MINNESOTA POLLUTION CONTROL AGENCY
NEED TO KNOW
WASTEWATER AND COLLECTION SYSTEM OPERATORS

AUDIENCE:

- Wastewater and Collection System Operators – responsible for operating a wastewater or collection system facility.
- Trainers – responsible for developing and conducting training for operators.
- City Administrators – responsible for overall management and effective operation of the treatment facilities in their communities.
- Regulators – responsible for permitting, compliance, training and certification functions.

GOALS:

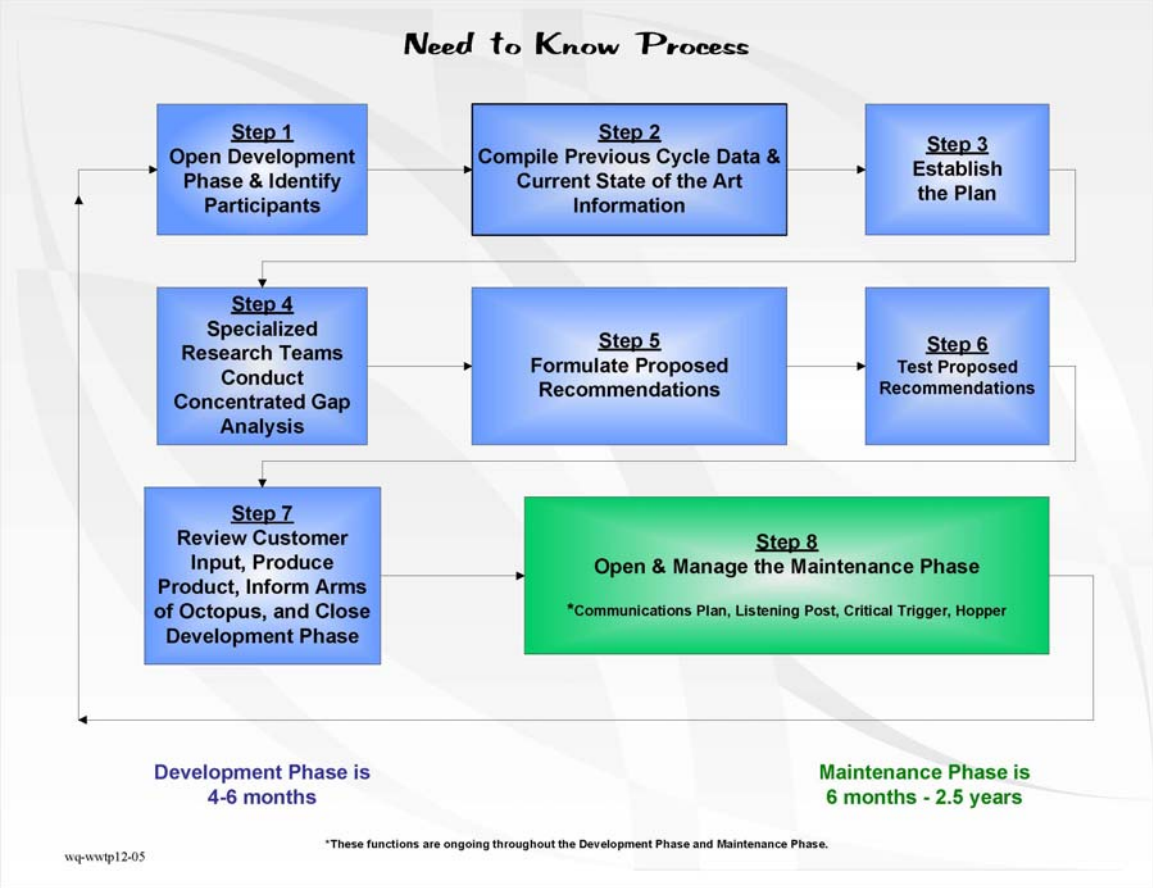
- To develop a process for identifying, validating, and updating Need to Know criteria for wastewater and collection system operators.
- To help wastewater and collection system operators understand the basic skills necessary to operate a plant.
- To develop a shared, consistent vision for the program among the MPCA and the four customer groups.
- To develop expertise and experience.

WHY: Clean water is essential for everyday life. Wastewater travels through the collection systems to the wastewater treatment plants where it is treated and returned to rivers, lakes, and streams. Operators control processes and equipment to remove or destroy harmful substances, chemical compounds, and microorganisms in the water.

Operators read, interpret, and adjust meters and gauges to make sure equipment and processes are working properly. They operate chemical-feeding devices, take samples of the water and liquid waste, perform chemical and biological laboratory analysis, and adjust the amount of chemicals, such as chlorine, in the water. They use a variety of instruments to sample and measure water quality, and hand and power tools to make repairs. Operators are increasingly relying on computers to help monitor equipment, store sample results, make process-control decisions, schedule and record maintenance activities, and produce reports. The specific duties of plant operators depend upon the type and size of plant. Plants operate 24 hours a day, 7 days a week.

THE NEED TO KNOW PROCESS: The Development Phase. With the help of stakeholders, the *Development Phase* is launched to identify, validate, and renew "Need to Know" criteria for wastewater and collection system operators. The *Development Phase* began by: (1) identifying a Steering Team consisting of the various customer groups, and other interested parties; (2) collecting, and researching/reviewing historical and state of the art information; (3) identifying gaps in the information; (4) formulating and testing proposed recommendations; and (5) accepting updated criteria. At the end of the 4-6 month *Development Phase*, the MPCA will integrate the updated Need to Know criteria into the training and certification program.

The Maintenance Phase. During the *Maintenance Phase*, customers will provide feedback on the process and criteria. This feedback will trigger the Steering Team to reconvene anywhere from 6 months – 2.5 years after the *Development Phase* has closed, or sooner if a danger is eminent to wastewater or collection system facilities.



FACILITY CLASSIFICATIONS: Treatment facilities are classified as A, B, C, and D according to a rated point system based on: the unit processes, loading to the plant, and the final permit effluent limitations. Collection systems are classified S-A, S-B, S-C, and S-D which are determined by the population of the community. Operators will need different expertise based on the type of facility they operate.

TRAINING AND OTHER QUALIFICATIONS: At minimum, a high school diploma or equivalent is required to become a wastewater or collection system operator. Operators should also be competent in basic math, chemistry, and biology and have a working knowledge of areas covered by the Need to Know document.

CERTIFICATION: The MPCA administers the certification program. Certain requirements including experience and knowledge must be met before an operator is eligible to take a certification exam. Students applying for certification must meet minimum requirements and pass the exam.