Chesapeake Bay Program Office.

Section A3 – Project Description and Background

West Virginia's point-source data collection focuses on collecting data from permitted industrial and municipal facilities along the Chesapeake Bay watershed. The data is collected through each facility's submission of Discharge Monitoring Reports as required by their permit. Discharge Monitoring reports (DMRs) are reports that provide analytical results of chemicals and nutrients being discharged by NPDES permitted facilities (point source) into the waterways of West Virginia. The data undergoes rigorous quality assurance checks before being uploaded into WVDEP's Environmental Resource Information System (ERIS) and uploaded into US EPA's Integrated Compliance Information System (ICIS).

Annually, the point-source data is compiled into a report to be used by the US EPA's Chesapeake Bay Program Office in Chesapeake Bay modeling software to track the environmental impact upon bay waters. Since the nature of this project relies on data collected and reported from outside sources, there are unique challenges to ensuring complete and accurate data. A quality assurance project plan to address the procedure for obtaining thorough, correct data was needed to ensure consistency from year to year.

Section B – Data Acquisition and Management

Data is collected from all permitted industrial and municipal facilities on the Chesapeake Bay watershed on no less than a yearly basis. Depending on the permit requirements, the reporting frequency can be monthly, quarterly, semi-annual or annual. WVDEP employs two Microsystem Support Specialists (MSSSs) to administer the industrial and municipal DMRs on a daily basis. The permit holders enter their DMR data into an electronic reporting system

via the web. The MSSSs upload all municipal and industrial DMRs in West Virginia, including those used for the collection of Chesapeake Bay point-source data.

Data received is first verified to correspond with the facility's respective permit and to ensure there were no errors in translation between WVDEP's electronic DMR (eDMR) submittal system and ERIS. The eDMR system has numerous QA/QC procedures built directly into the interface that prevents facilities from submitting erroneous data, such as detecting missing information or improper units. Facilities cannot submit their eDMR until the errors have been addressed, thus all data received should have a very high standard of completeness and accuracy. The MSSSs still review all submitted data to look for any errors that may not have been detected by the eDMR system filters and work with the facility representative over the telephone or via email or written correspondence to rectify the reporting problem.

Once data is validated in eDMR and uploaded to DEPs Oracle database (ERIS), the data is translated (in batch, utilizing the Central Data Exchange) to US EPA's Integrated Compliance Information System (ICIS). Batch Transaction Summary Reports from ICIS are ran and checked, rectifying any errors that occurred during translation.

The individuals also complete the municipal and industrial Quarterly Non-Compliance Reports (QNCR) data verification within one month following each quarter. The QNCR will show missing DMR data and data that violates the permit limits and conditions, as well as show any facilities that failed to submit a scheduled eDMR during the quarter. The individuals will rectify any missing data and verify the validity of the violations by comparing the DMR data provided by the facility against the limits and conditions within the permit and contact facility representatives to obtain the necessary reporting data as needed.

Section C1 – Assessment and Collection of Chesapeake Bay Point-Source Data

The Program Support Branch conducts assessments of all point-source industrial and municipal DMR data on the Chesapeake Bay watershed on a yearly basis. An environmental resource specialist prepares and evaluates a year's data between July 1st and June 30th. The following are the QA procedures adhered to during data preparation and submittal:

- ensure all DMR data has been properly recorded in ERIS by July 30 of each year;
- extract Chesapeake Bay watershed data from ERIS and convert into an Excel spreadsheet to be uploaded into the US EPA's Chesapeake Bay Program Office modeling software;
- analyze and evaluate data for accuracy and completeness as outlined by the Chesapeake Bay Phase 5 Community Watershed Model (particularly Section 7: Point Sources, Water Withdraws, and On-Site Waste Disposal Systems), the Chesapeake Bay Program Wastewater Facility and Nonpoint Source Data Submission Specifications and Requirements and the WV NPDES Reporting Reference Manual;
- complete mathematical calculations for data fields that have no analytical data provided, utilizing the standards and specification provided by US EPA in the Chesapeake Bay Program Wastewater Facility and Nonpoint Source Data Submission Specifications and Requirements;
- participate in meetings and conferences

- adjust reporting requirements to reflect those outlined in WVDEPs Watershed Implementation Plan as needed.

Section C2 – Chesapeake Bay Point-Source Data Report

Once the Chesapeake Bay point-source data is compiled, quality checked and appropriately formatted, the data is sent to US EPA no later than December 31st of the same year. All data review and utilization is performed at the US EPA level. Any questions relating to the point-source data report can be directed to WVDEP's Environmental Resource Specialist responsible for compiling and submitting the report.

Section D – References and Additional Information

1. Chesapeake Bay Program Wastewater Facility and Nonpoint Source Data Submission Specifications and Requirements
   http://www.epa.gov/region3/chesapeake/grants/2011Guidance/Attachment6_Point%20_NonPoint_Source_Data_Dec2010.pdf
2. Chesapeake Bay Phase 5 Community Watershed Model
   http://www.chesapeakebay.net/model_phase5.aspx
3. Quality Management Tools: QA Project Plans
   http://www.epa.gov/QUALITY/qapps.html
4. US EPA's Requirements for Quality Assurance Plans
   http://www.epa.gov/quality/qs-docs/r5-final.pdf
5. WV NPDES Reporting Reference Manual
   http://www.dep.wv.gov/WWE/ee/ww/Documents/npdes_nov2007.pdf