

## Hanover Park WRP's Goals and Objectives for 2015-2020

### **Goal – Prevent Heavy Metal Overloads in Soil at Fischer Farm**

#### Objective

Obtain the ability to distribute lagoon supernatant to all seven available farm fields by repairing/replacing existing damaged piping system to these fields. This will prevent over applying supernatant to any one field which could result in exceeding EPA 503 ceiling limits of As, Cd, Cu, Pb, and Zn in the soil.

#### Description

Currently we can only apply to three of the seven fields; three fields(#3,#4,#6) are inaccessible due to damaged pipes, risers, and valves. The project we have planned will repair/replace farm field piping, valves, and risers for divestment of Lagoon Supernatant.

#### Measurability

# of Fields Supernatant is applied to: Baseline is 3.

Heavy Metal Levels in the soil, groundwater and biosolids: As, Cd, Cu, Pb, Zn

EPA ceiling limits for EQ biosolids are as follows:

As – 41, Cd – 39, Cu – 1500, Pb – 300, Zn – 2800 (these are all measured in mg/kg)

#### Affect to Biosolids Production

Ability to water crops for better growth and nutrient uptake, eliminate excess metals caused by over applying to one area.

#### Relevant EMS Outcomes

Environmental Performance, Quality Management Practices

#### Action Plans

Survey of all existing piping, valves, and risers was completed in previous years. Corrective action were completed to repair/replace what was needed under Job Order Contract (JOC) #J67755-01 in 2014. Continue with sampling of metal levels as stated in Measurability, through 2020.

#### Tracking Progress

# of Fields applied to: Quarterly Report

Metals levels in the soil samples will be monitored and historically tracked as follows

Monitoring wells: quarterly; Biosolids: Daily, when applied; Soil: Every 4 years: 2012, 2016, 2020

#### Responsible Person(s)

Hanover Park WRP Section 753 Senior Civil Engineer

Hanover Park WRP Section 755 Engineering Technician V

#### Funds/Resources

None

#### Target Date

December 2020

## **Hanover Park WRP's Goals and Objectives for 2015-2020**

### **Goal – Maximize digester gas usage**

#### Objective

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

#### Description

Add a central boiler facility to replace the existing 7 boilers with 4 new high efficiency boilers.

#### 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. Amount spent on natural 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 and digesters.

#### Relevant EMS Outcomes

Environmental Performance, Quality Management Practices

#### Action Plans

Award Contract 11-531-3M, Oversee construction over a two year period.  
Track measurable goals through 2020.

#### Tracking Progress

Contract Award: First Quarter of 2016. Monthly Construction meetings. CPM reports will be submitted to EMS Coordinator Quarterly. Digester gas produced/utilized and natural gas purchased will be submitted on quarterly status reports.

#### Responsible Person(s)

Hanover Park WRP Section 753 Senior Civil Engineer  
Hanover Park WRP Section 755 Engineering Technician V  
Engineering Department Representative/ Inspector

#### Funds/Resources

Budgeted in the Engineering Department.

#### Target Date

December 2020