



City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
www.appleton.org

Meeting Agenda - Final Utilities Committee

Tuesday, January 8, 2019

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

2. Roll call of membership

3. Approval of minutes from previous meeting

[19-0008](#) Approval of the December 11, 2018 Utilities Committee Meeting Minutes.

Attachments: [December 11, 2018 Utilities Committee Meeting Minutes.pdf](#)

4. **Public Hearings/Apearances**

5. **Action Items**

[19-0009](#) Award Sole Source Stormwater Consulting Services Contract 2019G for French Road Urbanization Stormwater Analysis with raSmith in an amount not to exceed \$28,000.

Attachments: [2019G raSmith Contract Util Memo 01-08-2019 final.pdf](#)

[19-0051](#) Award North Edgewood Sanitary Lift Station Design and Related Services to McMahon Associates, Inc. in the amount of \$105,031.00 with a 5% contingency of \$5,249.00 for a project total not to exceed \$110,280.00.

Attachments: [North Edgewood Sanitary Lift Station design.pdf](#)

6. **Information Items**

[19-0050](#) Presentation - Historical Review of Appleton's Biosolids Composting Initiative

Attachments: [2019 Compost History Presentation 01-03-19.pdf](#)

[19-0014](#) Monthly Reports for November 2018:
- Water Distribution and Meter Team Monthly Report

Attachments: [Water Main Breaks November 2018.pdf](#)

7. Adjournment

Notice is hereby given that a quorum of the Common Council may be present during this meeting, although no Council action will be taken.

Reasonable Accommodations for Persons with Disabilities will be made upon Request and if Feasible.

For questions on the agenda, contact Chris Shaw at 920-832-5945 or Paula Vandehey at 920-832-6474.



City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
www.appleton.org

Meeting Minutes - Final Utilities Committee

Tuesday, December 11, 2018

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

Chairperson Baranowski called the Utilities Committee meeting to order at 5:00 p.m.

2. Roll call of membership

Present: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

3. Approval of minutes from previous meeting

18-1798 Approval of the November 27, 2018 Utilities Committee Meeting Minutes.

Attachments: [November 27, 2018 Utilities Committee Meeting Minutes.pdf](#)

Meltzer moved, seconded by Dvorachek, that the Minutes be approved. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

4. Public Hearings/Apearances

5. Action Items

18-1799 Award of 2019C Stormwater Consulting Services Contract for Newberry Street reconstruction with Brown and Caldwell in an amount not to exceed \$28,690.

Attachments: [2019C Award to Brown and Caldwell.pdf](#)

Dvorachek moved, seconded by Reed, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

18-1800 Award of 2019D Stormwater Consulting Services Contract for Lightning Drive Drainage Study Update and Preliminary Engineering to raSmith, Inc. in an amount not to exceed \$58,140.

Attachments: [2019D Lightning Drive Approval Memo raSmith.pdf](#)

Dvorachek moved, seconded by Raasch, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

18-1801

Award of 2019E Stormwater Consulting Services Contract for K2 Drainage Study to McMahon, Inc. in an amount not to exceed \$29,700.

Attachments: [2019E K2 Drainage Study Approval Memo McMahon FINAL.pdf](#)

Meltzer moved, seconded by Reed, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

18-1802

Approval to single source and award the 2019F Stormwater Consulting Services Contract for an UNPS Planning Grant application for the next City-wide stormwater management plan to Brown and Caldwell in an amount not to exceed \$6,850.

Attachments: [2019F Single Source Award to Brown and Caldwell.pdf](#)

Meltzer moved, seconded by Raasch, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

18-1837

Approval of a Coating Services contract for the #2 Receiving Station to Mississippi Valley Coating in the amount of \$68,782 plus a contingency of \$8,250 for a total not to exceed cost of \$77,032.

Attachments: [utilities memo #2 RS Coating Contract Award 12-07-18.pdf](#)

Raasch moved, seconded by Dvorachek, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

6. Information Items

7. Adjournment

Raasch moved, seconded by Dvorachek, that the Utilities Committee Meeting be adjourned at 5:12 p.m. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

Department of Public Works – Engineering Division

MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works
Pete Neuberger, Staff Engineer
Sue Olson, Staff Engineer

DATE: January 2, 2019

RE: Award Sole Source Stormwater Consulting Services Contract 2019G for French Road Urbanization Stormwater Analysis with raSmith in an amount not to exceed \$28,000.

The Department of Public Works requests approval to award the sole source Stormwater Consulting Services Contract 2019G for the French Road Urbanization Stormwater Analysis with raSmith in an amount not to exceed \$28,000. After this contract award, \$586,220 will remain in the 2019 stormwater consulting budget.

French Road from Evergreen Drive to Broadway Drive is a rural two-lane road located within the City's northeast growth area. As development continues to occur nearby, such as Emerald Valley to the west and North Edgewood Estates to the east, the need for urbanization of French Road increases to allow for efficient regional traffic flow.

Urbanization of a roadway is accompanied by the need to provide stormwater conveyance and management per City and DNR requirements. This contract is proposed to allow the City to begin planning and budgeting for the design and construction of an urbanized French Road. Project scope includes the following items:

1. Identify and analyze potential stormwater management practices to meet required peak flow and water quality, including potential use of the existing Emerald Valley stormwater pond.
2. Develop and analyze alternative conveyance of stormwater runoff.
3. Prepare 30% conceptual engineering plans with budget level cost estimates for the selected stormwater management facilities, stormwater conveyance system, and French Road urbanization

raSmith has already performed significant review and analysis within the tributary and downstream areas of French Road, including analysis of existing Emerald Valley Pond function and stormwater review of North Edgewood Estates Stormwater Management Plan. Based on raSmith's prior excellent work in these areas and a scope of services provided by raSmith, DPW staff determined the raSmith team are prepared to provide the most efficient, cost-effective process for providing these consulting services. Therefore DPW requests approval of the recommendation without a formal RFP process. If raSmith provides excellent consulting services under this proposed contract, DPW staff anticipate requesting at a future date to contract with raSmith for the final design of the stormwater facilities described above.



"...meeting community needs...enhancing quality of life."

**DEPARTMENT OF PUBLIC WORKS - Engineering Division
MEMO**

TO: Members of the Utilities Committee

FROM: Ross Buetow, Deputy Director of Public Works

SUBJECT: Award of contract for North Edgewood Sanitary Lift Station Design and Related Services

DATE: January 2, 2019

In response to a request for proposals issued by our office, we received one response for Design and Related Services for our proposed North Edgewood Regional Sanitary Lift Station. The proposal was submitted by McMahon Associates, Inc. and was opened on Monday, December 10, 2018.

Although we only received one response, we are confident in recommending award of this contract to McMahon Associates. They have demonstrated a strong understanding of the scope of services for our project and have provided design services on numerous similar projects in our area. During the solicitation process, several other firms informed us that their current staff workloads did not allow them the opportunity to submit a proposal for this particular project.

Therefore, we recommend award of contract for North Edgewood Sanitary Lift Station Design and Related Services to McMahon Associates, Inc. in the amount of \$105,031.00 with a 5% contingency of \$5,249.00 for a project total not to exceed \$110,280.00. The approved budget for the project is \$100,000.00; however, we anticipate that sufficient 2019 fund balance will be available to cover the full contract award.

Thank you for your consideration.

CITY OF APPLETON BIOSOLIDS COMPOST

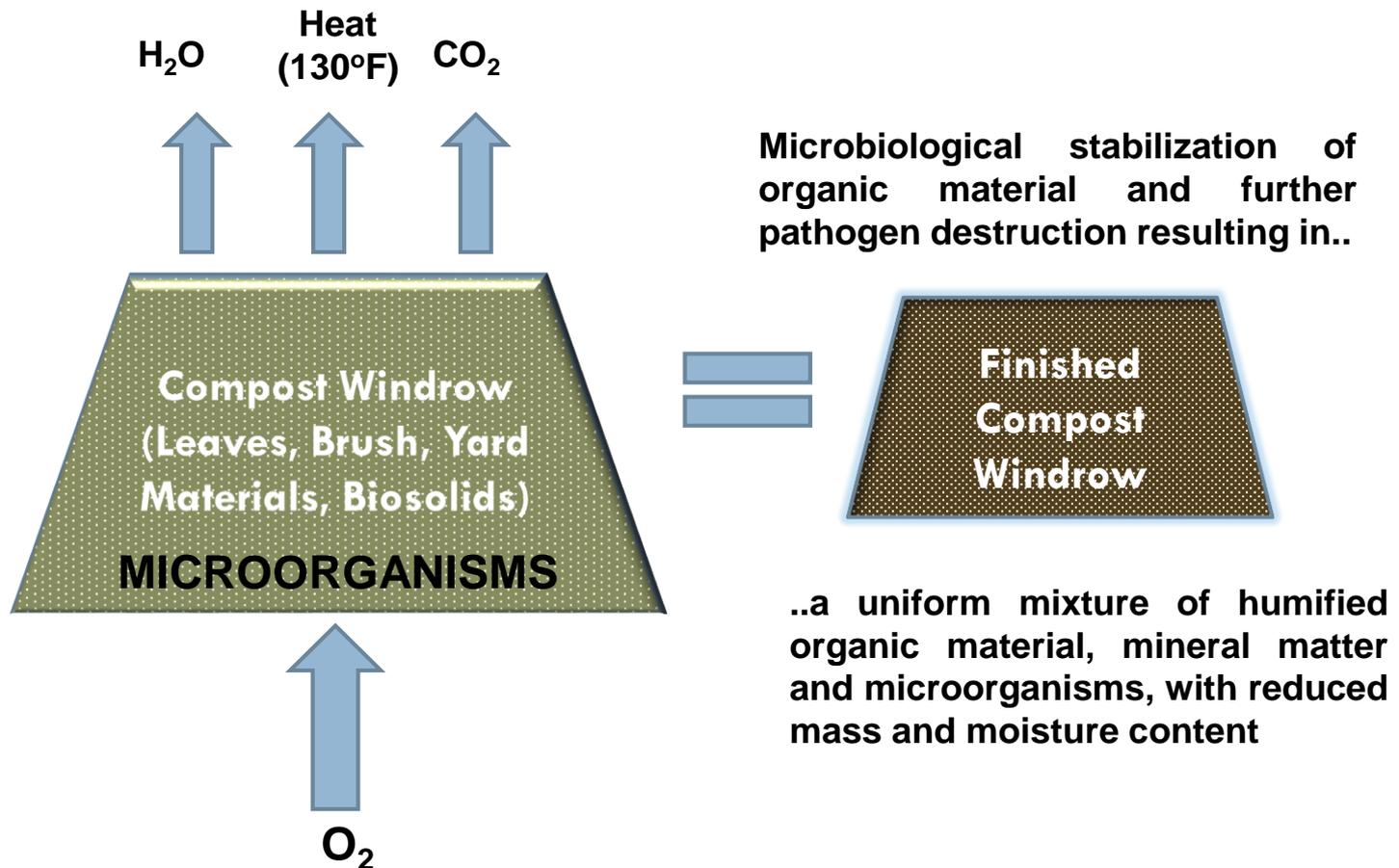


Status Update
Appleton Utilities Committee
January 2019

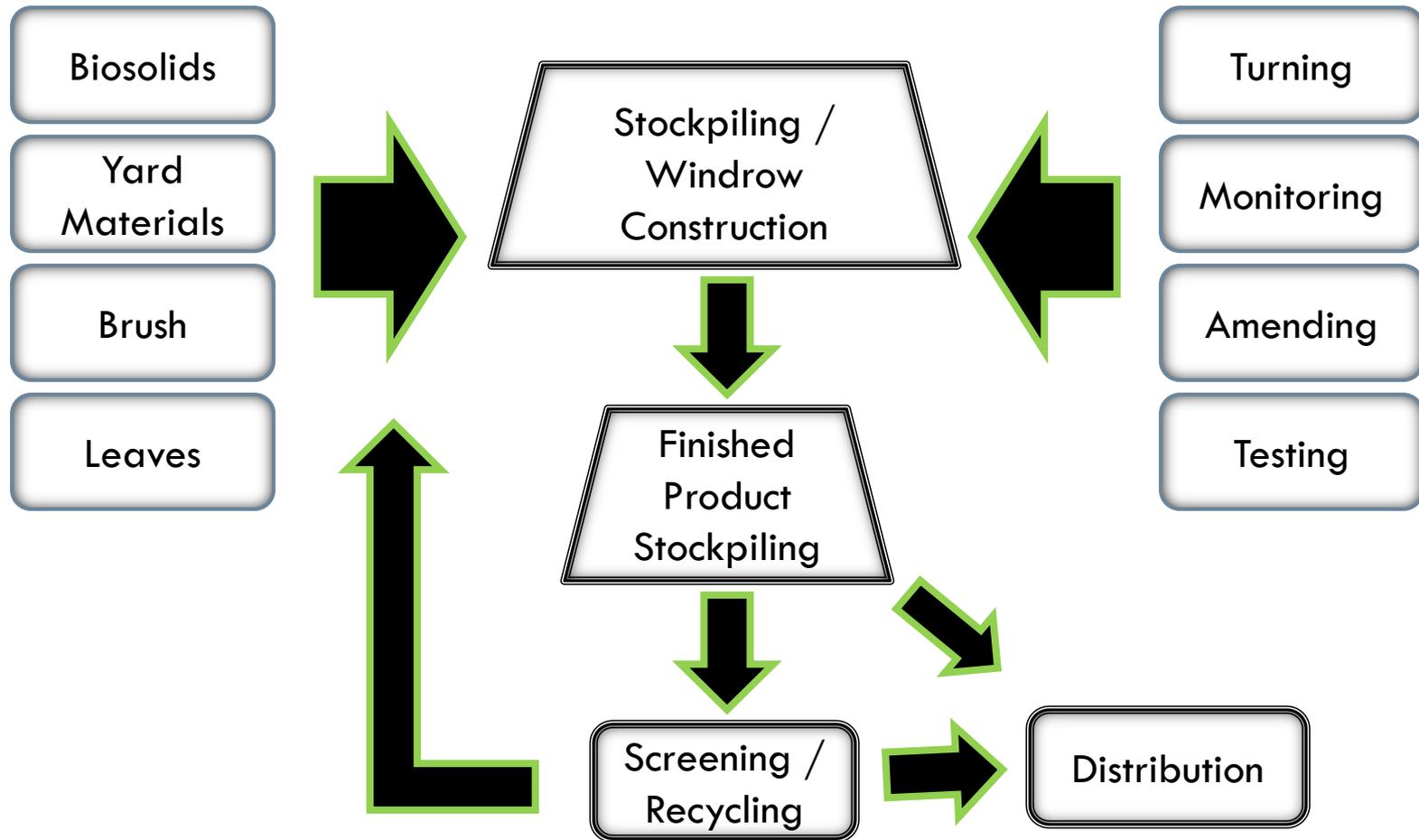
Presentation Summary

- What is Composting
- Why We Are Composting
- What Has Been Accomplished
- Lessons Learned
- Current Status
- Future Planning

What is Composting?



Windrow Processing Overview



Composting Factors

- Biosolids and Amendment Characteristics
 - ▣ % Moisture, Carbon:Nitrogen, Particle Size/Structure, Porosity, Biodegradability, Energy Content (Volatile Solids from Carbon)
- Initial Mix Ratios
- Aeration Rates or Turning Intervals
- Detention Time



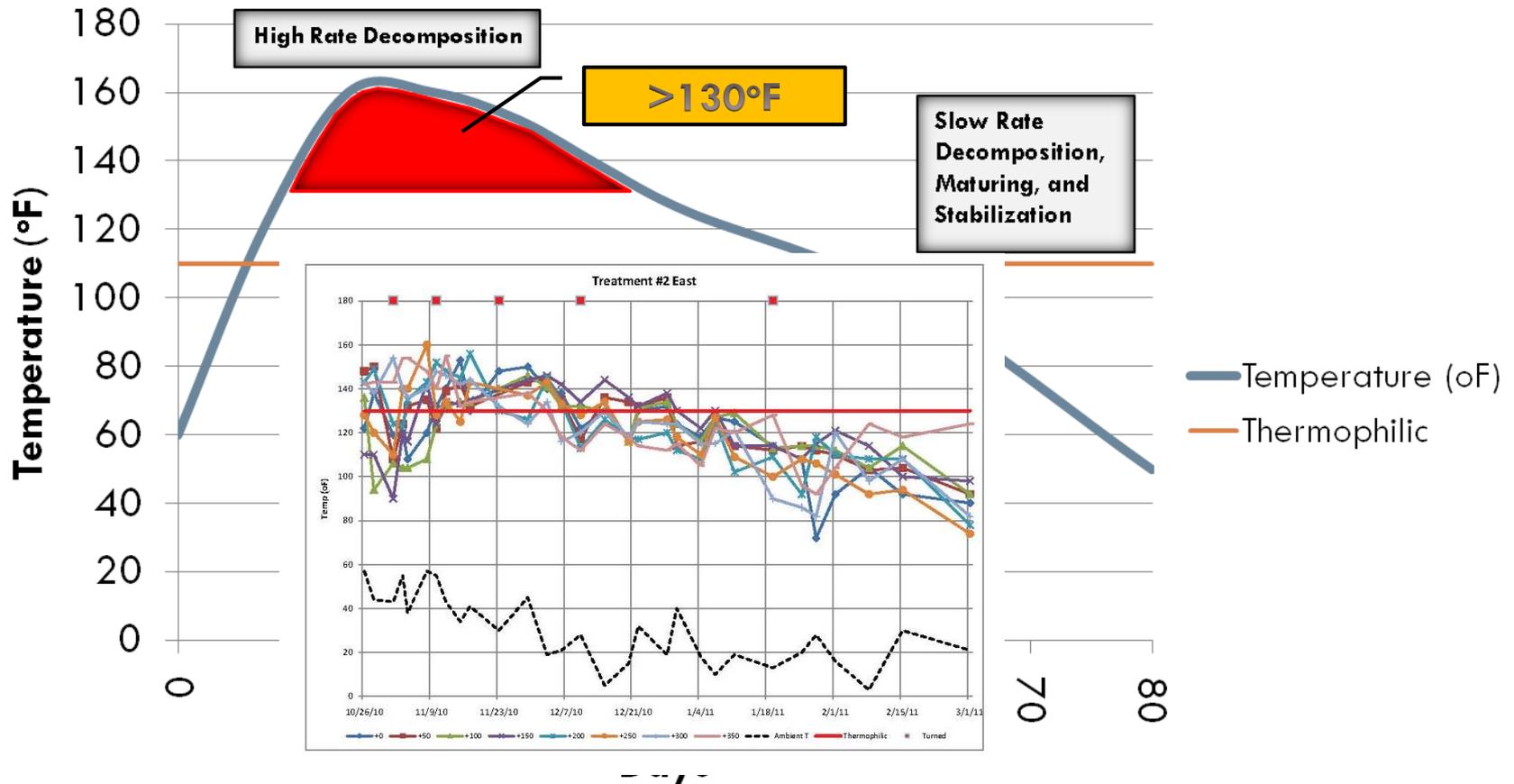
January 2019 Utilities Committee Compost

Biosolids Composting Requirements

- Biosolids regulated under Wisconsin Administrative Codes NR 204.
 - Windrow composting to generate a Class A biosolids must do the following:
 - Maintain $>130^{\circ}\text{F}$ for 15 days.
 - Minimum of 5 turnings required.
 - Fecal coliform $<1,000$ MPN/g TS



Compost Temperature Cycle

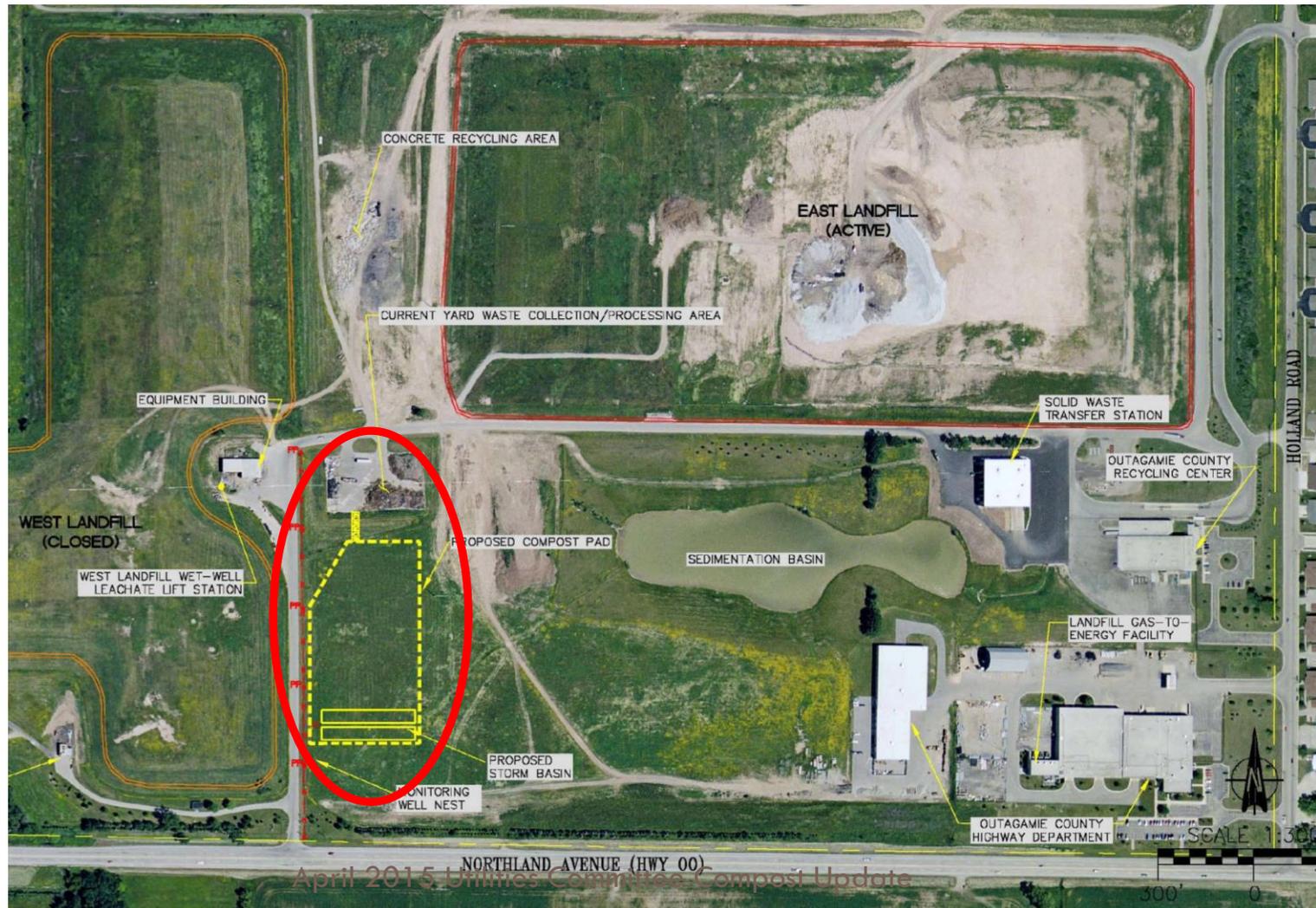


Biosolids Compost “Advisory Group”

- The City of Appleton Wastewater Treatment Plant (AWWTP)
- Appleton Department of Public Works (ADPW)
- Outagamie County Department of Solid Waste (OCDSW)

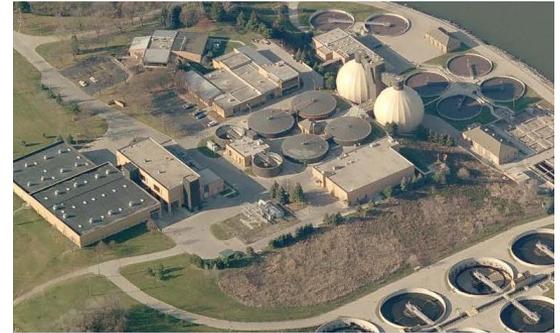
Mission: “Seek long-term, cost-effective, and environmentally sound alternatives for management of organic waste streams.”

Compost Pilot Location



Why Are We Doing It?

- DNR mandated 180-day sludge storage requirement.
 - ▣ The AWWTP has historically not met this NR 204 requirement.
- Increasing and more stringent regulations.
 - ▣ Land based phosphorus standards.
 - ▣ TMDL
- Competing land uses.
 - ▣ Urban and rural sprawl
 - ▣ Expanding large dairy operations (CAFOs)
- Diversify options for environmentally responsible beneficial use.



Why Are We Doing It?

- Other options exist for the AWWTP:
 1. Agricultural land application
 - Upside: Cost effective when land is close and available.
 - Downside: Weather conditions, various regulations, and farming practices dictate when and how much; unpredictable; contract costs for transportation, land application, and tillage closely associated with fuel costs (i.e. fuel surcharges).
 2. Landfilling
 - Upside: Reliable.
 - Downside: Limited quantities accepted, costly tipping fees, contract costs for transportation closely associated with fuel costs (i.e. fuel surcharges).



Compost Uses

- Agriculture
- Commercial Landscapers
- Municipal - Parks, Engineering
- Sports Turf
- Restoration/Reclamation
- Soil Blenders/Conditioners
- Retail, Specialty Blenders (Lawn & Garden)





OCTOBER



NOVEMBER



DECEMBER



JANUARY

2010-2011

- ❑ Trial #1 and Trial #2 completed (approx 6,500 yds each).
- ❑ “Best mix and best method” established
- ❑ All treatments tested for STA parameters; considered high quality “finished”.
- ❑ Greenhouse study verified weed seed destruction and positive impact on plant growth.
- ❑ Registered with the US Compost Council.
- ❑ Compost distribution plan approved by DNR.

2012-2013

- ❑ Optimum Compost Blend Identified thus Transitioned from “Trial” Processing
- ❑ Economic Feasibility Report Completed
- ❑ UW Oshkosh Research Study
- ❑ Facility Operations and Marketing Audit
- ❑ Completed Various Demonstration Projects
- ❑ Extended Intergovernmental MOU with County(2013-2016)
- ❑ Staff Transition 2013

2014-2015

- Approximately 30,000 CY Composted Since 2010
- “New” Outagamie County Department of Solid Waste Director
- Resume Compost Processing in Spring 2015
- WPDES Permit Expires September 30, 2015. New Permit will include Compost Operation (**1st Biosolids Compost Facility in Wisconsin!**)
- Actively Engage Potential Large Scale Compost Users: Landscapers, Contractors, & Highway Dept

Lessons Learned

People Matter

- ❑ Outagamie County Partner – MOU
- ❑ Compost Contractor
- ❑ UC and Common Council Support

Too Big Too Small

- ❑ Resource Prioritization
- ❑ Product Storage/Availability
- ❑ Program Costs

Defining Program Costs

Land Application	Contractor Cost (\$/WT)
Biosolids Land Application <40 Miles	\$13
Biosolids Land Application >40 Miles	\$18

Composting	Contractor Cost (\$/WT)
Compost Turning, Biosolids Hauling, Brush, Pad Maintenance and Biosolids	\$30

Landfilling	Contractor Cost (\$/WT)
Disposal and Transportation to the Outagamie County Landfill	\$45

Future Planning: 2015-2020

- WPDES Permitting/MOU with OC
- Develop Larger Volume Users
- Develop Product Accessibility
- Program and Capital Planning
- Appropriations (Windrow Turner, Staff, etc.)



Questions and Discussion



WATER MAIN BREAK/JOINT LEAK REPORT NOVEMBER 2018

YEARLY WATER MAIN BREAK COMPARISON

<u>NOV 17</u>	<u>NOV 18</u>	<u>YTD 17</u>	<u>YTD 18</u>
11	7	69	73

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**
2637 S. Jackson Street	248752	CIP	8"	1960	1/32" hole	331 days	64,202	\$390.35
211 W. Harriet Street	248780	CIP	6"	1962	5" hole	3 hours	531,889	\$3,233.89
2113 N. Douglas Street	248803	CIP	8"	1965	1/16" crack	8 hours	148,760	\$904.46
Beechwood Court / Pershing Street	248857	CIP	6"	1961	3/32" crack	36 hours	753,099	\$4,578.84
Memorial Drive / Seymour Street	248866	CIP	8"	1928	1/16" crack	4 hours	74,380	\$452.23
2503 S. Harmon Street	248957	CIP	8"	1968	16" split	3 days	405,701	\$2,466.66
2401 S. Harmon Street	248985	CIP	6"	1956	1/16" crack	12 hours	159,567	\$970.17
								\$0.00

**Water Loss is calculated at the residential rate of \$6.08 per 1000 gallons.