



FITCHBURG SPOTLIGHT

CLAUDIA GUY, ENVIRONMENTAL ENGINEER

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AGENDA

- Erosion Control Process Improvements
- Stormwater Utility Maintenance Plan
- Public Works Maintenance Facility
- Upcoming Planning Projects
- PermiTrack and GIS

EROSION CONTROL PROCESS CHANGES



EROSION CONTROL PROCESS CHANGES

- Internal SOP / External SOP
- Permit Fee Changes
- Email Templates
- Inspector Form
- Stormwater Maintenance Agreement Template
- Annual Maintenance Report Template & Notification Timeline
- Redevelopment Guidance Document
- Annual Training

STANDARD OPERATING PROCEDURES

- **Goal:** To better provide uniform oversight and obtain erosion control and stormwater management permit compliance on projects under the City Engineering's jurisdiction for inspection and enforcement.

**City of Fitchburg Engineering Erosion Control and Stormwater Management Enforcement
Standard Operating Procedures & Common Requirements (effective 5/1/2019)**

To better provide uniform oversight and obtain erosion control and stormwater management permit compliance on projects under the City Engineering's jurisdiction for inspection and enforcement.

Noncompliance violations for administrative and field items will be tracked separately.

Administrative Noncompliance

1. Administrative noncompliance shall include, but not be limited to: failure to complete a weekly inspection report on PermiTrack, failure to complete a post-rain event inspection report on PermiTrack, or falsifying an inspection report.
2. Notices of Noncompliance will be provided twice during the duration of a project for administrative noncompliance of the Fitchburg Code of Ordinances, Ch 30, Article II. Any violations after the two notices will result in the issuance of a citation.
3. For permitted projects that are required to submit weekly inspection reports, compliance checks are performed on Mondays for the previous week. To be considered in compliance, an online inspection report must have been submitted any time Sunday through Saturday of the previous week. If the inspection has not been received, the landowner and applicant listed on the Erosion Control and Stormwater Management Permit Application, as well as the PermiTrack authorized inspector will receive an email Notice of

<http://www.fitchburgwi.gov/DocumentCenter/View/20326/City-of-Fitchburg-Erosion-Control-Enforcement-SOP>

PERMIT FEE CHANGE

- **Goal:** To ensure permit fees cover the cost of administration for the Erosion Control and Stormwater Management program.

Proposed Permit Fee for **non-Plat Projects**

Type of Permit Erosion Control Only Erosion Control and Stormwater Management Stormwater Management Only
(check only one)
(EC Base Fee = \$275) (EC+SWM Base Fee = \$450) (SWM Base Fee = \$375)
(EC Amendment Fee = \$100) (EC+SWM Amendment Fee = \$100) (SWM Amendment Fee = \$100)
Plus actual costs** **Plus actual costs**** **Plus actual costs****

***In addition, the applicant shall pay the actual costs incurred by the City from any consultant or agent with whom the City may contract to provide services relating to the administration of this Code. The City shall bill the applicant for such charges, which shall be paid within thirty (30) days. Any unpaid charges shall be assessed to the subject property as a special charge pursuant to Wis. Stats. 66.0627 and placed on the tax roll.*

*Make checks payable to "City of Fitchburg." Permit fee must be paid before Dane County review will begin.
Base fee DOUBLES if work starts before permit is approved.*

EMAIL TEMPLATES

- **Goal:** To increase efficiency and ensure all permit holders are provided with information that they need to successfully meet erosion control requirements. We have templates for the following:
 - Permit Issuance
 - Administrative Citation
 - Field Citation
 - Permit Closure

Permit Issuance Template Covers:

- Other permits commonly required
- Requirements during construction
- Requirements prior to receiving occupancy
- Protocol to close out the permit
- Credit opportunities
- Annual maintenance requirements

INSPECTOR FORM



Erosion Control Inspector Form

Last Revised: 2/26/2020

Public Works
5520 Lacy Road
Fitchburg, WI 53711-5318
Phone: (608)270-4262
www.fitchburgwi.gov

I understand that the site should be inspected weekly and within 24 hours after every rainfall of 0.5 inches or more. I understand that as part of my inspection, I should look at **all** erosion control measures, including but not limited to:

- Walk the **entire** length of silt fence to determine if maintenance or repair is required.
- Look at all inlet protection to determine if sediment needs to be removed or bag needs to be replaced.
- Inspect the tracking pad(s):
 - Stone Tracking Pads: Correct tracking pad dimensions and correct stone size? If the stone is full of mud/dirt, the stone needs to be refreshed to get the mud to settle further in the tracking pad. If stone is full of dirt the whole way through, new stone needs to be purchased.
 - Reusable Tracking Pads: If the tracking pad is full of mud/dirt, have them shake off the tracking pad on site to remove the dirt.
- Inspect ditch checks and temporary sediment control measures.
- If dewatering is occurring, visually inspect water according to the new DNR standard.
- Verify that the construction sequence and schedule is being followed.

I will upload inspection observations to the PermiTrack website. I will also upload at least one photo from my inspection.

If maintenance or repairs are required, I will report deficiencies to the owner and contractor to be addressed within 24 hours.

- **Goal:** To ensure inspectors understand their role and responsibilities for inspection. Common issues are discussed in the form. Secondly, the form collects information so we can set up user accounts in PermiTrack.

<http://www.fitchburgwi.gov/DocumentCenter/View/20005/Inspector-Form>

STORMWATER MAINTENANCE AGREEMENT TEMPLATE

- **Goal:** To ensure maintenance of private facilities meets DNR guidance. Also, to save time reviewing Maintenance Agreements.

<https://wifitchburg.civicplus.com/DocumentCenter/View/19566/ANNUAL-STORMWATER-MANAGEMENT-MAINTENANCE-REPORT>

[REMOVE SECTIONS THAT ARE NOT APPLICABLE TO YOUR SITE AND ADD ADDITIONAL SECTIONS AS NECESSARY]

STORM SEWER

- Proprietary sedimentation devices shall be installed and maintained in a manner consistent with laboratory testing and modeling assumptions used to predict effectiveness. This includes the following requirements: the device shall be installed in accordance with manufacturer recommendations; the installed device shall be equipped with an internal or external bypass to divert flows in excess of the design treatment flow rate.
- Storm structures outfitted with devices to capture total suspended solids (TSS) shall be inspected semi-annually in early spring and early fall. Cleaning of TSS and other debris shall be performed anytime the sediment in the unit reaches 8 inches in depth or the volume exceeds 15% of the total storage volume.
- Visual inspection of components shall be performed and debris removed from inlets and storm sewer manholes.
- Repair inlet/outlet areas that are damaged or show signs of erosion.
- Rip-rap shall be replaced as necessary.
- Repairs must restore the component to the specifications of the original plan.

PERMEABLE PAVEMENT

- Pervious pavement systems shall be inspected at least twice per year. Inspections are recommended to be made during and after heavy rainfalls (eg: 2.9" or more over the area of the pervious pavement system within a 24 hour period). An alternative to inspecting during heavy rainfalls would be to apply sufficient water onto the pervious pavement system to simulate a heavy rainfall. Inspection of the permeable pavement system shall be conducted to evaluate the following:
 - Pavement Condition – Inspect permeable pavement surfaces for settlement, deformation or cracking.
 - Surface Infiltration – Inspect permeable pavement surfaces for sedimentation or evidence of ponding.
 - Drainage – Inspect observation wells 72 hours after a rain event of 0.5 inches or greater to verify that the aggregate storage reservoir is draining down effectively.
 - Outfalls - Inspect underdrain outfall locations for obstructions and erosion.
 - Run-on Areas – Inspect run-on areas for adequate cover and stability.
- Clean the pervious pavement at least twice per year using industry recommended methods, such as

ANNUAL MAINTENANCE REPORT TEMPLATE

- **Goal:** To ensure consistent reporting for annual maintenance activities.

<https://wifitchburg.civicplus.com/DocumentCenter/View/19566/ANNUAL-STORMWATER-MANAGEMENT-MAINTENANCE-REPORT>



Department of Public Works

Claudia Guy, P.E., City Environmental Engineer

Engineering Division
5520 Lacy Road, Fitchburg, WI 53711

Phone: 608 270 4262

<https://www.fitchburgwi.gov/141/Public-Works>

ANNUAL STORMWATER MANAGEMENT MAINTENANCE REPORT

Each applicant who is granted a stormwater management permit, and who has signed a maintenance agreement for best management practice(s) on the property, shall submit to the director an annual report reviewing the condition of all practices and any maintenance performed during the past calendar year. This report shall be submitted and sealed by a professional engineer currently licensed in the State of Wisconsin or alternate certification approved by the City. Where a recorded maintenance agreement exists, the annual report should provide documentation that maintenance was performed in accordance with the annual inspection requirements of the recorded maintenance agreement on file with the City. If a stormwater management permit was granted but no maintenance agreement has been recorded, the property owner shall work with a professional engineer to develop a maintenance plan and submit the plan and subsequent annual review reports to the City.

This report shall consist of the following:

- Photos of the treatment device post completion of required maintenance;
- Documentation of the completion of the required annual maintenance, including copies of receipts from agents hired to perform the work and date the work was completed.

Submission Guidelines

The City requires all ECSWM permittees to submit this report electronically through [PermiTrackESC](#), which is a web-based system allowing active construction sites to be viewed easily on a map. If you have questions on how to access [PermiTrack](#), you should contact Dakota Dorn by email at Dakota.Dorn@fitchburgwi.gov or by phone at 608-270-4287

Maintenance for Calendar Year: _____
Stormwater Management Permit Number: _____
Project Name: _____
Site Address: _____
Certifying Engineer: _____
Certification Date: _____

This document and included maintenance summaries certifies that the stormwater management BMP's for the above site have been properly maintained for the indicated calendar year. Any deficiencies that were found have been corrected prior to the submittal of this certification.



Engineer's Seal

ANNUAL MAINTENANCE SOP

- **Goal:** To ensure owners are supplied with timely and persistent reminders about annual stormwater maintenance requirements. This will allow for the City to issue citations or perform maintenance on behalf of the owners (and charge them for it) if required.

City of Fitchburg Oversight and Enforcement Timeline for Annual Stormwater Maintenance (Internal Guidance Document for City Staff)

Timeline

April	Letter and email sent to owners
July	Reminder email to owners
Sept.	Letter and email to owners
Nov.	Final reminder email
Jan.	Staff compile list of noncompliant sites & revoke stormwater utility credit (if applicable)
Feb.	Letter and email to noncompliant site(s) covering the following points: <ul style="list-style-type: none">• Stormwater utility credit has been revoked (if applicable). Owner will not be eligible to re-apply for a minimum of one full calendar year.• If a report is not submitted by May 31, the City will hire a qualified consultant to perform the inspection, prepare the annual report, and perform any required maintenance. The owner will not be able to address maintenance on their own, if the report is not received by this date.
Jun.	Staff prepare RFP for a qualified inspector to: <ul style="list-style-type: none">• Send letter to all noncompliant sites informing them that they will be

REDEVELOPMENT GUIDANCE DOCUMENT

CITY OF FITCHBURG

REDEVELOPMENT GUIDANCE DOCUMENT

Last updated: March 5, 2020 (Resolution R-56-20)

Q Is an erosion control plan required?

A If the site disturbance exceeds 4,000 square feet, a plan with Universal Soil Loss Equations (USLE) is required, as well as an Erosion Control Permit.

Q When are stormwater management practices required on a redevelopment site?

A If the disturbed area on a developed site exceeds 4,000 square feet, redevelopment stormwater management practices are required, as well as a Stormwater Management Permit.

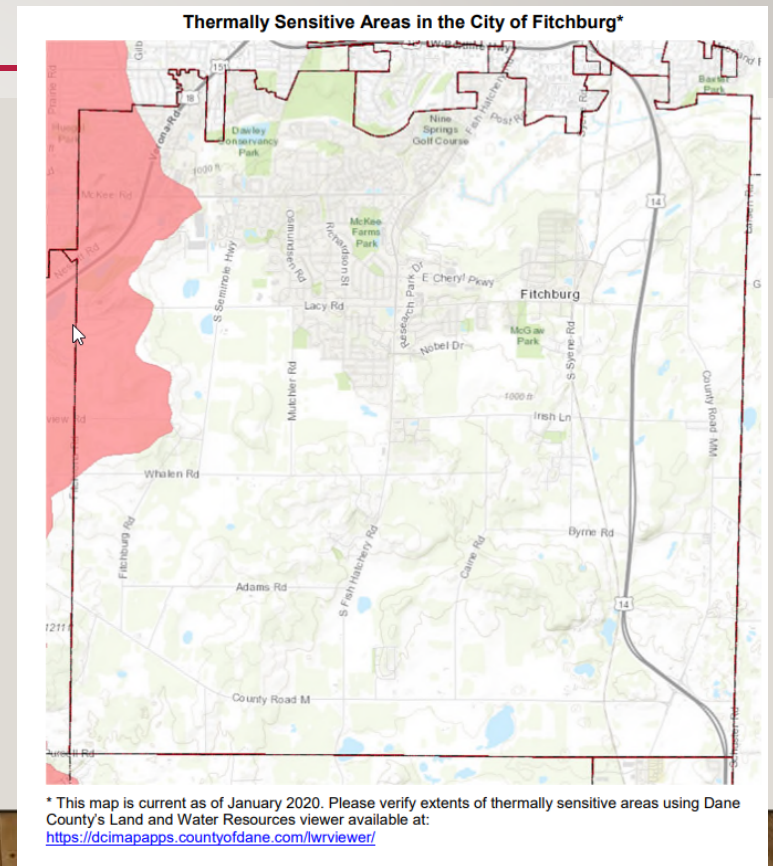
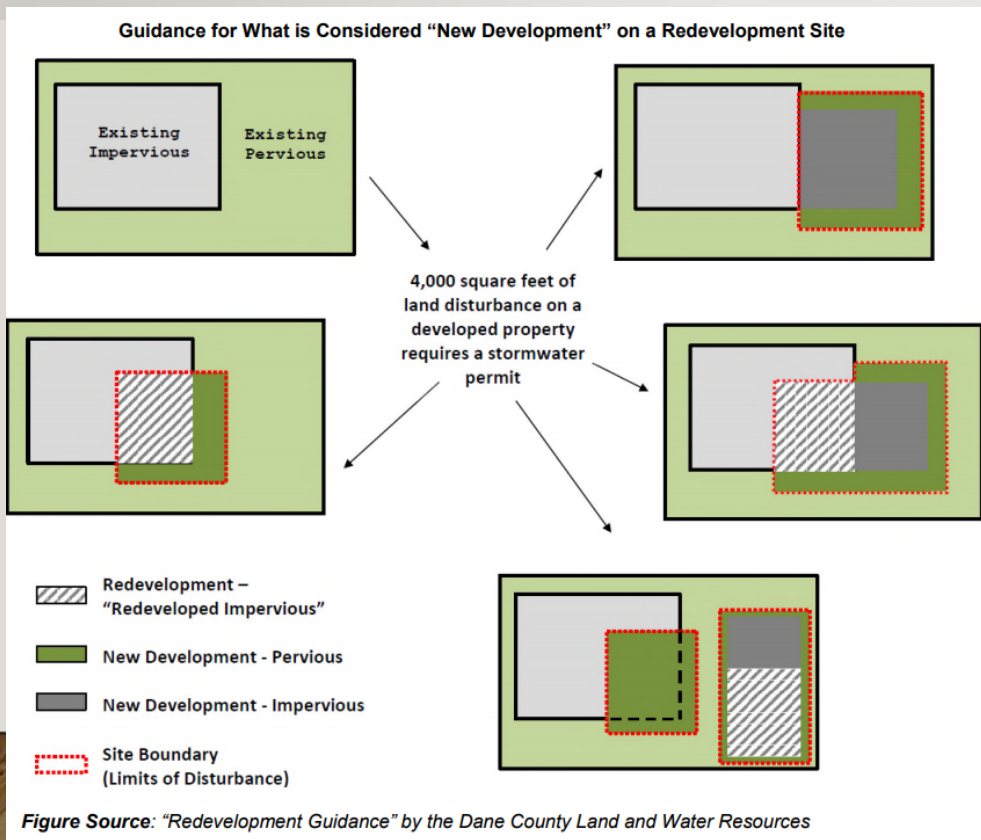
Q When do redevelopment requirements apply?

A Redevelopment performance standards apply if development results in an **equal amount** or a **net decrease** of impervious area on the site. If development results in a net increase, a mix of redevelopment and new development standards may apply. If the cumulative addition of impervious area after August 22, 2001 is 20,000 square feet or more, new development standards would apply to **all** new impervious areas since that time; otherwise, redevelopment standards would apply to new impervious areas. (See the attached figure for guidance on how to determine what is considered a "new impervious surface").

Q If stormwater management is required for redevelopment, what components are

<http://www.fitchburgwi.gov/DocumentCenter/View/20839/City-of-Fitchburg-Redevelopment-Guidance>

REDEVELOPMENT GUIDANCE DOCUMENT



ANNUAL EROSION CONTROL TRAINING

- **Goal:** To provide a resource to contractors, designers, inspectors, and City staff doing work in the Fitchburg and greater Dane County area.

<https://www.youtube.com/watch?v=k5H9ITVnHwA>



STORMWATER UTILITY MAINTENANCE PLAN



WHY PLAN?

- Provides an agreed upon approach for maintenance
- Helps Council understand what we do (potentially we can get more staff?)
- Helps public understand what we do
- Provides continuity in the event of staff turnover



DRAFT

City of Fitchburg

Stormwater Facility Maintenance Plan



WHAT DOES THE PLAN COVER?

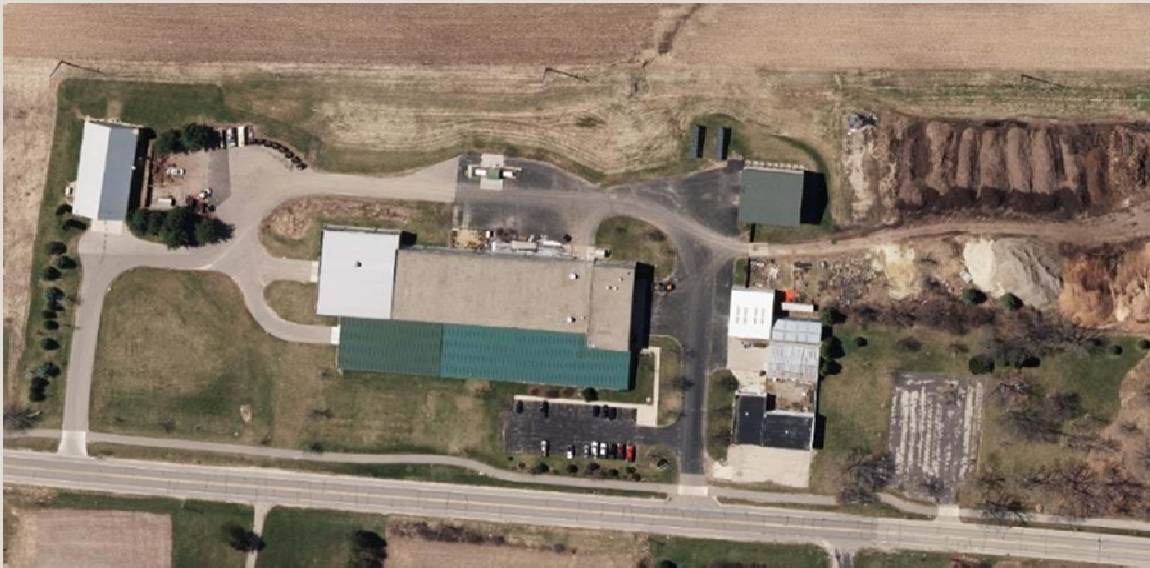
- City-Private responsibilities
- Infrastructure Maintenance
- Pond Maintenance
- Vegetation Management
- Infiltration Practices
- Sediment Removal from Sumps
- Oil Control
- IDDE
- Stormwater Facility Signage
- Street Sweeping
- Flood Control and Pumping Operations
- Capital Improvements
- Maintenance of Private Stormwater Facilities

PULL UP PLAN AND GO THROUGH SOME OF THE
SECTIONS



PUBLIC WORKS MAINTENANCE FACILITY

PUBLIC WORKS MAINTENANCE FACILITY



SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN

- Meet regulatory requirements of 40 CFR 112
- Tank inventory
- Tank filling and oil handling operations
- Spill response procedures
- Notification requirements
- Inspections (monthly), testing (annual), and training
- AST Closure protocol

SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN

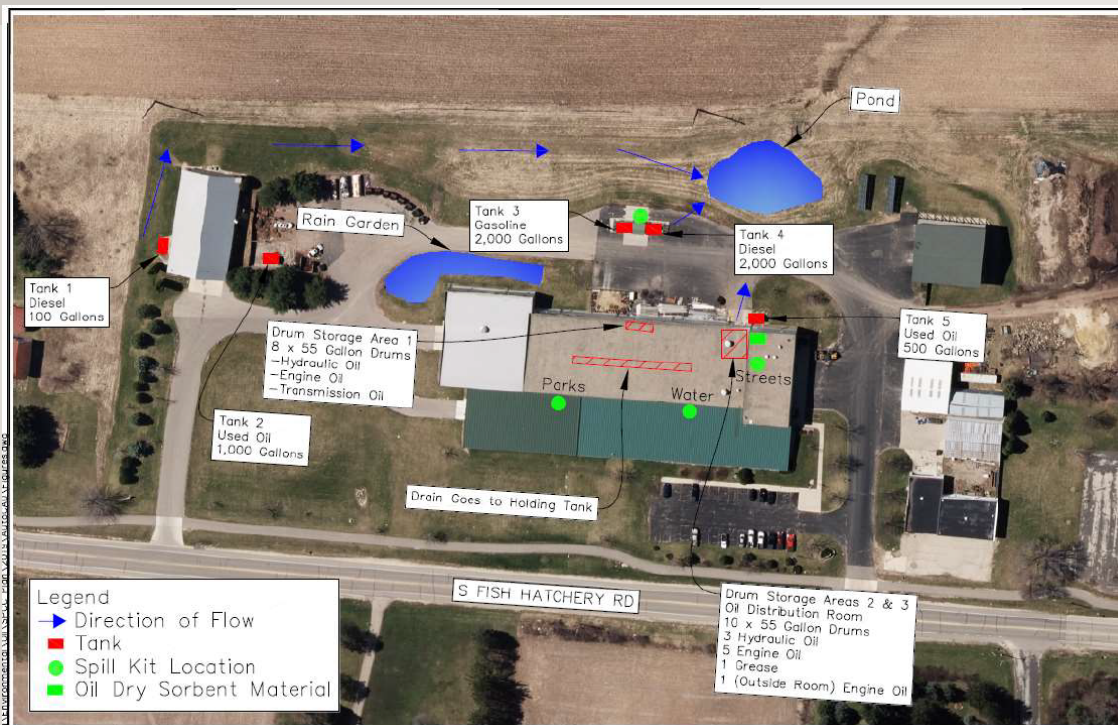


Figure 1-2: Oil Storage Locations
Public Works Maintenance Facility

DRAWN BY: D. Dorn
1/4/2019

Fitchburg Public Works Maintenance Facility PHOTOGRAPHIC LOG

Description:

Photograph:

Tank 1
Single-Walled 100-gallon diesel tank.



Tank 2
Single-Walled 1,000-gallon tank that holds used motor oil.



COMPOSTING GUIDELINES



Composting Guidelines

Wisconsin's composting regulations (NR 502.12, Wis. Adm. Code), effective June 1, 2012, require operators of licensed compost facilities to **monitor temperatures** during the composting process, and to **keep records of temperatures and turning events**.

Taking Temperature Readings:

What you need

- Long probe thermometer (~4 feet long)

Procedure

- Take temperature reading every 150 linear feet of windrow (~50 paces). A minimum of 6 evenly spaced measurements must be taken per windrow.
- At each location, take a temperature reading about 12 inches below the surface AND a core temperature reading ~ 4 feet off the ground. Should take readings from both the north and south sides of windrow to be complete.
- Log temperature readings at each location on monitoring form.

Analysis

- Aeration, or turning of the windrow, is required if the temperature rises above 140°F or below 90°F. Temperatures should be kept under 150°F to keep beneficial microbes.
- Windrows consisting primarily of leaves and wood waste are likely to require turning at least monthly from spring through fall.
- For windrow composting, attain a minimum temperature of 55°C, or 131°F, on a minimum of 15 days, which are not required to be consecutive, and turn the windrow a minimum of 5 times during the high temperature periods to be free of toxins.
- Temperature measurements should be taken a minimum of twice a month, but weekly is preferred.

Turning Windrows:

Goal: To move material from the outside of the pile to the middle and to loosen and fluff the material. This will allow the material to decompose more quickly and be more porous.

Procedure

- A front-end loader should be used to flip the top of the windrow over just beyond the existing windrow and then take the compost from the bottom of the old windrow and place it on top of the new windrow.



Temperature monitoring DNR: <https://dnr.wi.gov/files/PDF/pubs/wa/WA1585.pdf>

Temperature info: <http://compost.css.cornell.edu/monitor/monitortemp.html>

Turning: <http://compost.css.cornell.edu/Factsheets/FS7.html>

UPCOMING PROCESS-RELATED PROJECTS



UPCOMING PROCESS-RELATED PROJECTS

- Stormwater Pollution Prevention Plan (SWPPP) for the PW Maintenance Yard
- MS4 Public Education and Outreach Plan
- Specific Vegetation Maintenance Plan for the Stormwater Utility

PERMITRACK AND GIS

DAKOTA DORN – ENVIRONMENTAL
ENGINEERING TECH / GIS SPECIALIST

- PermiTrack
 - Erosion Control inspection reports
 - Annual Maintenance inspection reports
 - Public-facing Map of Open Construction Projects
- Survey I 23 and Workforce
 - Outfall inspection form and creation of task orders for Mark
 - Erosion Control Inspection Form (for City staff only)
- GIS Mapping
 - Internal GIS Map
 - Stormwater layers (specific emphasis on the public complaints layer)
 - Show that this can be superimposed with the street resurfacing layer
 - External GIS Map
 - Stormwater layers
 - Brief overview of other layers available
 - Open Data Portal