



Hanover Park WRP's Goals and Objectives for 2019-2023

Goal – Prevent Nutrient Overloads in Soil at Fischer Farm

Objective

Reduce the Levels of Ammonia in Monitoring Wells at Fischer Farm to Less Than 10 Milligrams Per Liter and Explore Solutions to Reduce/Eliminate the Source.

Description

Ground Water Monitoring Well No. 7 has shown elevated levels of NH₃ for the past several years. Biosolids application has been halted on the associated Farm Field No. 7 and three new temporary monitoring wells were installed during the summer of 2017 (these were analyzed bi-weekly for 1 year).

Measurability

Samples will be taken from groundwater monitoring wells. The water samples will be analyzed for NH₃ concentration and tabulated quarterly.

Affect to Biosolids Production

If the soil at Fischer Farm becomes overloaded we would have to stop land applying biosolids at this site.

Relevant EMS Outcomes

Environmental Performance, Quality Management Practices.

Action Plans

Samples taken from the temporary wells will be used to pinpoint the source of NH₃ and solutions will be explored to eliminate the source. Repairs to infrastructure may be needed once source is determined.

Tracking Progress

Ground Water Monitoring wells and soil in each field will be sampled and tracked.
Permanent Monitoring Wells: Quarterly, Temporary Monitoring Wells: Weekly, Soil: Every 4 years: 2012, 2016, 2020

Responsible Person(s)

Hanover Park WRP Section 751 Managing Engineer
Hanover Park WRP Section 755 Engineering Technician V

Funds/Resources

M&R funds were utilized to drill 3 temporary wells, M&R resources are being used for sampling and analyzing the water from these wells.

Target Date

December 2023

**Hanover Park WRP's Goals and Objectives for 2019-2023****Goal – Maximize Digester Gas Usage**Objective

The specific objective of this goal is to improve digester gas capture and reuse for building and digester heat, prevent digester gas releases to the atmosphere, and reduce flaring, which will save money.

Description

Replacement of digester gas collection system piping was complete in 2012 under contract 08-530-3P, and an in-house project to replace the waste gas burner piping was completed in 2014.

Measurability

Amount of natural gas purchased, the amount of digester gas produced and utilized for heat. Baseline: 2014 - Purchased 147,704 therms of natural gas; produced 115,476 therms of digester gas; utilized 82,905 therms of digester gas.

Affect to Biosolids Production

Reducing the amount of natural gas which is purchased and increase efficiency of digester gas utilized for heating the plant buildings and digesters.

Relevant EMS Outcomes

Environmental Performance, Quality Management Practices

Action Plans

In spring/summer of 2018, we noticed a higher than average natural gas usage and found a leak in the gas pipe leading to the waste gas stack igniter, this line was replaced by in-house staff under Work Order No. 09C22978. Additionally, new key port valves that supplement the boilers with natural gas will be installed under Work Order Nos. 09C22992 and 09C22991. These key port valves will better regulate the use of supplemental natural gas. We will continue to track the digester and natural gas usage monthly through 2023. We also requested that a meeting be organized with representatives from the M&O, M&R, and Engineering Departments to discuss Contract 11-531-3M, Central Boiler Facility and Electrical Upgrades. This contract was to improve digester gas utilization and also potentially address unsafe conditions in the Digester area. The contract never was advertised.

Tracking Progress

Digester gas produced/utilized and natural gas purchased will be submitted on quarterly status reports.

Responsible Person(s)

Hanover Park WRP Section 751 Managing Engineer
Hanover Park WRP Section 755 Engineering Technician V

Funds/Resources

Budgeted in the Engineering Department.

Target Date

December 2023



Hanover Park WRP's Goals and Objectives for 2019-2023

Goal – Improve Odor Control Measures at the Treatment Plant

Objective

The specific objective of this goal is to install/modify odor control systems at three odor sources identified by the Planning Group from the M&R Department.

Description

Remedy three odor sources under Engineering Contract 17-844-3P:

- Replace the existing ozone air treatment system on the digester complex with a bio-trickling filter.
- Install covers on the aerated grit tanks, and treat the captured air with a bio-trickling filter.
- Install an activated carbon air treatment system on the coarse screen exhaust fan.

Measurability

The number and nature of odor complaints will be tracked. In order to comply with the specific and measurable criteria associated with the goal of Improving Odor Control Measures at the Hanover Park WRP, a goal of zero verified odor complaints attributed to plant processes will be set upon completion of Engineering Contract 17-844-3P (Furnish and Install Odor Control System at HPWRP, KWRP, and CWRP).

Affect to Biosolids Production

There will be no anticipated affect to biosolids production.

Relevant EMS Outcomes

Environmental Performance, Quality Management Practices

Action Plans

To be designed by Engineering Department 2017/2018.
Award Contract in late 2018 or early 2019.

Tracking Progress

Track measurable goals through 2023

Responsible Person(s)

Hanover Park WRP Section 751 Managing Engineer
Hanover Park WRP Section 755 Engineering Technician V
Engineering Department Representative

Funds/Resources

Budgeted in the Construction Fund.

Target Date

December 2023