



Inver Grove Heights Environmental Commission
Thursday, August 25, 2022 at 7:00 PM
8150 Barbara Avenue, Inver Grove Heights, MN 55077

AGENDA

NOTICE TO RESIDENTS: If you are interested in participating on **Item 6. Public Comment**, please contact Ally Sutherland prior to this meeting via telephone 651-604-8511 or email (asutherland@ighmn.gov) to inform her - your name, address and to what you wish to speak on. Individuals may submit written public comments in advance of the meeting by emailing comments to Ally Sutherland (asutherland@ighmn.gov). Comments received prior to 4:00 p.m. on Thursday, August 25, 2022, will be provided to the Commission at or before the Thursday, August 25, 2022, meeting.

1. Call to Order

2. Roll Call

3. Presentations

A. SolSmart Program Overview

4. Approval of Minutes

A. Minutes of Thursday, June 23, 2022, Environmental Commission Meeting

5. Regular Agenda

6. Public Comment

Public comment provides an opportunity for the public to address the Commission on items that are not on the agenda. Comments will be limited to three (3) minutes per person.

7. Commissioner and Staff Comments

A. Organics Drop Off Program update

B. Solar Power Hour update

C. Meeting time survey

8. Adjourn

This document is available upon a three (3) business day request in alternate formats such as braille, large print, audio recording, etc. Please contact Ally Sutherland, Environmental Specialist, at 651-604-8511 or asutherland@ighmn.gov.



Staff Report

TITLE: SolSmart Program Overview

Meeting Date:	August 25, 2022
Item Type:	Regular Agenda
Contact:	Ally Sutherland, 651-604-8511
Prepared by:	Ally Sutherland

PURPOSE/ACTION REQUESTED

Great Plains Institute (GPI), the technical assistance provider for SolSmart, will present a SolSmart program overview.

BACKGROUND

At the May and June 2022 Environmental Advisory Commission (EAC) meetings, staff presented a list of potential environmental initiatives the Commission could consider pursuing for the 2023 Environmental Advisory Commission work plan. The EAC concluded at the June 23, 2022 EAC meeting the Commission would like staff and the commission to research three programs: Dakota County's Organics Drop Site program, SolSmart, and a Resident & Business Sustainability Recognition Program. The commission requested staff invite GPI to present a SolSmart program overview. Emma Parkson, Communities Program Associate with GPI, will present the program at the August 25, 2022 EAC meeting.

SolSmart is a solar-ready certification program focused on helping communities adopt best practices for solar readiness. The City is eligible for receive free technical assistance from GPI on solar projects, land use and permitting standards, and educational and outreach initiative. Minnesota has almost 40 communities that have achieved SolSmart certification. Links to additional resources have been provided below by Mrs. Parkson:

- [SolSmart Designee Map](#): You can navigate to the Minnesota communities on this map, where you will have access to the level of designation communities around you have received.
- [SolSmart Program Guide](#): This guide gives an in depth overview of the SolSmart program, including all of the eligible credits a community can earn.
- [SolSmart FAQ](#)

Inver Grove Heights Environmental Advisory Commission
8150 Barbara Avenue
Thursday, June 23, 2022, at 7:00 p.m.

Meeting Minutes

1. Call to Order

The Environmental Advisory Commission of Inver Grove Heights met in City Council Chambers on Thursday, June 23, 2022. Chair Trenzeluk called the meeting to order at 7:00 p.m.

2. Roll Call

Present: Chair Ted Trenzeluk, Commissioners; Sarah Brass, Sara Goodman, Nick Ruiz, Larry Moehring, Kevin Sethre, Todd Kruse, Nichole Boehmke
Absent: Brian Barner (unexcused)

3. Presentations

A. Operational and Gas Migration Updates at Pine Bend Landfill

Ally Sutherland, Environmental Specialist, noted Pine Bend Landfill is a Municipal Solid Waste Landfill operated by Republic Services and is located at 2495 117th St E. The landfill is currently operating under existing permits received through the Minnesota Pollution Control Agency, Metropolitan Council Environmental Services, Dakota County and the City of Inver Grove Heights. In 2018, Pine Bend Landfill requested City, County and MPCA approval to expand the landfill's side slope capacity. The City approved this request through the various approvals noted by Mrs. Sutherland. In Fall 2021, Pine Bend Landfill received the final approval, Certificate of Need, from the MPCA for this expansion.

In the first quarter of the year, Pine Bend Landfill submits an Annual Report to the MPCA to show compliance with their MPCA Solid Waste Permit. Barr Engineering completes a technical review of the Annual Report on the behalf of the City for compliance of the following items:

- Conditional Use Permit
- Non-Conforming Use Certificate
- Gas/Leachate Dual Extraction System
- Landfill Gas
- Surface Water
- Financial Assurance
- Contingency Action and Closure Plans
- Groundwater Quality

Barr Engineering's review of Pine Bend Landfill's 2020 Annual Report concluded that compliance of Minnesota Rule 7035.2815 Subpart 11, related to gas management at landfills, was not achieved. Per the landfill's CUP, until compliance is achieved, Pine Bend Landfill must present progress to City's Environmental Advisory Commission annually and report progress in their annual report. The City requested that Pine Bend Landfill present progress to achieve compliance at the June 23, 2022 Environmental Commission Meeting.

Aaron Janusz, Environmental Manager of Pine Bend Landfill, presented a powerpoint presentation to the Environmental Advisory Commission on the operational and gas migration updates at Pine Bend Landfill. Powerpoint slides were presented as follows:

Republic Services Team

- Tyler Kraft, General Manager, 4 years
- Chris Parker, Operations Manager, 2 years
- Ross Ziegenhagen, Operations Supervisor, 1 year
- Aaron Janusz, Environmental Manager, 15 years
- Gratiass Sessou, Environmental Specialist, 2 months
- Operators (8) / Mechanic (1) / Scalehouse/Lab/Laborer (3)
- Consultants - Stantec, GES, SCS

Landfill Development

- MSW Landfill
 - MPCA Permit SW-45
 - Dakota County License/Host Agreement
 - Inver Grove Heights CUP/NCUC/Host Agreement
- Landfill Started September 1971
 - Phase 1 and Phase 2 built - Unlined
- Subtitle D (Engineered (lined) Landfill)
 - Phase 3 built - 1986
 - Phase 4 built - 1999
 - Phase 5 built - 2005 (Vertical Expansion to build up the landfill)
 - Phase 6 built - 2019 (Vertical Expansion to build up the landfill)

Landfill Information

- Total Area - 358.7 acres
 - Permitted landfill - 192.1 acres
 - Current footprint - 188.9 acres
 - Final cover area - 40.0 acres
- 2,000 tons MSW per day
- 3,000 cubic feet per minute of Landfill Gas
 - Renewable Natural Gas (RNG) Plant - Fortistar plant that will convert landfill gas into 100% natural gas. Fortistar has an agreement with Xcel Energy to put the converted gas into Xcel Energy's natural gas pipeline.
- 10,000,000 gallons of leachate per year
 - Landfill leachate is hauled to MCES for treatment and disposal. The landfill hauls about 6-7 loads of leach to MCES daily.
 - 117th Street may be converted into a county road and as part of this project Pine Bend Landfill is considering installing a direct connection to the sewer system to dispose leachate instead of hauling the leachate.

Project Updates

- Certificate of Need (CON) received in 2022
- Phase 6B-2 Cell Construction - Sideslope Expansion
- Renewable Natural Gas (RNG) Plant Construction - Opal Fuels (formerly Fortistar)
- Vertical Expansion is being proposed soon
- Gas Migration Workplan updates

Certificate of Need (CON)

- MPCA Process - Required for MSW Airspace
- Pine Bend Granted 2,398,746 tons Metro MSW in December 2021
- Based on 7-yr Metro County Estimates

Renewable Natural Gas (RNG) Plant

- Renewable Natural Gas (RNG) Plant
- Opal Fuels (formerly Fortistar)- Plant Owner and Operator
- Convert Pine Bend's Landfill Gas to RNG - 18,000 tons methane per year
- 6.3 Million gasoline gallons equivalents of RNG per year
- Displaces 44,000 tons per year of CO₂
- Facility construction completed June 2022
- Currently commissioning - expect RNG to Xcel pipeline mid-July

Vertical Expansion

- Application submitted to MPCA on June 6, 2022
- Additional 85 feet elevation at highest point
- Additional 8.2 Million cy - 10 - 12 years of airspace

Gas Migration

- MN Rule 7035.2815 Subp. 11. Gas monitoring, collection, and treatment system. The concentration of any explosive gas must not exceed its lower explosion limit at the property boundary or 25 percent of its lower explosion limit in and around facility structures or any other on-site monitoring point.
 - Landfill Gas (LFG) is 50% Methane
 - Methane Lower Explosive Limit (LEL) is 5%

Gas Migration - Probe Monitoring

- 39 probes monitored quarterly
- Probes with exceedances monitored monthly
- Historical exceedances on east, south, and west side of landfill
 - Unlined area
 - Narrow buffer area
- Working with MPCA since 2006
- No off-site impacts
 - Building monitors in all on-site buildings
 - Building monitor at Recycling Center

Gas Migration - Source Controls

- Active Gas Collection
- 220 collection points - gas wells, horizontals, leachate risers
 - 2020 - Phase 4 gas header, Phase 5 horizontal collection
 - 2021 - Additional gas wells, well redrills and piping repairs
- Phase 6 Sideslope Expansion
 - Additional liner/cover
 - Additional gas wells

Gas Migration - IGH CUP

- April 9, 2018 Res. No. 18-69, Condition 14
- Compliance with MN Rule 7035.2815 for six consecutive months prior to January 1, 2025
- Annual updates to Environmental Commission
- Progress reports in MPCA Annual Report
- City review and comment on work plans and reports

Gas Migration - Timeline

- 2006 - Geoprobe investigation and “fingerprint” analysis
 - No detections across railroad tracks to the north
 - Detection near Recycling Center across railroad tracks
 - Installed building monitor at Recycling Center
- 2012 - Probe evacuation
 - Apply vacuum to two probes and monitor
 - No decrease in methane concentration
- 2013/14 - Geoprobe investigation
 - Installed more probes on east and west side of landfill
 - One exceedance on east side (Recycling Center)
 - Exceedances on West 100

Gas Migration - Timeline (with diagram)

- 2015 - Geoprobe investigation and Work Plan
 - Geoprobos at 5 locations adjacent to probes
 - Proposed installing passive vents

Gas Migration - Timeline (with diagram)

- 2016/17 - Passive Vents and Work Plan
 - Passive vents installed adjacent to MMP17. Saw a little success but not as much as expected.
 - Proposed installing wind turbines

Gas Migration - Timeline

- 2017/18 - Passive Vents and Work Plan
 - Turbines installed on passive vents at MMP17
 - Passive vents installed adjacent to MMP22 and MMP24
- 2019/20 - Monitoring
- 2021 - Workplan
 - Probes with passive vents - trending downward, with intermittent exceedances
 - Geoprobe investigation
 - Connect passive vents to vacuum source and mini-flare

Gas Migration - Timeline

- 2022 - Passive Vent Vacuum and Geoprobe Investigation
 - Radon Fans Installed on Existing Passive Vents
 - Geoprobe - Methane present in area of MMP17, potential “bubble”
 - Observing decline in methane concentration in probes near vents
- 2022 - Future
 - Additional passive vents and radon fans in locations with historical exceedances
 - Relocate MMP25
 - Continued monitoring
 - Prepare report and work plan

Gas Migration - Radon Fan

Gas Migration - MMP25 Relocation

4. Approval of Minutes

A. Minutes of Thursday, May 26, 2022, Environmental Commission Meeting

Motion by Commissioner Boehmke, seconded by Commissioner Kruse to approve the minutes from Thursday, May 26, 2022 as submitted. New Commissioners Sethre, Goodman, and Ruiz abstained.

Ayes: 5

Nays: 0 Motion carried.

5. Regular Agenda

A. New Commissioner Introductions

Commissioners Ruiz, Goodman and Sethre were welcomed as new Commissioners and were asked to introduce themselves. Commissioner Ruiz has always been interested in the environment and saw the request for environmental commissioner applications. Commissioner Goodman noted she is a Dakota County Master Recycler Composter volunteer and also participated in the Landscaping for Clean Water Program. She has always been passionate about the environment. Commissioner Sethre heard about the need for new commissioners. He sat on the Parks and Recreation Commission and Pavement Management Task Force and is looking forward to the learning experience. He also sits on the Citizens Advisory Commission for Flint Hills Refinery.

B. Continued Discussion on Future Environmental Initiatives

Ally Sutherland summarized the discussion from the May 26, 2022 Environmental Commission meeting regarding the 2023 Environmental Advisory Commission workplan. Mrs. Sutherland noted that the Commission recommended staff research the Dakota County Organics Drop Off Program and SolSmart Program. Mrs. Sutherland noted the Commission requested the discussion be continued at the June 23 Environmental Advisory Commission meeting to incorporate feedback from the new Commissioners.

Mrs. Sutherland stated the Commission should select 2023 workplan initiative recommendations by the end of 2022 and make a formal recommendation to the City Council for the Commission and Staff to pursue further research of those items. Mrs. Sutherland noted that the next steps for the Dakota County Organics Drop Off Program research is for City staff to meet with the Dakota County. She intends to set up that meeting soon and bring an update back to the Commission. Mrs. Sutherland also confirmed SolSmart is able to present to the Commission in-person, and the Commission requested SolSmart present at the August meeting.

Mrs. Sutherland shared leadership suggested the Commission consider adding the Residential and Business Sustainability Recognition Program to the 2023 workplan. The Commission suggested incorporating existing city recognition programs, such as lawn of the week, and other items from the initiatives list into parts of the recognition program. The Commission recommended staff move forward with researching these three items for the 2023 workplan.

C. Commissioners Appointments for Chair & Vice Chair

Motion by Chair Ted Trenzeluk to nominate Nichole Boehmke as Chair, seconded by Commissioner Brass. Commissioner Boehmke abstained.

Ayes: 7

Nays: 0 Motion carried.

Motion by Chair Ted Trenzeluk to nominate Sarah Brass as Vice Chair, seconded by Commissioner Boehmke.

Ayes: 8

Nays: 0 Motion carried.

6. Public Comment

7. Commissioner and Staff Comments

Commissioner Sethre shared he is familiar with former landfills, one in central Wisconsin that's a ski area, and one in Virginia that's a picnic area. He stated landfills can be repurposed in a way that is not a blight to the city. He also noted that in 2021, the Host Community Fees from Pine Bend were used to cover a \$1 million operations deficit at the VMCC. He suggests the city start preparing to not have that money available. He also shared the City of IGH Consumer Confidence Report of Drinking Water Quality was recently published and suggests the community reads it to learn about the city's drinking water. He also suggests the community read the mailed residential newsletter, INSIGHTS. Commissioner Sethre noted he will bring an update regarding Flint Hills Refinery's Citizen Advisory Commission (CAC) next month. Commissioner Boehmke noted she is a former member of the CAC.

Mrs. Sutherland asked each Commissioner if they would like to have printed agenda packets or use their own electronic devices going forward to view the packet. Each Commissioner shared their preference.

8. Adjourn

Motion by Commissioner Sethre, seconded by Commissioner Kruse to adjourn at 8:36 p.m.

Ayes: 7

Nays: 0 Motion carried.