

Wastewater Treatment Facility Operation and Maintenance Manual Certification Checklist

Notice: This form is authorized by s. NR 162.12(1)(k)(1), Wis. Adm. Code. Receipt of this information by the Department is mandatory to obtain a CWFPP loan. Failure to submit a completed form may result in denial of loan funds for the project. Personal information collected on this form will be used for program administration and may be made available to requesters as required by Wisconsin Open Records law [s. 19.31–19.39, Wis. Stats.].

Facility Information				
Municipality Name	Clean Water Fund Project No.	Plan & Spec Approval No.	WPDES Permit No.	
Address		City	State	ZIP
Name of Firm that Prepared Manual	Name of Individual who Prepared Manual	Phone Number	E-Mail Address	
Checklist Completed By		Phone Number	E-Mail Address	

Municipality Certification	
We certify that to the best of our knowledge and belief, the information provided on this form and any associated attachments are true, accurate and complete.	
Project Engineer Name	Title
Signature	Date Signed
Authorized Representative Name	Title
Signature	Date Signed

Facility Operator Certification	
I certify that I have reviewed the Operation and Maintenance Manual developed for this project and find that the manual meets the information and training requirements for this facility.	
Facility Certified Operator Name	Title
Signature	Date Signed

Leave Blank – DNR Use Only	
This certification checklist has been reviewed by me and is acceptable.	
DNR Reviewer Name	Date Received
Reviewer Signature	Date Reviewed

NOTE: An acceptable Operation and Maintenance (O&M) Manual must address the applicable items in this checklist. For upgrading projects, addenda or revisions to the existing O&M manual may be provided. The applicable portions of this checklist should then be completed for the addenda or revisions. The three Volume format is a suggestion. Volume III and other standard reference materials do not need to be included with the copy of the manual provided to DNR.

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Form 8700-311 (R 12/06)

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A. General	Page No.	Satisfactory	N/A
1. Table of Contents			
2. Introduction – Purpose and use of the manual			
3. Contact Information			
a. Emergency telephone numbers and addresses			
b. Telephone number, address, contact person for:			
i. Utilities			
ii. Chemical suppliers			
iii. DNR regional and central office			
4. Format			
a. Text written to operator			
b. Manual is an instructional tool			
c. Manual is organized and makes sense			
i. General information and discussion			
ii. Inspection, operation and maintenance sections including specific safety procedures and concerns			
d. Appendices			
e. Will user find manual helpful (satisfactory)			
f. Index Tabs			
VOLUME I			
B. Staffing			
1. Staffing and certification requirements and personnel qualifications			
2. Staffing contingency			
3. Operator responsibilities and duties			
C. Records System			
1. Purpose of records			
2. A recommended system			
3. Sample forms (maintenance records system, equipment inventory card system, daily logs, and reporting forms or describe computer program)			
D. Laboratory			
1. Standard Laboratory Operating Procedures			
2. Lab Safety Equipment and Procedures			
3. Individual wastewater tests including process control			
a. Description of each test			
b. Sample type, frequency and locations			
c. Sampling preservation			
d. Sampling recordkeeping (logs, bench sheets, etc.)			
e. Equipment needed			
f. Test procedure			
g. Test QA/QC			
h. Sample calculations and interpretations			
4. Sample shipping and handling (if mailed out) procedures			
5. Laboratory QA/QC manual (if on-site lab)			
E. Safety			
1. General discussion			
2. Personal hygiene			
3. Hazards			
a. Physical injuries			
b. Pathogens (recommended inoculations)			

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E. Safety (continued)	Page No.	Satisfactory	N/A
c. Oxygen deficiency and noxious gases			
d. Electrical safety			
e. Explosion and fire			
f. Chemical safety			
g. Equipment safety			
h. Laboratory safety			
i. Traffic and roadway safety			
4. Definition of confined spaces and applicable rules and regulations for entry			
5. Safety procedures for confined space entry			
6. List of specific hazardous areas and confined spaces at treatment facility			
7. List of actual chemicals used and a Material Safety Data Sheet (MSDS) for each			
8. Safety equipment and first aid kits (types and locations)			
9. Accident reports			
10. Job safety instruction and training			
F. Security and Emergencies			
1. Vulnerability Assessment			
2. Emergency Response Plan			
3. Emergency Operating Plan			
G. Utilities and Electrical Systems			
1. Fuel systems, water systems, fire protection, HVAC, compressed air systems, communication systems, etc.			
2. Electrical distribution and control			
3. Alternate power and other emergency operating provisions			
H. Appendices			
1. WPDES permit			
2. Local sewer ordinance and user charge system			
3. Summary of industrial dischargers and allocated wasteload			
4. Water quality standards			
5. Needed forms			
6. Chemicals used in plant and laboratory			
7. Mutual aids agreements			
8. Equipment suppliers and service representatives			
9. Conversion factors, glossary and abbreviations			
10. DNR Plan & Specification approval letter and design report			
11. Compliance Maintenance Annual Report (NR 208 requirement)			

VOLUME II

I. Process Description, Operation and Control for all Processes (Liquids and Solids)			
1. General description			
2. Plant layout and yard piping			
3. Hydraulic profile (inverts and weir elevations)			
4. Detailed design data and unit efficiencies			
5. Valves and gates schedule			
6. Unit processes			
a. Process purpose, description and overall control strategy			
b. Start-up and normal operation			
c. Alternative operations (include winter operations)			
d. Emergency operation (include response to process upsets)			

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I. Process Description, Operation and Control for all Processes (continued)	Page No.	Satisfactory	N/A
e. Online monitoring systems and controls (flow, electrical, lab, etc.)			
f. Operational problems and corrective actions			
g. Equipment data sheet			
7. Bypass and spill reporting procedures (include reporting forms)			
J. Sludge Management			
1. General description of the sludge treatment process and disposal methods (include description of applicable regulations for method of disposal)			
2. Septage receiving (describe facilities and routine operations)			
3. Sludge Transport and Storage			
a. Description of vehicles and equipment			
b. Normal and emergency operations for vehicles and equipment			
4. Land Application			
a. Description of equipment, facilities and application sites			
b. Normal and emergency procedures			
c. Site approval process and site management (if owned by permittee)			
5. Landfilling			
6. Combustion			
7. Testing and reporting requirements for sludge process and disposal			
8. Copy of relevant forms			
K. Maintenance			
1. Purpose and general discussion			
2. Recommended spare parts, tools and lubricants			
3. Recommended maintenance schedule summary (daily, weekly, etc.)			
4. Each unit process or piece of equipment (include monitoring equipment)			
a. Specific description			
b. Data sheet			
c. Maintenance schedule (i.e., chart)			
d. Diagrams			
5. Painting schedule and paint types			
6. List of manufacturers' manuals			

VOLUME III

Wastewater Treatment Facilities Recommended Reference Materials	Check if Provided
1. Manual of Operation of Wastewater Treatment Plants (WEF MOP-11)	
2. Operation of Wastewater Treatment Plants (Calif. State Univ.–Sacramento Field Study Training Manuals)	
3. Manual on the Causes and Control of Activated Sludge Bulking and Foaming (Jenkins, Richard and Daigger–Lewis Publishers)	
4. Safety & Health in Wastewater Systems (WEF MOP-1)	
5. Biological Hazards at Wastewater Treatment Facilities (WEF)	
6. Standard Methods for the Examination of Wastewater (Latest Edition)	
7. WEF Manuals of Operations as they apply. List additional MOPs or any other reference books or materials, if provided:	
8. Security Vulnerability Self-Assessment Guide for Wastewater Systems (WRWA)	
9. Vulnerability Self-Assessment Tool (VSAT) – (WEF)	
10. Wisconsin Administrative Code as they apply:	
<input type="checkbox"/> NR 110 – Sewerage Systems	<input type="checkbox"/> NR 204 – Domestic Sewage Sludge Management
<input type="checkbox"/> NR 114 – Certification Requirements for WWTP Operators	<input type="checkbox"/> NR 206 – Land Disposal Municipal and Domestic Wastewaters
<input type="checkbox"/> NR 140 – Groundwater	<input type="checkbox"/> NR 208 – Compliance Maintenance
<input type="checkbox"/> NR 149 – Laboratory Certification and Registration	<input type="checkbox"/> NR 210 – Sewage Treatment Works
	<input type="checkbox"/> NR 219 – Analytical Test Methods