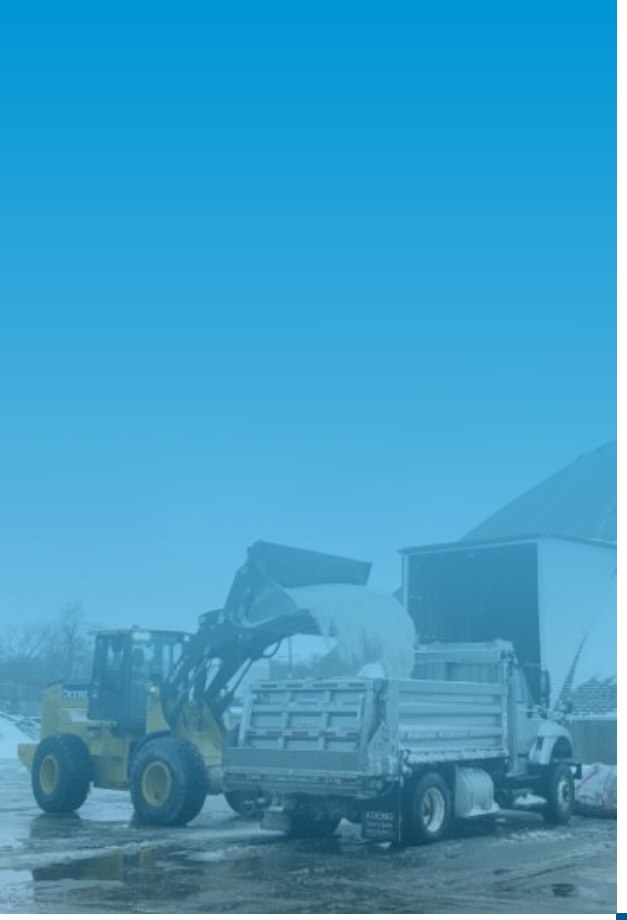


Pollution Prevention & Good Housekeeping Plan Minimum Requirements:

What Is Needed To Comply With The ILR40 Permit?

IAFSM 2019

Town of Normal

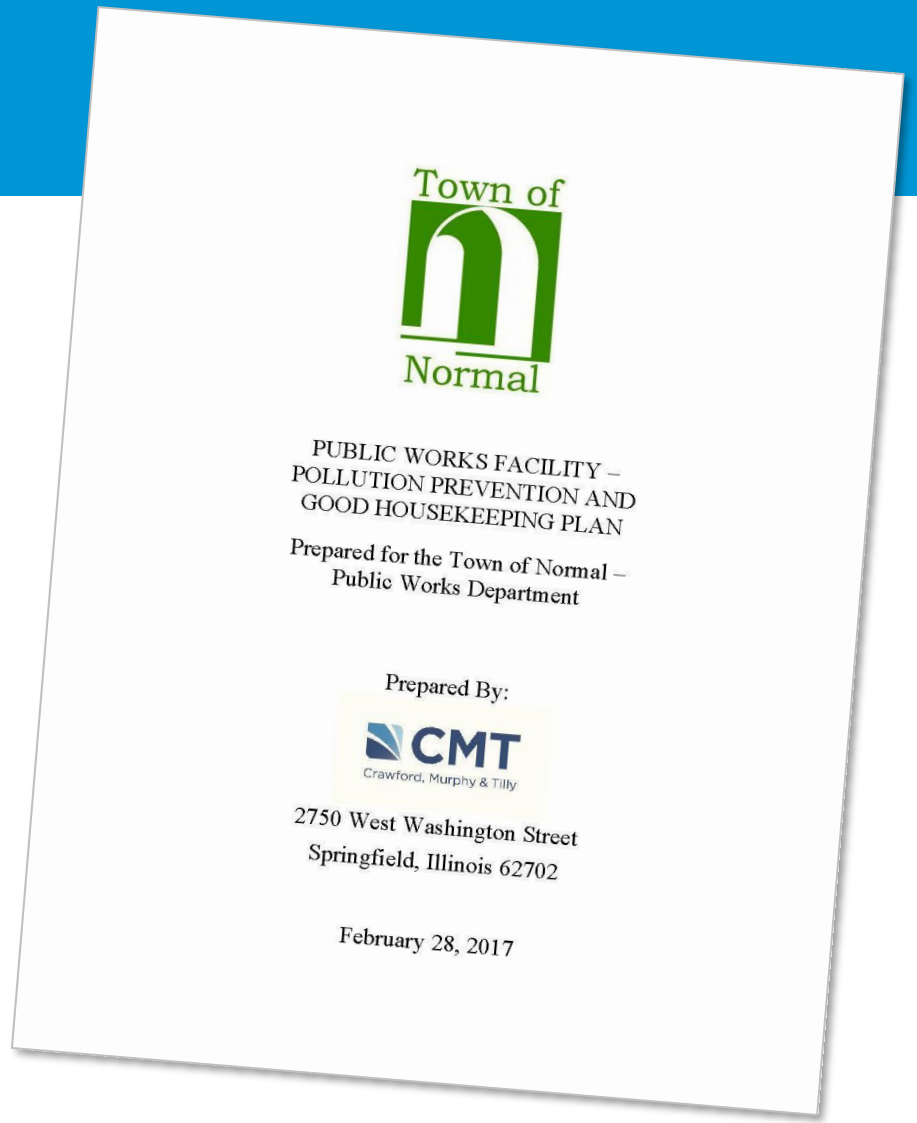
Wayne Aldrich, PE
Public Works Director

CMT

Tim Sumner, PE
Project Manager

Presentation Outline

- Town of Normal - Public Works
- Public Works Facility
- ILR40 Permit and PP&GHP requirements
- PP&GHP Considerations
- Operations Assessment
- Good housekeeping practices for municipal operations
- PP&GHP Standard Elements
- Questions to Get Started
- Suggestions
- Helpful References


Town of Normal

PUBLIC WORKS FACILITY – POLLUTION PREVENTION AND GOOD HOUSEKEEPING PLAN

Prepared for the Town of Normal – Public Works Department

Prepared By:

CMT Crawford, Murphy & Tilly

2750 West Washington Street
Springfield, Illinois 62702

February 28, 2017

Town of Normal: **Background**

- Incorporated 1867
- Home to Illinois State University
- At the crossroads of Interstates 55, 74 and 39
- Sustainable initiative started in Uptown area

554 Lane Miles of Road

202 Miles of Water Main

180 Miles of Sanitary Sewer

128 Miles of Storm Sewer

~54,000 Population

Normal Public Works: **What We Do**

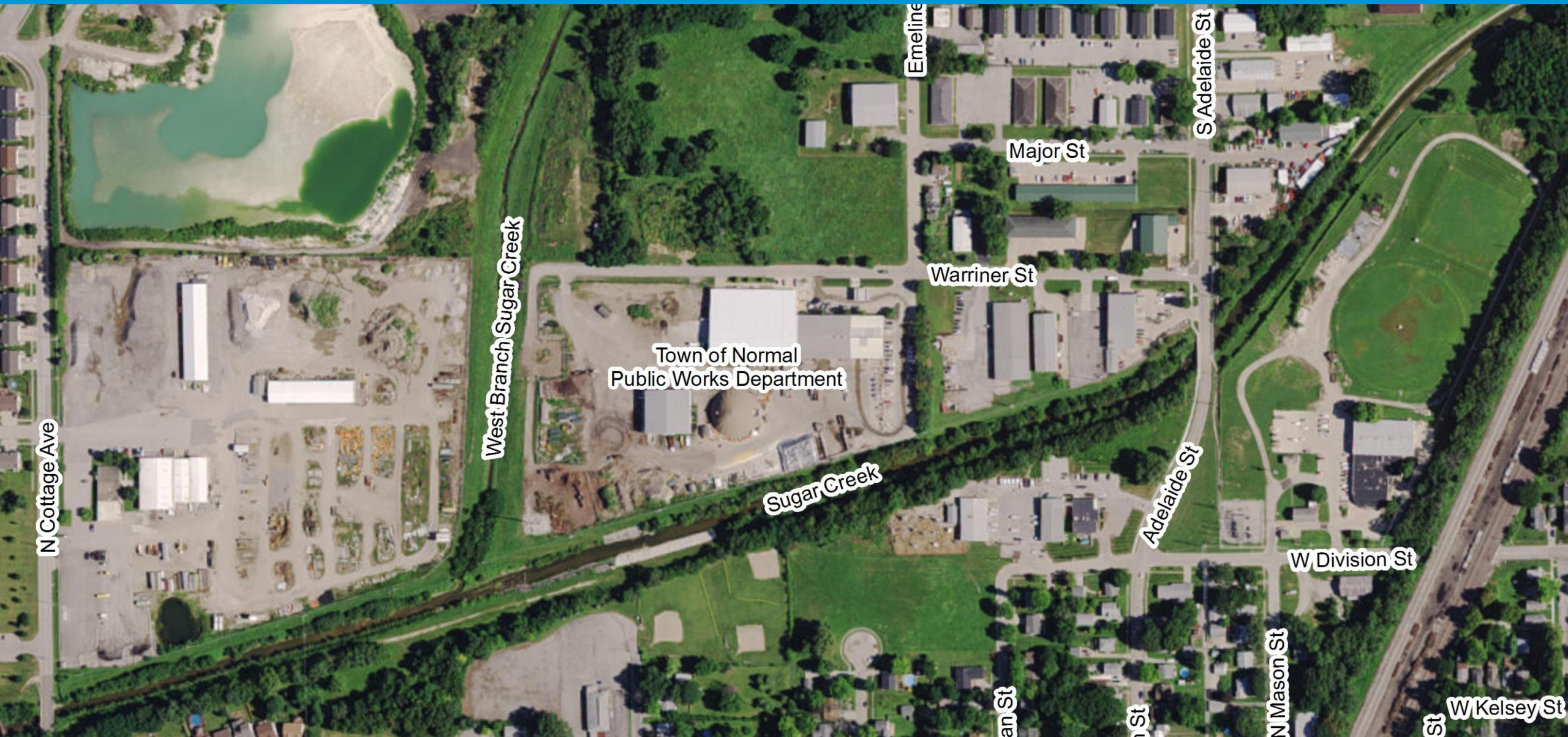
Public Works is responsible for:

- Fleet Maintenance
- Sewer Maintenance
- Street Maintenance
- Waste and Recycling

Occurs on 11-acre Public Works Facility (PWF) on Warriner Street that includes:

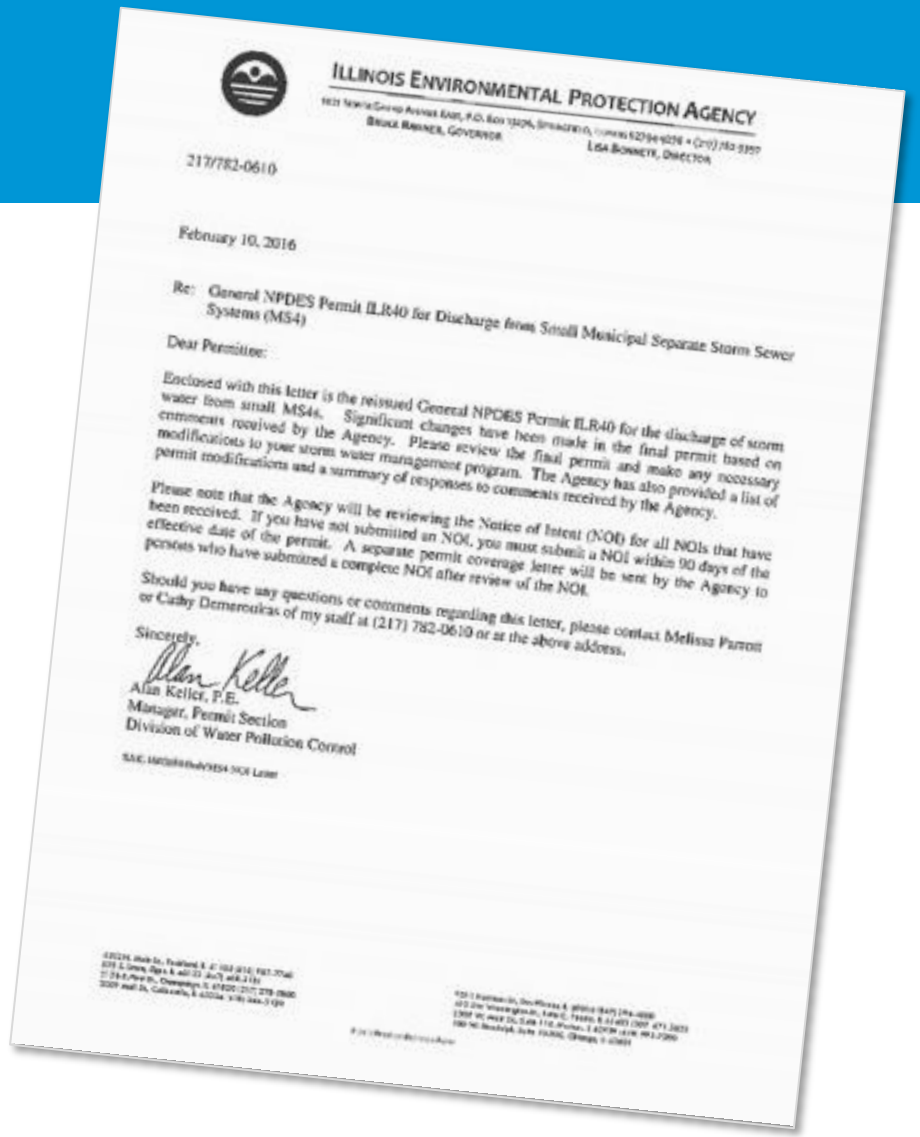
- 44,00 S.F. maintenance & operations building
- Salt dome
- Recycling transfer facility
- Landscape waste processing
- Material storage

Public Works Facility



ILR40 Stormwater Permit

- Normal has a Municipal Separate Storm Sewer System (MS4)
- Stormwater discharges regulated by IEPA Permit ILR40
- IEPA audited Normal storm water management program in 2015
- **Highest priority recommendation:** develop a (storm water) pollution prevention and good housekeeping plan (PP&GHP) for the PWF
- **ILR40 Minimum Control Measure #6:** Reduce Pollutant Runoff from Municipal / Government operations
- **Suggestion:** *maintaining communication with IEPA field office staff will promote a good working relationship*



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

217/782-0610

February 10, 2016

Re: General NPDES Permit ILR40 for Discharge from Small Municipal Separate Storm Sewer Systems (MS4)

Dear Permittee:

Enclosed with this letter is the reissued General NPDES Permit ILR40 for the discharge of storm water from small MS4s. Significant changes have been made in the final permit based on comments received by the Agency. Please review the final permit and make any necessary modifications to your storm water management program. The Agency has also provided a list of permit modifications and a summary of responses to comments received by the Agency.

Please note that the Agency will be reviewing the Notice of Intent (NOI) for all NOIs that have been received. If you have not submitted an NOI, you must submit a NOI within 90 days of the effective date of the permit. A separate permit coverage letter will be sent by the Agency to persons who have submitted a complete NOI after review of the NOI.

Should you have any questions or comments regarding this letter, please contact Melissa Parrott or Cathy Demeroukas of my staff at (217) 782-0610 or at the above address.

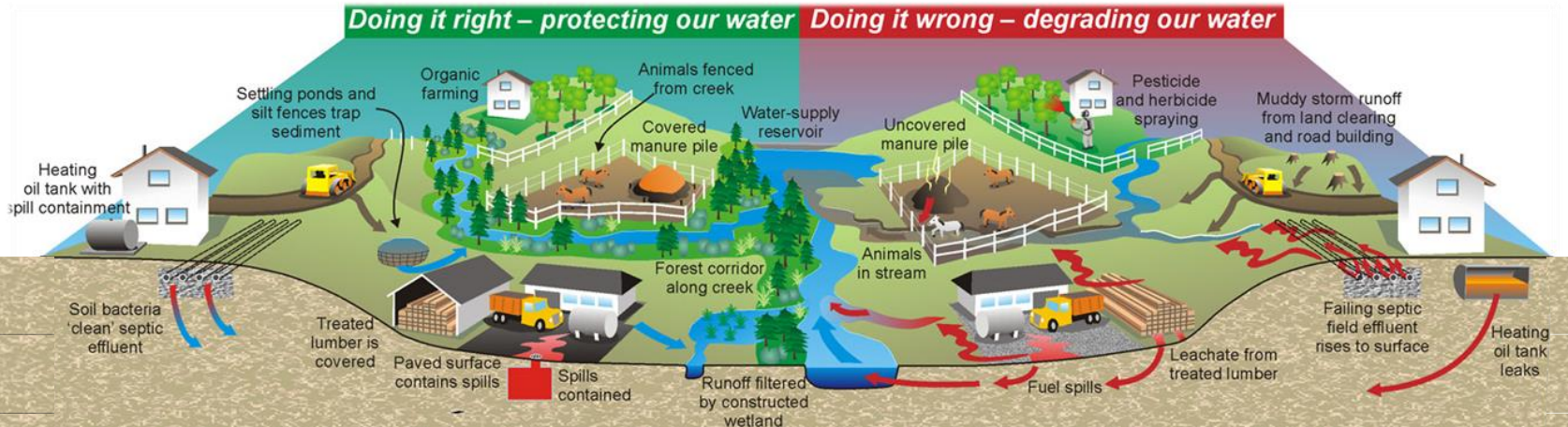
Sincerely,

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

PP&GHP Minimum Components

(Part IV, Sec.6, A-F from ILR40)

- O&M program with annual training for staff & contractors to prevent and reduce discharge of pollutants
- Design, install, and maintain effective pollution prevention measures
- Store deicing materials in permanent covered structure
- Employee training to prevent and reduce storm water pollution from public works maintenance activities
- Define best management practices (BMP) and measurable goals for each BMP
- Evaluate PP&GHP annually in the *Facility Inspection Report* to IEPA



PP&GHP: **Considerations Before Developing The Plan**

Provide essential services to Normal residents

Take a holistic view of the municipal operations

Normal PW mission; what is it we do?

Where should operations be in the next 5 to 10 years?

Gather all historical information and data

Assess current operations

Summarize findings

Develop PWF improvement goals

Steps needed to develop PP&GHP

Assessment of Current Operations

- Reviewed each operation to establish a baseline:
  - Fleet, Sewer, Streets, Waste / Recycling
- Summarize when the facilities were constructed and/or remodeled
- Summarize site runoff
- Inventory materials that could pollute storm water
- List materials and equipment stored outside
- List materials and equipment stored inside or covered
- Establish pollutants of concern

Fleet Assessment & Improvement Goals

Assessment Findings

1. Not all vehicles stored under cover
2. Waste oil and antifreeze recycling containers adjacent to street building without containment and guidelines (public access)
3. No records of fluid use and recycling

Improvement Goals

1. Provide enclosed storage for PWF vehicles of all types
2. Eliminate used motor oil and antifreeze recycling containers
3. Log fluid use and recycling associated with all vehicle maintenance

Sewer Assessment & Improvement Goals

Assessment Findings

1. Spoil material from sewer repairs stored in the yard
2. PWF storm sewer and inlet cleaning 2 to 3 times per year
3. Debris can easily enter inlets

Improvement Goals

1. Store spoil material in a bunker with paved bottom
2. Increase storm sewer and inlet cleaning to at least 6 times per year
3. Install inlet filters and maintain filters

Street Assessment & Improvement Goals

Assessment Findings

1. Hydraulic oil, crack filler, cleaning solvents stored on floor without containment
2. Storm water runoff leads into the salt dome
3. Extra salt not covered
4. No containment around calcium chloride tank

Improvement Goals

1. Provide spill containment for materials
2. Redirect storm water runoff away from salt dome
3. Provide permanent covered storage of extra salt
4. Provide containment around calcium chloride

Waste & Recycling Assessment & Improvement Goals

Assessment Findings

1. Public access to site unsupervised
2. Public access too close to chipper and yard operations
3. No programs or training for dealing with HHW

Improvement Goals

1. Monitor public access by part-time employee or wireless notification
2. Reconfigure public access to yard to reduce auto and equipment interactions
3. Eliminate deposition and storage of HHW

(ILR40,PART IV, SEC.6, a)

Good Housekeeping Practices: **O&M Plan with Training**

Determine:

- Routine operations: material storage, yard waste mulching, equipment mobilization, etc.
- Equipment maintenance requirements: fluid change, vehicle repair, vehicle wash down, etc.
- Staff training needs: spill prevention, oil / water separator maintenance
- Documenting processes and procedures

(ILR40,PART IV, SEC.6, b)

Good Housekeeping Practices: **Pollution Prevention Measures**

- Review all operations
- Decide which operations could spill and/or pollute ground water and/or surface water
- Determine the weaknesses
- Yard sweeping and inlet cleaning
- Spill prevention and containment measures
- Recycling of fluids
- Keep products and materials off the floor
- Protect floor drains
- Perform vehicle maintenance inside, where possible

(ILR40,PART IV, SEC.6, c)

Good Housekeeping Practices: **Deicing Material Storage**

- Per ILR40, deicing materials to have permanent cover by now
- Normal has a salt dome & temporary bunker with tarp
- Normal considering prefabricated structure (e.g., Clear Span type) to cover additional salt
- Locate salt storage away from storm sewer and inlets, if possible
- Include inlet protection near all salt storage
- Be strategic about your salt use to minimize stockpile & impacts
- Set a limit on use of salt; make it dependent on the type of storm

(ILR40,PART IV, SEC.6, d)

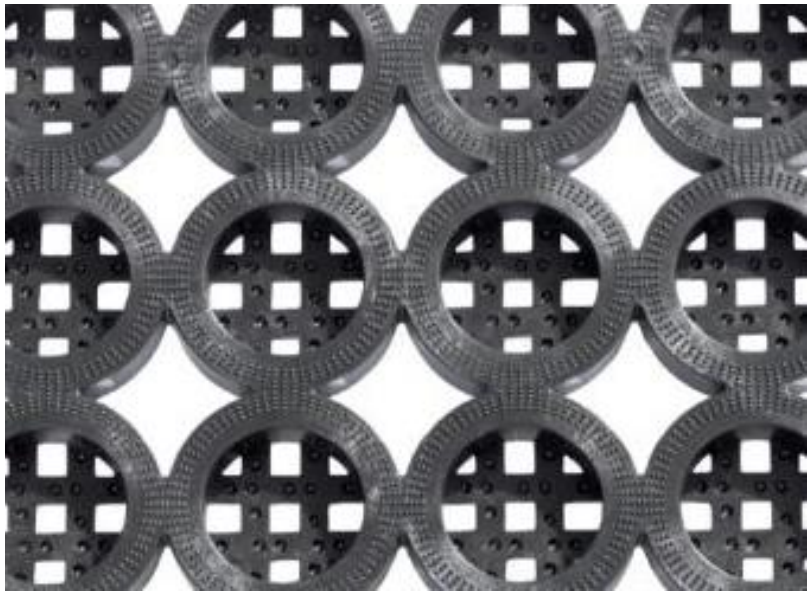
Good Housekeeping Practices: **Employee Training Program**

- Educate staff about reducing pollution & pollution prevention requirements
- Utilize existing training resources available on internet
- Customize training for the PWF and staff based on skill level
- Hold training annually: pick a day and do it the same time every year
- Adjust training as conditions change (when necessary)
- Maintain a binder of training documents for reference

(ILR40,PART IV, SEC.6, e)

Good Housekeeping Practices: **Define BMPs & Measurable Goals**

- Provide containment around materials and fluids
- Increased sweeping of PWF yard
- Increased inlet cleaning
- Protect inlets from debris
- Reducing / eliminating HHW drop offs
- Improved debris/yard waste management
- Protect inlets from debris – Implementing a Grid sediment trap around new inlets



(ILR40,PART IV, SEC.6, f)

Good Housekeeping Practices: **Annual Program Evaluation**

- Set aside a few minutes each year to check on progress towards goals
- Determine changes needed to the program
- Evaluate the program when preparing next year's budget
- Document changes / updates in Annual Facility Report to IEPA
- Assess progress towards achieving reduction in pollutants

Typical Questions to Get Started

- What is your essential function?
- **What are your daily routines/tasks?**
- What improvements and/or equipment would improve efficiency?
- What is your vision for the PWF in five (5) years?
- What pollution prevention practices are in place?
- Is annual pollution prevention training provided to staff?
- What chemicals are stored at the PWF?
- Are MSDS sheets available for all chemicals?
- Is there an emergency spill response plan?
- What type of maintenance is performed inside vs. outside?
- **Are records kept for all maintenance activities?**

PP&GHP Funding & Implementation Update

New Electronics Recycling Building

- New electronics recycling building constructed and opened in October 2018
- Installation of new salt storage building, storm water drainage improvements and relocation of material storage areas set for Spring/Summer 2019
- **Funding**
  - Grants were not available to complete this work
  - Town was able to utilize storm water fees to fund the improvements

Implementation Plan Changes

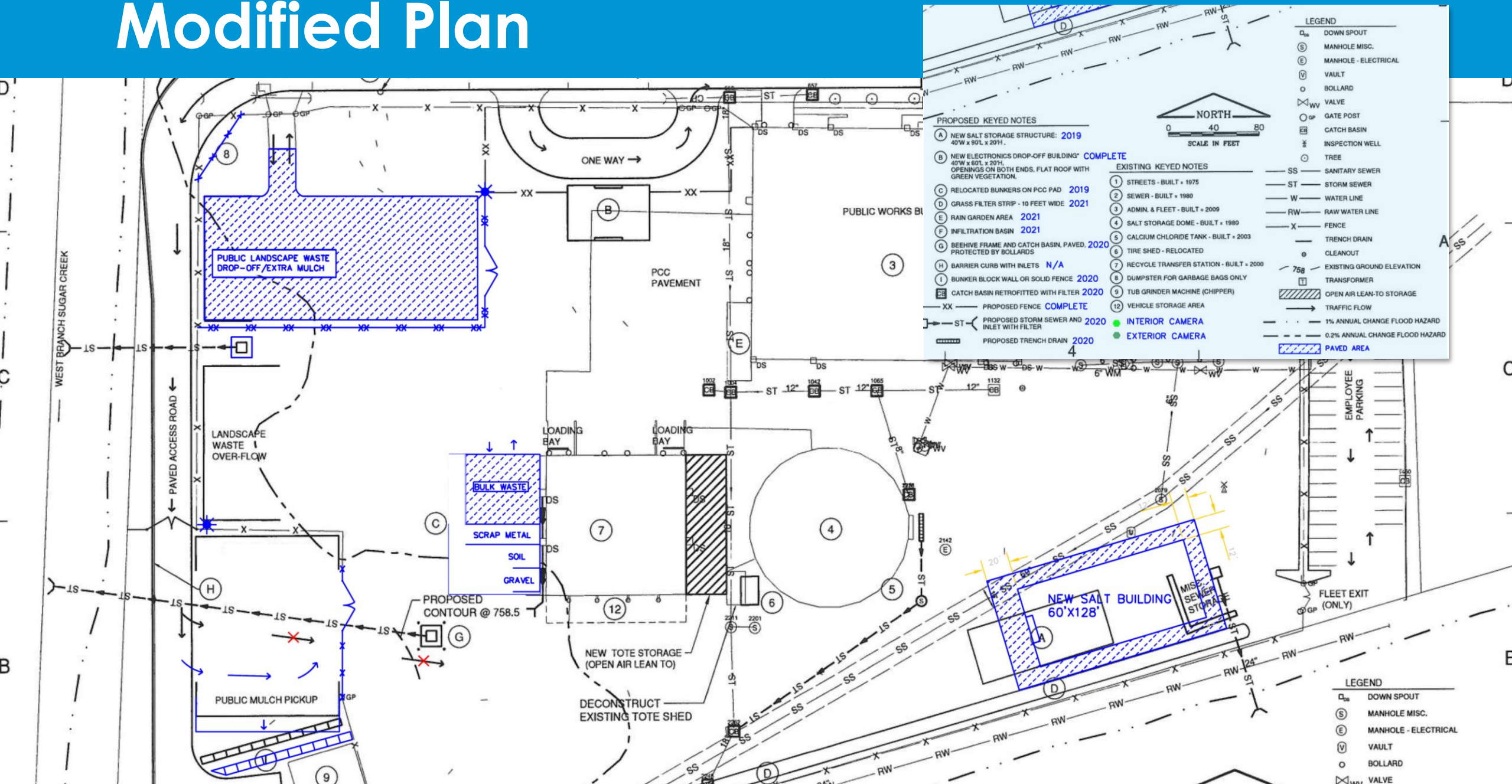
Some changes to the original plan had to be made due to changes in operations. **Those operational changes include:**

- Existing transfer center no longer in use.
- A reduction in bulk waste storage in the yard.

Changes made to the original plan include:

- Larger salt storage structure to accommodate up to 4,000 tons of salt.
- Inlet protection and sediment traps to be used in place of paving around new storm water inlets.
- Additional fencing to keep public from entering the yard.
- Relocated public landscape drop off area.
- Larger public mulch pick up area.
- Elimination of the recycling drop box program and transfer station.

Modified Plan



Suggestions

Assemble a plan that not only meets minimum requirements, but is implementable and flexible

Develop the plan using a template

Keep it simple at first

Utilize your staff resources whenever possible

Address the "low hanging fruit" first and work your way down the list

Keep the plan updated as the facility or mission changes

Be able to adapt to changes

The requirements are not going away; IEPA will be back for a visit

Helpful References

Center for Watershed Protection (CWP). Pollution Prevention and Good Housekeeping Practices Version 1.0 – Manual 9. Ellicott City, MD. September 2008.

Indiana Association for Floodplain and Stormwater Management (INAFSM). Creating a Program Plan for Municipal Operations Pollution Prevention and Good Housekeeping. Indianapolis, IN. August 2015.

https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater-documents

Thank You!

Questions?

Town of Normal

Wayne Aldrich, PE
Public Works Director

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