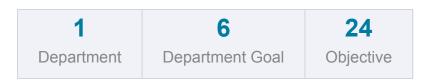
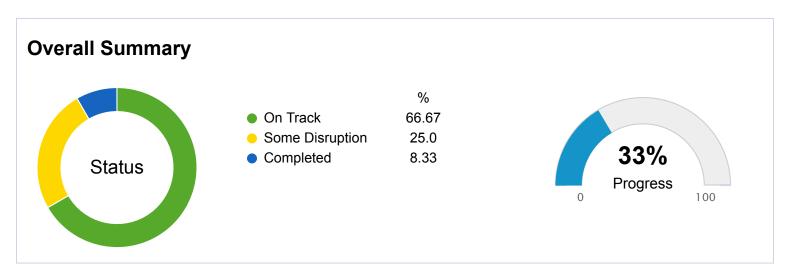


Department of Public Works Performance Measures

Oct 13, 2020





Report Legend No Update

Overdue

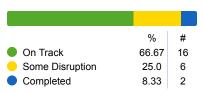
Priority

Department 17

Progress 33%

Public Works

The Department of Public Works (DPW) is an enterprise fund providing solid waste management services and education programs to Kent and surrounding counties. Established by the Board of Commissioners and overseen by the Board of Public Works, the Department has two divisions: Administration and Solid Waste Operations. The Solid Waste division has four primary functions: Recycling and Resource Recovery, Waste to Energy, Landfill and Transfer Station, and Closed Landfill Remediation and Environmental Compliance. DPW Administration provides support to the Solid Waste Division through accounting, communications, and reporting.



Department Goal: 6

Objective: 24

Department Goal 17.1

Progress 28%

Administration: Provide leadership and strategic planning with department support through finance, communications and reporting activities.



Objective: 4

Objective 17.1.1

Jan 01, 2019 - Sep 01, 2021

Some Disruption

Progress 40%

Relocate DPW administration and SafeChem program to new facility. Property acquired to relocate at the Recycling & Education Center campus at 977 Wealthy Street as the Road Commission anticipates relocating from the Scribner campus by 2021/22. Develop site plans and construct new facility with anticipated move end of 2nd Q 2021.

Update provided by Darwin Baas on Sep 30, 2020 12:33:36

Architect/engineering and construction management firms have been procured. Presently completing design and construction documents. Project to be bid late fall 2020 with final approval by BPW early 2021. Construction anticipated to start March 2021 with projected completion in 3rd quarter 2021.

Objective 17.1.2

Oct 01, 2018 - Dec 31, 2030

Some Disruption

Progress 20%

Sustainable Business Park: In October 2018, the Board of Public Works approved the Sustainable Business Park Master Plan that provides a road map for business development and infrastructure build out for a 250-acre business park and through a strategic partnership with The Right Place, attract industry and conversion technologies to utilize municipal solid waste for recycling, energy, fuel, raw material and manufacturing.

Update provided by Darwin Baas on Sep 30, 2020 12:59:14

Conceptual design complete. The Right Place retained in 2019 to assist with business and infrastructure development. Anchor tenant request for proposal issued in June 2020. Responses delayed and deadline extended due to COVID-19. Proposals due end of 3rd Q 2020 with review to being 4th Q.

Objective 17.1.3

Mar 01, 2020 - Dec 31, 2021

On Track

Progress 41%

Digitize department files to provide secure storage, quicker access and retrieval while reducing physical storage needs.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:08:18

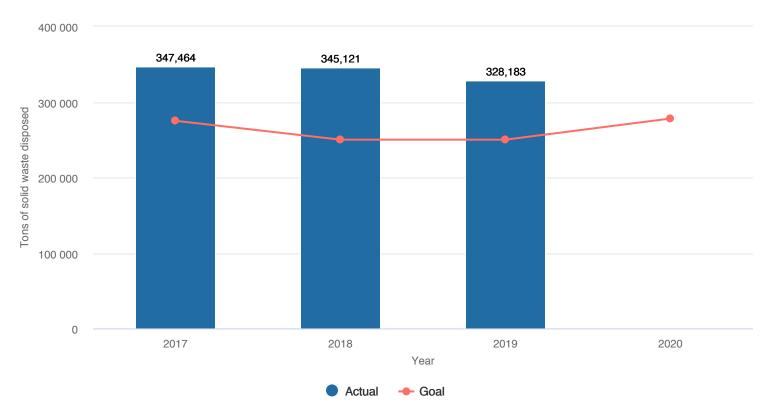
Achieve a 20% landfill disposal reduction for Kent County municipal solid waste by 2020 and a 90% reduction by 2030.

DPW - Tons of Solid Waste Disposed

Jan 01, 2015 - Dec 31, 2020

Objective 17.1.4 Achieve a 20% landfill disposal reduction for Kent County municipal solid waste by 2020 and a 90%...

Tons of Solid Waste Disposed at the Landfill



Department Goal 17.2

Progress 52%

Solid Waste Operations: Operate the South Kent Landfill and North Kent Transfer Station in a safe, efficient and environmentally conscious manner to meet the municipal solid waste disposal needs of our businesses, residents and commercial waste haulers.

% # • On Track 100.0 3

Objective: 3

Objective 17.2.1

Jan 01, 2020 - Dec 31, 2020

On Track

Progress 56%

Storm Water Retention: South Kent Landfill Storm Water Improvement Project - improvement to four (4) storm water detention ponds to provide storm water storage, reduce flow rate offsite and improve overall water quality to maintain compliance with the NPDES storm water permit.

Update provided by MaryBeth Vantill on Oct 07, 2020 12:50:04

Construction underway.

Objective 17.2.2

Aug 01, 2020 - Nov 30, 2020

On Track

Progress 60%

Gas Collection:

Operate and maintain the Landfill Gas (LFG) extraction system: 2020 expansion of landfill gas collection system to mitigate odor and ensure maximum delivery of LFG to the gas-to-energy facility in partnership with Energy Developments Limited for electrical generation.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:09:20

Gas well expansion design complete. Project has been bid and awarded to installation contractor. Project completion expected November 2020.

Objective 17.2.3

Oct 01, 2019 - Mar 31, 2021

On Track

Progress 40%

With 17% of the waste accepted for disposal at the North Kent Transfer Station (by weight) is construction & demolition (C+D) material (including wood, metal, cardboard, brick, concrete, shingles, drywall, doors, windows, sinks and toilets) use material handler purchased through EGLE Recycling Infrastructure grant, to separate (C&D) debris and other bulky material with diversion potential from loads delivered to the North Kent Transfer Station. Identify markets and community stakeholders that can reuse or recycle diverted material as well as barriers preventing reuse.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:09:45

The material handler has been purchased and is being utilized by staff at North Kent Transfer Station to selectively extract materials based on known value, volume, marketability and capacity to store and transport the material. A covered working space is needed to effectively use the material handler and the small area available at the existing facility presents challenges to effective, efficient and safe maneuverability. Staff are tracking weights of metals, cardboard and vinyl siding currently being diverted from landfill. Resource Recovery staff are compiling market opportunities for further diversion of C&D and other materials from disposal at North Kent Transfer Station and all Kent County DPW facilities.

Department Goal 17.3

Progress 40%

Waste to Energy: The Kent County Waste to Energy Facility is one of four facilities in Kent County's integrated solid waste management fleet. 2020 marks the 30th year of operation serving Grand Rapids, East Grand Rapids, Walker, Kentwood, Wyoming and Grandville. Five and half million tons of municipal solid waste have been processed since opening in 1990. As an EGLE - Michigan Clean Corporate Citizen for the past 15 years the facility demonstrates environmental stewardship and a strong environmental ethic, generating 100,000 MWh of electricity annually or the equivalent of providing the power needs to 11,000 homes.

% #
On Track 60.0 3
Some Disruption 20.0 1
Completed 20.0 1

Objective: 5

Update provided by Darwin Baas on Aug 27, 2020 13:32:30

Replace power generation control systems to maximize reliability and reduce total cost of operation

Objective 17.3.1

Ongoing - Ongoing

On Track

Maintain Waste-to-Energy (WTE) boiler availability at 92% or better and process 185,000 tons annually

Update provided by MaryBeth Vantill on Oct 07, 2020 13:10:05

Objective 17.3.2

Ongoing - Dec 01, 2019

Completed

Progress 100%

Negotiate a 20-year power purchase agreement with Consumers Energy to provide a long term off take agreement for electrical generation and stable energy revenue. Update provided by Darwin Baas on Oct 05, 2020 11:39:41

Twenty-year power purchase agreement with Consumers Energy signed in December 2019 and approved by the Michigan Public Service Commission in July 2020.

Objective 17.3.3

Ongoing - Dec 31, 2024

On Track

Progress 10%

Increase Waste-to-Energy processing capacity by 50% through development of expansion, front end processing and/or source separation.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:10:26

Objective 17.3.4

Mar 01, 2020 - Apr 30, 2022

On Track

Progress 20%

Complete engineering review of structural, electrical, mechanical and control components of refuse crane components. Procure project manager and complete the build and installation of new cranes to replace 30-year old refuse cranes in continual and at the end of their service life. Minimizing disruption to the operations during the 18-month project.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:14:31

Working with Covanta Energy to develop a refuse crane replacement proposal with an anticipated project timeline of 18 months.

Objective 17.3.5

Mar 01. 2020 - Dec 31. 2020

Some Disruption

Progress 70%

Update provided by MaryBeth Vantill on Oct 07, 2020 13:15:24

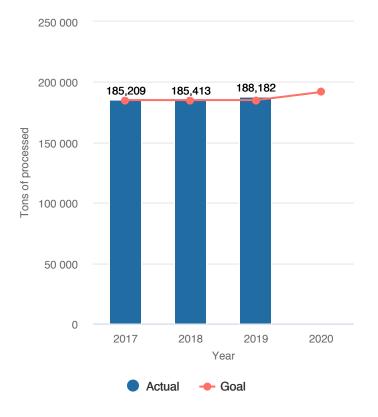
COVID pandemic hindered the ability to bring personnel on site.

Complete an independent assessment and life extension study to evaluate major refurbishment or replacement of required systems and associated costs to ensure continued high reliability of the Waste-to-Energy facility for another 20 years.

DPW - Tons Processed at the Waste-to-Energy Boiler

Objective 17.3.1 Maintain Waste-to-Energy (WTE) boiler availability at 92% or better and process 185.000 tons annu...

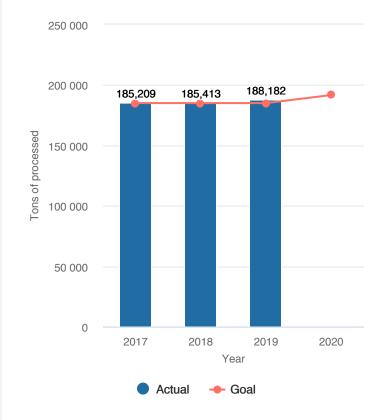
Tons Processed at the Waste-to-Energy Boiler



DPW - Tons Processed at the Waste-to-Energy Boiler

Objective 17.3.3 Increase Waste-to-Energy processing capacity by 50% through development of expansion, front end p...

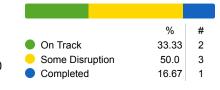
Tons Processed at the Waste-to-Energy Boiler



Department Goal 17.4

Progress 51%

Recycling and Education Center: Use existing and new branding and communications tools to market sustainable materials management strategies and DPW services to support business, residential and customer waste diversion and recycling efforts to meet a 20 percent reduction in waste by 2020 and 90 percent reduction by 2030 (20x'20 and 90x'30).



Objective: 6

Objective 17.4.1

Jan 01, 2020 - Dec 31, 2023 Sor

Some Disruption

Progress 10%

Increase residential recycling participation to 50 percent by 2022.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:17:03

Study has been completed. Meeting with solid waste advisory committee comprised of municipal leadership throughout Kent County.

Objective 17.4.2

Ongoing - Dec 31, 2020

Some Disruption

Progress 80%

Install non-ferrous Eddy Current separator technology to improve sorting of aluminum - used beverage containers to increase capture rate and quality while reducing manual sorting cost.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:17:42

Equipment design complete. Eddy Current equipment and installation bid and procured. Delays receiving programmable logic controls to integrate into facility operations due to COVID-19. Anticipate late 3rd Q 2020 installation.

Objective 17.4.3

Ongoing - Aug 31, 2019

Completed

Progress 100%

Facilitate a residential recycling study to review current residential recycling participation, better understand barriers and develop recommendations to improve access and participation in single-stream residential recycling programs for Kent County.

Update provided by Darwin Baas on Sep 30, 2020 12:50:08

Completed 3rd Q 2019.

Objective 17.4.4

Apr 01, 2020 - Dec 31, 2020

On Track

Progress 90%

Development of virtual field trips, presentations and online tools to support continued recycling education with school partnerships in response to the COVID-19 pandemic required social distancing.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:18:04

Traditional in-person programming has been adapted to enable participation in a variety of instructional circumstances - including virtual/online, blended/hybrid, in-person, synchronous/real-time facilitation, teacher directed/facilitated and environmental educator facilitated. The "Virtual Field Trip to the Recycling Center" takes students on a journey to learn about recycling and waste and part of a larger series of waste learning resources including topics such as the landfill, waste to energy, composting, reuse, and more. A variety of Michigan Educational Standards are met through this instruction.

The Virtual Field Trip to the Recycling Center is part of a pilot program that has been developed through a working relationship with Grand Rapids Public Schools and GREEN Grand Rapids Environmental Education Network. GRPS is the pilot school district for a comprehensive regional approach to environmental education to ensure that all children within a district are exposed to a series of environmental education experiences between Kindergarten and 8th grade.

Objective 17.4.5

Ongoing - Ongoing

Some Disruption

Maintain 95% facility availability at the Recycling & Education Center to process up to 40,000 tons annually.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:18:28

COVID-19 pandemic impacted operations causing a four week closure that started late 3rd Q. With suspension of Work Release program, alternate process line workers were provided by a temp agency. Safety protocols including screening, PPE, social distancing, scheduling, cleaning and sanitation were put into place and the facility reopened in April.

Objective 17.4.6 Jan 01, 2020 - Jun 30, 2021 On Track Progress 25%

Pilot a multifamily recycling program with waste haulers and property managers that leads to route density to sustain private sector waste hauler service.

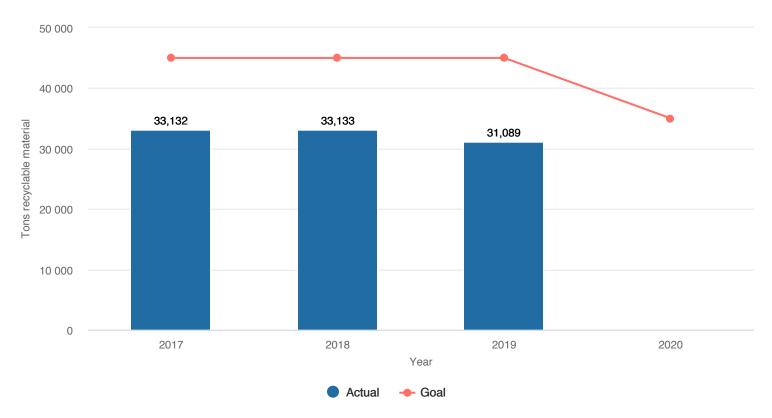
Update provided by MaryBeth Vantill on Oct 07, 2020 13:21:26

A new mixed use development with multifamily apartment housing in Wyoming expressed interest in piloting the multifamily recycling program. Families are beginning to move in to the first phase of the development and DPW staff are working with the property developer and the recycling service provider to place a decaled 10 yard recycling container and distribute recycling information to residents upon move-in.

DPW - Tons of Recyclable Material Processed

Objective 17.4.5 Maintain 95% facility availability at the Recycling & December 2018, Education Center to process up to 40,00...

Tons of Recyclable Material Processed



Department Goal 17.5

Progress 0%

SafeHomes: Providing safe and sustainable disposal of medical waste, prescription drugs, electronics and household hazardous waste through SafeChem, SafeSharps, SafeMeds and electronic recycling programs.



Objective: 3

Objective 17.5.1

Ongoing - Ongoing

On Track

SafeChem:

The SafeChem Program collects household chemicals from residents of Kent County for safe disposal. Examples of items residents bring for disposal include paint thinner, motor oil, fluorescent light bulbs, antifreeze, pesticides, mercury thermometers & thermostats, pool chemicals and other household items that are flammable, poisonous or chemically dangerous.

Expand participation in SafeHome Programs and facility tours through education and focused outreach.

Update provided by MaryBeth Vantill on Aug 26, 2020 14:17:20

In 2019, participants brought 295,989 pounds of hazardous waste for safe disposal, a 8% increase in pounds from 2018. A total of 5,899 participants used the service for safe chemical disposal, with each one dropping off an average of 50 pounds of material. Disposal costs were \$136,375 with overall program costs of \$349,734.

Objective 17.5.2

Ongoing - Ongoing

On Track

SafeMeds: (formerly West Michigan Take Back Meds)

The SafeMeds program began as Wy-Meds in 2009, originally serving the Wyoming Clean Water Plant district. In December 2010, the program was embraced regionally to cover Kent County as the West Michigan Take Back Meds program. In 2011 collection sites in Allegan, Ottawa and Muskegon counties were added and in 2012 Barry and Berrien counties added collection sites.

In 2016 the program was rebranded to SafeMeds under the SafeHomes umbrella of programs. Program partners include law enforcement agencies, pharmacies, wastewater treatment facilities (Cities of Wyoming and Grand Rapids) and Kent County and collects unwanted and expired medications from residents and delivers them to Kent County's Waste to Energy Facility for safe disposal to prevent water quality impacts and misuse. As

Update provided by MaryBeth Vantill on Aug 26, 2020 14:17:39

As of 2019, 34 pharmacies and 37 law enforcement agencies across six counties participate in the medication collection program by hosting medication drop-off containers.

Objective 17.5.3

Ongoing - Ongoing

On Track

SafeSharps:

SafeSharps program was launched January 4, 2016 in collaboration with Kent County Health Department. The SafeSharps program ensures safe, confidential and environmentally sound disposal of used needles, lancets and other home use sharps which are dangerous to people and pets if not collected and disposed of properly. Sharps pose injury concerns for sanitation and recycling facility workers and spread infections that can cause serious health problems. Sharps collection containers are distributed and collected through the Kent County Health Department Clinic sites. The program is administered through the Kent County Department of Public Works.

Update provided by MaryBeth Vantill on Aug 26, 2020 14:18:14

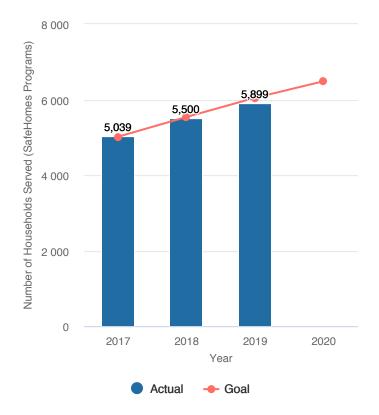
A total of 1,675 sharps containers were distributed in 2019, a 32% increase in overall program participation. On average, 40% of full containers were returned to the clinics for safe disposal (many remain in use for several months or even years). To increase return rates an additional reminder sticker was added late 2018. DPW staff are evaluating length of time between pickup of the empty container and the return of the full container. Since containers are tracked on a calendar year basis, it can take up to two years to track deployed containers before they are returned to the Health Department full. DPW staff continue to monitor this to ensure that communication is effective to make sure the full containers are returned to the Health Department.

The Health Department introduced a trial of a 'hands-free' return system at the North Clinic in 2018 to keep clinic staff safe from accidental needle sticks while receiving full sharps containers. DPW and Health Department staff determined that it was important to implement this system at all clinic locations in 2019. Hands-free collection bins were purchased by DPW and deployed in 2019.

DPW - Number of Households Served (SafeHomes Programs)

Objective 17.5.1 SafeChem: The SafeChem Program collects household chemicals from residents of Kent County for saf...

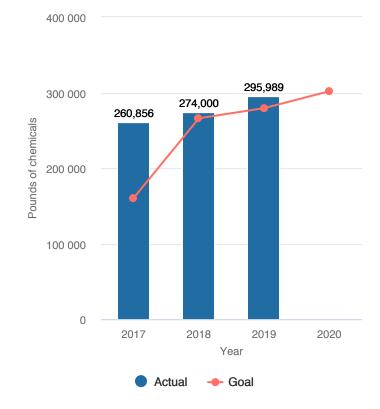
Number of Households Served (SafeHomes Programs)



DPW - Pounds of Chemicals Processed (SafeHomes Programs)

Objective 17.5.1 SafeChem: The SafeChem Program collects household chemicals from residents of Kent County for saf...

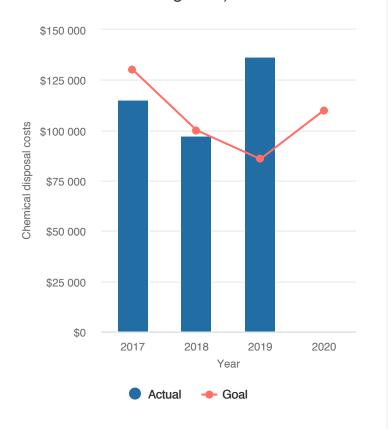
Pounds of Chemicals Processed (SafeHomes Programs)



DPW - Chemical Disposal Costs (SafeHomes Programs)

Objective 17.5.1 SafeChem: The SafeChem Program collects household chemicals from residents of Kent County for saf...

Chemical Disposal Costs (Safehome Programs)



Department Goal 17.6



Environmental Compliance: Setting the standard for compliance through adherence to environmental requirements, fostering positive relationships with regulators, maintaining environmental permits, controlling waste acceptance, and implementing innovative environmental management projects for Kent County's integrated waste management fleet of facilities.



Objective: 3

Objective 17.6.1

Ongoing - Ongoing

On Track

Meet the State's new standards for testing, filtering and treatment of landfill leachate impacted by PFAS.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:23:21

Continuing to monitor closed landfill facilities and constructing PFAS pretreatment phase I at North Kent Landfill.

Objective 17.6.2

Jan 01, 2020 - Aug 31, 2021

On Track

Progress 30%

Design, construct and operate a waste water treatment facility (Phase I) at the North Kent Landfill to remove PFAS from leachate to meet regulatory limits for discharge to the North Kent Sewer Authority.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:22:07

PFAS Treatment Facility is designed and bid. Anticipating BPW approval to proceed in 3rd Q. 2020 with construction to begin in 4th Q. 2020.

Objective 17.6.3

Ongoing - Jun 30, 2022

On Track

Progress 0%

Design, construct and operate a waste water treatment facility (Phase II) at the North Kent Landfill to remove PFAS from groundwater to meet National Pollutant Discharge Elimination System - NPDES permit limits for discharge to surface water.

Update provided by MaryBeth Vantill on Oct 07, 2020 13:24:35

Phase I construction underway and will help inform design parameters for Phase II.