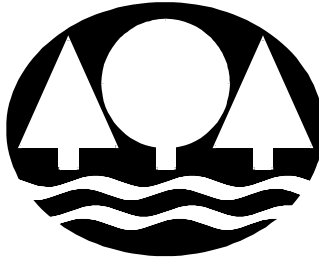


Collection System Facilities

Suggested Study Material

Need to Know Topics



Minnesota Pollution Control Agency

Minnesota Pollution Control Agency
Program & Training Coordination Unit
Customer, Employee & Agency Development Section
Technology, Education & Assistance Division
520 Lafayette Road North
St. Paul, Minnesota 55155

Website: www.pca.state.mn.us

Contact: Dianne Navratil
(651) 296-9269 or (800) 657-3864

SUGGESTED STUDY MATERIAL FOR COLLECTION SYSTEMS

Basic Wastewater Collection Systems Manual - Rick Arbour & Associates,
4467 Oak Chase Lane, Eagan, MN, 55123 - (612)686-5516

Operation and Maintenance of Wastewater Collection Systems - Office of Water Programs,
California State University, Sacramento, 6000 J Street, Sacramento, CA, 95819-6025 -
(916)278-6142

Recommended Standards for Wastewater Facilities - Health Education Services, P.O. Box 7126,
Albany, NY, 12224 - (518)439-7286

Temporary Traffic Control Zone Layouts Manual - Mn/DOT Map Sales Office, Room G-19
Transportation Building, 395 John Ireland Boulevard, St. Paul, MN, 55155 - (612)296-2216

Collection System Math Workbook - Minnesota Pollution Control Agency, Training Unit, Water
Quality Division, 520 Lafayette Road, St. Paul, MN, 55155-4194 - (612) 296-7251

Wastewater Treatment Technology Manual - Minnesota Pollution Control Agency, Training
Unit, Water Quality Division, 520 Lafayette Road, St. Paul, MN, 55155-4194 - (612) 296-7251

Note: Specific study materials for each class of examination are listed with the need-to-know
criteria.

CLASS S-A

1. Gravity system

- 1.1 Maintenance
- 1.2 Troubleshooting
- 1.3 Repair
- 1.4 Monitoring
- 1.5 Recordkeeping

2. Lift stations

- 2.1 Fundamentals
- 2.2 Maintenance
- 2.3 Troubleshooting
- 2.4 Repair
- 2.5 Monitoring and recordkeeping

3. New construction

- 3.1 Fundamentals
- 3.2 Operation and maintenance
- 3.3 Troubleshooting

4. Administration

- 4.1 Fundamentals
- 4.2 Operation and maintenance
- 4.3 Troubleshooting
- 4.4 Monitoring and recordkeeping

5. Wastewater/general

6. Safety

7. Math

- 7.1 Grade/slope
- 7.2 Budgeting
- 7.3 Detention time

Suggested study materials include:

- Basic Wastewater Collection Systems Manual
- Collection System Math Workbook
- Operation and Maintenance of Wastewater Collection Systems, Volumes 1 and 2
- Recommended Standards for Wastewater Facilities (10-State Standards)

CLASS S-B

1. Gravity systems

- 1.1 Maintenance
- 1.2 Troubleshooting
- 1.3 Repair
- 1.4 Monitoring
- 1.5 Recordkeeping

2. Lift stations

- 2.1 Fundamentals
- 2.2 Maintenance
- 2.3 Troubleshooting
- 2.4 Repair
- 2.5 Monitoring and recordkeeping

3. New construction

- 3.1 Fundamentals
- 3.2 Operation and maintenance
- 3.3 Troubleshooting

4. Administration

- 4.1 Fundamentals
- 4.2 Operation and maintenance
- 4.3 Troubleshooting
- 4.4 Monitoring and recordkeeping

5. Wastewater/general

6. Safety

7. Math

- 7.1 Pumping rates/pump calibration
- 7.2 Flow rates
- 7.3 Velocities
- 7.4 Grade/slope
- 7.5 Budgeting
- 7.6 Detention time

Suggested study materials include:

- Basic Wastewater Collection Systems Manual
- Collection System Math Workbook
- Operation and Maintenance of Wastewater Collection Systems, Volumes 1 and 2
- Recommended Standards for Wastewater Facilities (10-State Standards)

CLASS S-C

1. Gravity systems

- 1.1 Maintenance
- 1.2 Troubleshooting
- 1.3 Repair
- 1.4 Monitoring
- 1.5 Recordkeeping

2. Lift stations

- 2.1 Fundamentals
- 2.2 Maintenance
- 2.3 Troubleshooting
- 2.4 Monitoring and recordkeeping

3. New construction

- 3.1 Fundamentals
- 3.2 Operation and maintenance
- 3.3 Troubleshooting

4. Administration

- 4.1 Fundamentals
- 4.2 Troubleshooting
- 4.3 Monitoring and recordkeeping

5. Wastewater/general

6. Safety

7. Math

- 7.1 Pumping rates/pump calibration
- 7.2 Flow rates
- 7.3 Velocities
- 7.4 Grade/slope
- 7.5 Detention time

Suggested study materials include:

- Basic Wastewater Collection Systems Manual
- Collection System Math Workbook
- Operation and Maintenance of Wastewater Collection Systems, Volumes 1 and 2
- Temporary Traffic Control Zone Layouts Field Manual

CLASS S-D

1. Gravity system

- 1.1 Fundamentals
- 1.2 Maintenance
- 1.3 Troubleshooting
- 1.4 Repair
- 1.5 Monitoring
- 1.6 Recordkeeping

2. Lift station

- 2.1 Fundamentals
- 2.2 Maintenance
- 2.3 Troubleshooting
- 2.4 Monitoring and recordkeeping

3. New construction

- 3.1 Fundamentals
- 3.2 Troubleshooting

4. Administration

- 4.1 Fundamentals
- 4.2 Monitoring and recordkeeping

5. Wastewater/general

6. Safety

7. Math

- 7.1 Volume
- 7.2 Areas
- 7.3 Slope
- 7.4 Detention time

Suggested study materials include:

- Basic Wastewater Collection Systems Manual
- Collection System Math Workbook
- Operation and Maintenance of Wastewater Collection Systems, Volumes 1 and 2
- Temporary Traffic Control Zone Layouts Field Manual