

**VILLAGE OF ROMEO WASTEWATER TREATMENT PLANT
STORM WATER POLLUTION PREVENTION PLAN**



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TABLE OF CONTENTS

I.	COVER PAGE	
II.	TABLE OF CONTENTS	II
III.	CERTIFICATION SHEET	III
IV.	STORM WATER POLLUTION PREVENTION REQUIREMENTS	
A.	SOURCE IDENTIFICATION.....	IV-1
1.	POLLUTANT SOURCE IDENTIFICATION.....	APPENDIX A
2.	SITE MAP	APPENDIX B
3.	REPORTABLE SPILLS	APPENDIX C
4.	SAMPLING DATA.....	APPENDIX D
5.	EVALUATION OF REQUIRED AREAS/ACTIVITIES	IV-2
B.	NON-STRUCTURAL CONTROLS.....	IV-4
1.	GOOD HOUSEKEEPING	IV-4
2.	PREVENTATIVE MAINTENANCE.....	IV-4
3.	MATERIAL HANDLING PROCEDURES	IV-5
4.	SPILL RESPONSE	IV-5
5.	SOIL EROSION CONTROL.....	IV-5
6.	EMPLOYEE TRAINING	IV-5
7.	GROUNDS MAINTENANCE.....	IV-5
8.	STORM WATER DISCHARGE	IV-5
C.	STRUCTURAL CONTROLS	IV-6
D.	OTHER REQUIREMENTS	IV-6

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TABLE OF CONTENTS

APPENDIX	DESCRIPTION
A	Table #1 – Significant Material Sources and Table #2 - BMP's
B	Site Map
C	Reportable Spills History
D	Sampling Data
E	Storm Water Management - Certificates
F	NPDES Permit
G	Tank Truck Unloading Procedures
H	Inspection Logs
I	Annual Reports
J	Spill Response Procedures and Reporting

III. CERTIFICATION SHEET

STORM WATER POLLUTION PREVENTION PLAN

VILLAGE OF ROMEO WWTP

ROMEO, MICHIGAN

I hereby certify that a Storm Water Pollution Prevention Plan (SWPPP) has been prepared for the Village of Romeo WWTP and to the best of my knowledge the plan is in accordance with good engineering practices. I have personally examined and am familiar with the information submitted in this document and that based on my inquiry of those individuals responsible for obtaining the information; I believe that the submitted information is true, accurate and complete.

This plan shall be reviewed annually to ensure facility compliance with NPDES Permit No. MI0060174. Based on the review, the plan shall be amended to ensure continuous compliance.

Any changes to the facility or introduction of new significant materials which will have a significant effect on the potential to contaminate storm water runoff from the facility will require an amendment to the SWPPP including a description of controls to be used to minimize exposure of such materials to storm water runoff.

Name: Doug LaFleur

Title: Certified Storm Water Operator

Signature: _____

Date: _____

Name: Phil Doner

Title: Certified Storm Water Operator

Signature: _____

Date: _____

Name: Al Lapeer

Title: Site Superintendent

Signature: _____

Date: _____

IV. STORM WATER POLLUTION PREVENTION REQUIREMENTS

A. Source Identification

A joint inspection of the entire facility was conducted by Village of Romeo WWTP Personnel and Hubbell, Roth & Clark, Inc. consulting engineers. The facility was inspected for potential storm water pollutant sources. Following the inspection, potential storm water pollutant sources were discussed, and Table # 1 in Appendix A was completed detailing the significant materials located at the site. As required under terms of the State of Michigan Storm Water NPDES Permit No. MI006074 requirements the facility has created this Storm Water Pollution Prevention Plan:

1. Potential sources of significant materials that could enter storm water. A site map identifying the following has also been developed (see Appendix B):
 - a) Buildings and other permanent structures.
 - b) Storage or disposal areas for significant materials.
 - c) Secondary containment structures.
 - d) Storm water discharge outfalls.
 - e) Location of storm water and non-storm water inlets contributing to each outfall.
 - f) Location of NPDES permitted discharges other than storm water.
 - g) Outlines of the drainage areas contributing to each outfall.
 - h) Structural run-off controls or storm water treatment facilities.
 - i) Areas of vegetation.
 - j) Areas of exposed and /or erodible soils.
 - k) Impervious surfaces (roofs, asphalt, and concrete).
 - l) Name and location of receiving water (s).
 - m) Areas of known or suspected impacts on surface waters as designated under Part 201 (Environmental Response) of the Michigan Act.

2. Significant Materials that could enter storm water.

Table No. 1 (Appendix A) provides a listing of potentially significant material sources. Source materials may include, but are not limited to: raw materials, treatment chemicals, waste materials, industrial machinery, fuels, lubricants, solvents and detergents that are related to the treatment process or other industrial activities.

Table No. 1 heading descriptions refer to the following:

- a) Material/product name (and a generic identification if appropriate) and or the activity of the potential pollutant.

- b) Location of material in relation to a building structure or the designated location description

c) The method of exposure (ways in which material has or could be exposed to storm water).

d) Which outfall(s) have the potential to be affected.

Table No. 2 (Appendix A) addresses the pollutant sources identified in Table No. 1 relative to what management practices are in place to control those pollutant sources.

3. Reportable Spills

The facility has had no spills or leaks of polluting materials in quantities reportable under the Part 5 Rules in the past 3 years. Any future releases will be controlled in accordance with the plan and will cause the plan to be updated within 14 calendar days of obtaining knowledge of the spill. Any Spills will be documented in Appendix C.

4. Sampling Data

The facility has no current storm water discharge sampling data. Any future sampling will be documented in Appendix D.

5. Evaluation of Required Areas/Activities

The following facility areas are required to be reviewed for Potential Pollutant Sources according to the NPDES Permit Part 1, Section A(C)(3). These Potential Pollutant Sources are also listed on Table #1 in Appendix A and will be inspected as part of the 6-month comprehensive site inspection.

a) Loading, unloading and other material handling operations.

- Aluminum Sulfate deliveries are identified as a Potential Pollutant Source on Table # 1 and inspected as part of the facilities 6-month SWPPP inspections. A spill kit will be positioned nearby, and storm drains will be covered with a spill mat during tanker truck unloading operations.
- Diesel deliveries are identified as a Potential Pollutant Source on Table # 1 and inspected as part of the facilities 6-month SWPPP inspections. A spill kit will be positioned nearby, and storm drains will be covered with a spill mat during tanker truck unloading operations.
- Sludge Removal Operations are identified as a Potential Pollutant Source on Table # 1 and inspected as part of the facilities 6-month SWPPP inspections. A spill kit will be positioned nearby, and all procedures followed during truck loading operations.

- b) Outdoor storage including secondary containment structures.
- The 1,000-gallon Fireguard double wall Diesel Generator Tank is identified as a Potential Pollutant Source on Table # 1 and inspected as part of the facilities 6-month SWPPP inspections.
 - The four 55-gallon EP Compound 68 oil drums stored inside the contained covered plastic shed are identified as a Potential Pollutant Source on Table # 1 and inspected as part of the facilities 6-month SWPPP inspections.
- c) Outdoor manufacturing or processing areas.
- Not present at this facility.
- d) Significant dust or particulate generating processes.
- Not present at this facility.
- e) Discharge from vents, stacks and air emission control.
- Not present at this facility.
- f) On-site waste disposal practices.
- The WTP treatment tanks are identified as a Potential Pollutant Source on Table # 1 and inspected as part of the facilities 6-month SWPPP inspections.
- g) Maintenance and cleaning of vehicles, machines and equipment.
- Any maintenance and cleaning of vehicles or other equipment is performed inside the maintenance garage area. This area is contained as it drains to the WWTP main sump.
- h) Areas of exposed and/or erodible soils.
- The site is fully vegetated with no exposed erodible soils.
- i) Sites of environmental contamination listed under Part 201 (Environmental Response) of the Michigan Act.
- Not present at this facility.
- j) Areas of significant material residue.
- Not present at this facility.
- k) Other areas where storm water may contact significant materials.

- A 5,000-gallon Aluminum Sulfate tank located in the SW corner of the Maintenance Garage. The tank is contained inside a concrete vault that provides over 9,000 gallons of secondary containment.
- Two 55-gallon drums of EP Compound 68 (oil) are stored inside the Maintenance Garage on a contained drum pallet. In addition, the area is sloped to a central drain that drains to the WWTP main sump so there is no reasonable risk for contact with storm water.
- A 270-gallon fiberglass tank of liquid sulfite is located inside the chemical feed room. Dry product is mixed with water to make this solution. The material is stored inside a room that has a 4-inch by 6-inch by 32-foot 8-inch curb that would contain any spill inside the building. A maximum of 1,000 lbs. of dry product is also stored in this area.

B. NON-STRUCTURAL CONTROLS

1. Good Housekeeping - The site is maintained in a clean and orderly fashion. Good housekeeping procedures will be incorporated into the facility's training program to build upon the existing facility maintenance program. An emphasis will be made on preventing any potential pollutant from encountering storm water.
2. Preventative Maintenance - The facility performs routine inspections of the facilities, equipment and systems which could impact surface waters daily. A system is in place where maintenance issues are tracked by recording the issue and date repaired on maintenance cards. Comprehensive site inspections are also periodically (every six months at a minimum) performed to ensure compliance with the NPDES Permit No. MI0060174 (Appendix F). The routine evaluation includes equipment/system inspections, record-keeping, internal reporting, and plan revisions as required. Qualified personnel conduct site compliance evaluations/certifications to verify the effectiveness of the SWPPP on an annual basis. Comprehensive site inspections are conducted a minimum of every 6 months and include the following:
 - a) Designated, qualified, trained plant personnel regularly inspect the facility's equipment and storage areas, track the results of inspections, make necessary changes, and maintain records of inspections.
 - b) Inspection records note when inspections were conducted, who conducted the inspections, what areas were inspected, what problems were found and what steps were taken to correct problems and prevent them from recurring.

Both the Preventive Maintenance and Comprehensive Inspection logs can be found in Appendix H. These logs are kept on site for three (3) years.

A report indicating whether the facility was found in compliance with the SWPPP and the conditions of the NPDES Permit shall be prepared on an annual basis. The report shall be signed by the designated signatory authority and kept with the SWPPP for three (3) years (Appendix I).

3. Material Handling Procedures - All material is handled in such a way as to minimize any possibility of impacting storm water. Loading/unloading procedures for tank trucks are included in Appendix G for reference.
4. Spill Response Equipment, Clean-Up and Notification Procedures/ Requirements – The facility has a spill response kit which is located nearby during all tanker truck unloading operations (Alum, Sludge Pump-Out and Diesel Fuel Tank). Spill Response and Notification procedures are in Appendix J.
5. Soil Erosion Control - The site has been completely developed and there are no areas which have a high potential for significant soil erosion. The site is covered by buildings, pavement, stone aggregate and vegetation which control potential erosion.
6. Employee Training - Employee Training for storm water pollution prevention is provided annually. Personnel are instructed to act in accordance with their level of training. The training will include good housekeeping measures, material management practices, and spill response procedures. A record of the training frequency and attendees is maintained at the facility.
7. The site is fully vegetated except for roadways, buildings and treatment tanks. The facility maintains a minimum of 10' un-mowed buffer along East Pond Creek. Turf grass is mowed to a minimum 3" height and low foot traffic areas are mowed only as needed.
8. Storm Water Discharge - The following materials could potentially be expected to run off following implementation of non-structural controls.
 - a) Incidental oil from parking lots and roadways.
 - b) Incidental silt and sediment from vehicle traffic.
 - c) Incidental road salt applied to roadways during winter months.

C. STRUCTURAL CONTROLS

The following structural controls are currently installed onsite. No new structural controls will be installed.

1. The facility has a 1,000-gallon diesel tank for a backup generator. The tank is a double walled Fireguard tank which provides 100% secondary containment.
2. One 5,000-gallon Aluminum Sulfate tank is located indoors in a concrete vault which provides over 9,000 gallons of secondary containment.
3. Four 55-gallon EP Compound 68 oil drums are stored inside a contained covered plastic shed which provides 100% secondary containment.
4. The equalization basin is equipped with a high level auto shut off and an overflow pipe which directs flow back to the head of the treatment plant.

D. OTHER REQUIREMENTS

1. Prohibited activities - All non-storm water discharges must be authorized by an NPDES Permit. It is anticipated that the following non-storm water discharges will take place at the facility periodically throughout the year:
 - a) Fire hydrant flushing discharge
 - b) Building wash down, this does not include detergents or compounds.
2. Material Storage/Use Area Labels and Signage - Where required, the facility uses labels and/or signs to designate use and storage areas in accordance with all applicable regulations.
3. Site Security – The site is secured with a 6’ high fence which surrounds the facility. The gate is locked during non-operating hours. The individual buildings are also locked with a building alarm system fire/security.

APPENDIX A

TABLE #1 Significant Material Inventory

MATERIAL / ACTIVITY	LOCATION	METHOD OF EXPOSURE	POTENTIAL AFFECTED OUTFALL & MH
1) Indoor 5,000 Gallon Aluminum Sulfate Tank and Outdoor Unloading Area	Maintenance Garage NE Corner of Site	Spills/Leaks from Tanker Unloading Operations	Sheet flow overland directly to East Pond Creek or Outfall 02
2) Outdoor Double Wall Diesel Fuel Tank for Backup Generator & Fuel Unloading Area	SE of Second (2) Digester Building	Spills/Leaks from Tanker Unloading Operations	Storm Water Outfall 03
3) Sludge Removal Operations	East of Digested Sludge Storage Tanks	Spills/Leaks from Sludge Removal Operations	Storm Water Outfall 03
4) WTP Equalization Basin	SW Section of Property	Leak/ Spill from Tank	Storm Water Outfall 03
5) Outdoor Containment Shed Containing Four 55 Gallon Drums of EP Compound 68 Oil	North of Final Clarifiers	Spill/Leak During Drum Placement	Storm Water Outfall 01 or 02
6) 270 Gallon Tank of Liquid Sulfite	Inside Chemical Feed Room	No Reasonable Potential	N/A
7) Two 55-gallon Drums of EP Compound 68 (oil)	Contained inside Maintenance Garage	No Reasonable Potential	N/A



APPENDIX A

TABLE #2
Potential Pollutant Sources with Proposed BMP's

Storm Water Pollutant Sources - Material / Activity	Existing Management Systems	Description of New BMP Options (if required)
1) Indoor 5,000 Gallon Aluminum Sulfate Tank and Outdoor Unloading Area	Tanks are contained inside and observed daily.	BMP - the area will be kept clean and orderly as part of the regular housekeeping maintenance schedule. A new spill kit is in the area during the tanker unloading operations. New written tanker unloading procedures will also be followed.
2) Outdoor Double Wall Diesel Fuel Tank for Backup Generator & Fuel Unloading Area	The tank is double walled having secondary containment and is observed daily.	BMP - the area will be kept clean and orderly as part of the regular housekeeping maintenance schedule. A new spill kit is in the area and nearby storm manholes will be covered with a spill mat during tanker unloading operations. New written tanker unloading procedures will also be followed.
3) Sludge Removal Operations	An Operator is always present during removal operations.	BMP - the area will be kept clean and orderly as part of the regular housekeeping maintenance schedule. A new spill kit is in the area and nearby storm manholes will be covered with a spill mat during tanker unloading operations. New written tanker unloading procedures will also be followed.
4) WTP Equalization Basin	The tank is equipped with a high-level overflow pipe which returns it to the head of the treatment plant. The tanks are also closely monitored and observed daily.	BMP - the area will be kept clean and orderly as part of the regular housekeeping maintenance schedule and will continue to be monitored daily.



APPENDIX A

**TABLE #2 (continued)
Potential Pollutant Sources with Proposed BMP's**

Storm Water Pollutant Sources - Material / Activity	Existing Management Systems	Description of New BMP Options (if required)
5) Outdoor Storage Shed Containing Four 55 Gallon Drums of EP Compound 68 Oil	The drums are stored outdoors in a contained and covered plastic storage shed and are observed daily.	BMP - the area will be kept clean and orderly as part of the regular housekeeping maintenance schedule and continue to be observed daily.
6) 270 Gallon Tank of Liquid Sulfite	The tank is stored indoors, is contained by the building and observed daily. A floor drain in the area would direct any spill to the main Wastewater treatment sump.	BMP - the area will be kept clean and orderly as part of the regular housekeeping maintenance schedule continue to be observed daily.
7) Indoor Storage of Two 55-gallon Drums of EP Compound 68 (oil)	The drums are stored indoors, have secondary containment and are observed daily.	BMP - the area will be kept clean and orderly as part of the regular housekeeping maintenance schedule.



APPENDIX C

Reportable Spills History

The facility has had no spills or leaks of polluting materials in quantities reportable under the Part 5 Rules in the past 3 years. Any future releases will be controlled in accordance with the plan and will cause the plan to be updated within 14 calendar days of obtaining knowledge of the spill.



APPENDIX D

Sampling Data

The facility has no current storm water discharge sampling data. Any future sampling data will be included in the Storm Water Pollution Prevention Plan.

Note: Sampling data is completed and reported in the Storm Water Inspection reports submitted in the lab bench sheets and water sampling reports for East Pond Creek.



APPENDIX E

Certified Industrial Storm Water Operator - Certificates



APPENDIX F

NPDES PERMIT



APPENDIX G

Tanker Truck Loading/Unloading Procedures

1. The tanker driver to alert site personnel upon arrival.
2. Ensure that the tank trailer is accurately spotted at the proper loading/unloading spot.
3. Tank trailer brakes will be set, and the driver will remain with the vehicle during the entire loading/unloading period. If flammable liquids are to be unloaded, the tank trailer engine will be shut off during transfer operations unless needed for pump operation.
4. Place an emergency spill response kit near the loading/unloading operation area. Cover any nearby open storm manhole covers with a spill mat drain cover and seal by placing sandbags over the mats as required before loading/unloading operations begin.
5. Caution signs/cones will be placed in the vicinity of the tank trailer to give necessary warning to approaching personnel and must be left up until after tank trailer is loaded/unloaded and disconnected from discharge connection.
6. Loading/unloading operations shall be performed only by authorized persons properly instructed and made responsible for careful compliance with applicable regulations. Tanker driver shall stay with the tanker and monitor the transfer during the entire duration of the loading/unloading operation.
7. Loading/unloading of tank trailers will be done during daylight hours except under emergency conditions. Romeo WWTP personal are continuously monitoring the truck off loading.
8. No naked flame of any kind shall be permitted, for any purpose whatsoever, near the tank trailer or within the vapor area surrounding the tank trailer containing flammable or combustible materials. Smoking is strictly forbidden within this area. Only spark proof tools will be used.
9. Make sure the permanent storage tank is vented before connecting the unloading line.
10. Tanker driver visually determines that sufficient space is available in storage tank to receive contents of the tank trailer.
11. Tank trailer numbers are to be compared with that on shipping papers on the invoice to determine contents of trailer and avoid mixing of products.



APPENDIX G

Tanker Truck Loading/Unloading Procedures

12. If leakage shows upon starting to remove cap at the bottom of the tanker truck, cap must not be entirely unscrewed. If leakage stops or initial rate of leakage diminishes materially, the cap may be entirely removed. If the initial rate of leakage continues, the valve must be actuated a couple of times to see that the outlet valve in bottom of tank is on seat. If this fails, the cap must be screwed up tight and trailer must be unloaded through top manhole.
13. After removing the cap, visually inspect the outlet chamber to ensure that no blockage exists. If a blockage does exist immediately replace the cap and unload trailer from the top.
14. Attach unloading line to the proper pipe connection.
15. Open outlet valve and proper valves in the unloading lines.
16. Start pump, checking to ensure there is no leakage at any of the connections. Should leakage be present immediately stop pump.
17. After liquid has been removed, stop pump, close all valves, disconnect unloading line from tank trailer, replace cap to outlet and make all other closures tight.
18. Remove all portable signs/cones and release tank trailer.
19. Tanker driver takes paperwork into the facility when filling process is complete. Facility personnel complete paperwork, giving the driver his copy.
20. Remove, clean and store spill mat drain covers.



APPENDIX H



ROUTINE INSPECTION LOG COMPLETED DAILY

Inspection Area	Location	Issues		Comments/ Corrective Action	Inspector Signature	Date
		No	Yes			
1) Indoor 5,000 Gallon Aluminum Sulfate Tank and Outdoor Unloading Area	Maintenance Garage NE Corner of Site			Completed daily by WWTP Operator rounds		
2) Outdoor Containment Shed Containing Four 55 Gallon Drums of EP Compound 68 Oil	North of Final Clarifiers			Completed daily by WWTP Operator rounds		
3) 270 Gallon Tank of Liquid Sulfite	Inside Chemical Feed Room			Completed daily by WWTP Operator rounds		
4) Two 55-gallon Drums of EP Compound 68 (oil)	Contained inside Maintenance Garage			Completed daily by WWTP Operator rounds		



COMPREHENSIVE INSPECTION LOG COMPLETED EVERY SIX (6) MONTHS

Inspection Area	Location	Issues		Comments/ Corrective Action	Inspector Signature	Date
		No	Yes			
1) Outdoor Double Wall Diesel Fuel Tank for Backup Generator & Fuel Unloading Area	SE of Digester Building					
2) Sludge Removal Operations	East of Digested Sludge Storage Tanks					
3) WTP Equalization Basin	SW Section of Property					
4) Outdoor Containment Shed Containing Four 55 Gallon Drums of EP Compound 68 Oil	North of Final Clarifiers					



APPENDIX I

Annual Reports



APPENDIX J

SPILL RESPONSE PROCEDURES

A. Spill Response Action

The following emergency actions shall be followed to prevent the discharge of significant materials from polluting the Waters of this State.

In the event of an imminent or actual Spill/Release, notify your immediate Supervisor. Involved employees have been instructed within their level of training on the availability and location of equipment to contain an incidental release that occurs within the area involved.

If the spilled material threatens human health, safety, or the environment, then the Village of Romeo Fire Department would be called to assist.

B. Spill Response Equipment

1. Facility Emergency Equipment

This facility maintains spill response equipment which can be used in the event of a spill release. The following equipment is maintained onsite for any such response:

Floor Dry
Spill Kit (1) – Includes sorbent booms and pads.

2. Designated Outside Agencies

If a major spill occurs, the Village of Romeo Fire Department would be the designated Outside Agency called to aid.

The Fire Department has access to spill response equipment to respond to a large size spill including:

Floor Dry	Floating Booms
Absorbent Pads	Vactor Truck
Personal Protective Equipment	

C. Reporting Requirements

Any unusual characteristics of the discharge as stated in the permit Part I, Section A) j) 2) shall be reported within 24 hours to the Department (MDEQ) followed with a written report within five (5) days detailing the findings of the investigation and steps to correct the condition.

