

ENVIRONMENTAL COMMISSION MEETING

Thursday, January 22, 2009

7:00 p.m.

Inver Grove Heights City Hall, Council Chambers

A G E N D A

1. CALL TO ORDER
2. PLEDGE OF ALLEGIENCE
3. ROLL CALL
4. APPROVAL OF AGENDA
5. APPROVAL OF MINUTES
 - A. October 2, 2008
6. OLD BUSINESS
7. NEW BUSINESS
 - A. Energy Study Update
8. CITIZEN COMMENTS
9. REPORTS AND UPDATES
10. ADJOURN

Draft

ENVIRONMENTAL COMMISSION MEETING
Inver Grove Heights City Hall – Council Chambers
October 2, 2008

1. Call to Order

Meeting called to order at 7:00 PM by Chair Lesney.

2. Roll Call

Commissioners Present:

Chair Lesney, Bob Pohlman, Greg Groejes, Peter Hall, Ted Trenzeluk, Chris Wang, Brandon Wild, Mike Flaherty, Ross Berge

Staff Present:

Jennifer Emmerich, Assistant Planner
Allan Hunting, City Planner

3. Approval of Agenda

Mr. Trenzeluk moved to approve the agenda and Mr. Wang seconded the motion. Motion to approve carried unanimously.

4. Approval of Minutes

Mr. Berge moved to approve the minutes with the revisions and Mr. Trenzeluk seconded the motion. Motion to approve carried unanimously.

5. Old Business

6. New Business

A. Allied Waste Service - Consider a request for a Conditional Use Permit for a yard waste composting facility located on the property immediately west of the Pine Bend landfill.

Allan Hunting, City Planner, presented the Conditional Use Permit for a yard waste composting facility to the Environmental Commission. Mr. Hunting provided a location of the proposed facility and explained that Allied Waste would accept yard waste and compost it at their facility. He further explained the process of composting the material and stated that the proposed operation meets the City's requirements for the Integrated Resource Management Overlay District.

Tom Shustarich, from Wenk Associates stated that Allied Waste has submitted application to both the Minnesota Pollution Control Agency and Dakota County. He stated that the property will be accessed off of 117th Street with a class five gravel driveway and explained the location of all of the site amenities.

Chair Lesney asked about the grass areas and if this facility will in turn reduce the amount of yard waste going to the landfill.

Mr. Schusterage responded that yard waste had not been going to the landfill. He then stated that he had some corrections to some information submitted to the Planning Department. First, the rows of material would be 16' wide and 10' high. Second, when calculating the capacity, he used an average pile height of four feet, but that realistically, the piles could be up to ten feet high. Third, Mr. Schusterage requested that the condition regarding the hours of operation be amended to allow the delivery of yard waste until 7:00 PM. The fourth item was regarding the final building. He stated that Allied Waste is looking at a two-sided building instead of a three-sided building.

Erik Schuck of Allied Waste came to the podium and spoke regarding the benefits of the facility. He stated that they would be doing a biological accelerated carbon stabilization facility (BACS) because it is the best process for the environment and it will produce a product that is superior to conventional processes. He further stated that the process would reduce carbon dioxide and volatile organic compound (VOC) emissions and fossil fuel consumption and odor.

Chair Lesney asked about the reduction of carbon dioxide emissions is above the natural decomposition of the organic matter.

Mr. Hill of Indiana University stated that it's based on the normal loss of carbon dioxide and VOCs. He further stated that the more the matter is turned, the more carbon dioxide and VOCs are emitted and because the BACS process does not turn the product as often, there are fewer emissions.

Chair Lesney asked if the BACS process would accelerate the amount of bacteria that consume the organic matter.

Mr. Hill said that it would accelerate the process two ways. First, the reduction in turning the material results in more active decomposition and, second, there are more enzymes present for breakdown.

Mr. Hall asked if speeding up the process would increase in heat and the potential for fire danger.

Mr. Hill stated it would not increase the potential for fire danger and that the BACS process would actually stabilize the temperature and reduce the potential for fire.

Mr. Groenjes asked how they will stop the system from becoming anaerobic when the matter is only turned once every six weeks.

Mr. Hill explained that the system stays aerobic by arranging the pile in a certain manner. He further stated that they have processed over six million tons of matter via the BACS process.

Mr. Groenjes asked how the pile is created.

Mr. Hill stated that to a certain extent, the pile naturally forms properly when it is dumped off of the end loader. Additionally he stated that by keeping a certain percentage of wood in the pile, a certain level of porosity will be maintained.

Mr. Schuck added that they specifically would have a separation of piles of material to maintain the proper mix. He also commented that Allied Waste accepts the conditions in the planning report, but would ask that the hours of operation be extended for the acceptance of waste. Additionally, he asked that the odor testing be completed only if a complaint about odor at the facility is made.

Mr. Hall expressed his concerns about the noise and extending the hours of operation and the odor.

Mr. Schuck confirmed that the extension of the hours of operation would mostly be for the residents to drop-off of material, not to run their equipment. He further stated that there is not a correlation between the height of the piles and the level of odor.

Mr. Hill stated that the proposed process is not new; facilities have been implementing it since 1998. He further stated that the process does not produce odor like a normal composting facility and he could provide data that proves this.

Mr. Trenzeluk asked how late Pine Bend Landfill is open.

Mr. Schuck said that it accepts waste until 7:00 PM.

Mr. Trenzeluk asked how long it would take to remedy an odor situation if complaints were received.

Mr. Schuck said that parameters to address that could be set in the conditions.

Chair Lesney asked about the comment regarding odor in the Barr Engineering report. The report states that Barr Engineering cannot confirm that odor would not be an issue at the site.

Jeff Ubl from Barr Engineering stated that they have experience with composing facilities, but not with BACS facilities and that they do not have information to determine if odor would be an issue.

Chair Lesney asked about Barr's recommendation to submit air quality testing.

Charlie Ganzer of Barr Engineering stated that the air quality study would look at the area and the size of the piles to determine the odor being emitted. He further stated that the information shown by Allied Waste was concentrations of certain odors, but not the actual amount of odor getting into the air. The recommended Calpuff test would do that and it specifically addresses odor levels at calm conditions.

Chair Lesney asked about the specific Calpuff test.

Charlie Ganzer stated that there are two models that they could do and that Barr is recommending the more expensive, more time-consuming tests.

Mr. Hall asked if the report being requested is a higher-quality report.

Charlie Ganzer said that because they are requesting information regarding odor, the necessary tests are more intense. However, the tests being requested have been done elsewhere.

Mr. Schuck stated that Barr Engineering's requirements are out of the ordinary for what is normally required of their facilities and that most BACS facilities are not required to do the Calpuff testing. He further stated that Calpuff testing is usually used on facilities that take in blood or other organic matter, like slaughterhouses.

Mr. Flaherty asked about the proximity of residences for the data submitted by Allied Waste.

Mr. Hill stated that one of the facilities in the data had residences approximately 1,000 feet from the facility and that some of the facilities have residences within 300 feet.

Chair Lesney asked if they have received complaints from residents next to those facilities.

Mr. Hill said that they probably have had complaints, but that they have had a significant reduction in complaints in the facilities where they switched to a BACS process.

Mr. Hall inquired about the contingency plan.

Mr. Schuck stated that there are topical applications that can be applied to reduce odor.

Mr. Berge asked about the noise level of the shredding process.

Mr. Shustarich stated that they sent a noise analysis to Barr Engineering. That report stated that at 50 feet, the noise level would be similar to a front end loader

Mr. Wilde asked about the level of trucks entering and exiting the site.

Mr. Schuck stated that they run approximately 30 vehicles but that not all of the vehicles go to that facility.

Mr. Pohlman asked if the operation is seasonal.

Mr. Schuck said that it is seasonal and that they do not collect material from December 1 to April 14.

Mr. Hall moved to approve the application with all of the conditions set forth in the planning report. Mr. Wilde seconded the application.

Mr. Trenzeluk stated that he is in support of extending the hours.

Mr. Groenjes stated that he is less concerned about the odor at the BACS facility than previous landfill applications and would support doing the Calpuff testing only if there is an odor problem.

Mr. Hall expressed his concerns with noise if the hours of operation are extended.

Mr. Trenzeluk stated that he likes to have the option to bring his stuff in after 5:00 PM.

Chair Lesney stated that she also supports extended hours of operation and gave an example of a storm event that required extensive amounts of debris being taken to a composting facility.

Motion failed 4-5 (Groenjes, Wang, Pohlman, Lesney, Trenzeluk)

Mr. Trenzeluk moved to approve the facility with the hours operation being extended to 7:00 PM. Mr. Wang seconded the motion. Motion approved 6-3 (Hall, Wilde, Berge).

7. Citizen Comments

8. Reports and Updates

9. Adjourn

Mr. Pohlman moved to adjourn at 8:20. Mr. Hall seconded the motion. Motion approved unanimously.

MEMO

To: Environmental Commission

From: Jennifer Emmerich

Date: January 16, 2009

RE: ENERGY STUDY UPDATE

As you are aware, the City received a grant to conduct an energy study for the city facilities, school facilities, Inver Hills Community College and the library. The purpose of the study is to determine if there are ways in which these organizations could save money on energy costs - either by reducing consumption or installing renewable energy sources. Ed Cook of Cook and Associates was hired to conduct the study and he is in the process of reviewing the potential options and the costs associated with them. Attached is a spreadsheet with some general information regarding the different renewable energy types. Please be aware that this is a draft review of the options and that the figures are approximate.

At our meeting on January 22, 2009, I will be presenting additional information regarding the different renewable energy sources. Also, Ed Cook will be available to answer any questions you might have regarding renewable energy sources.

Inver Hills Community College
Alternative Energy Options - Summary of Costs/Capacities

	Wind		Solar		Biomass (as fuel source)	Geothermal (Geoexchange) Small office bldg.- new construction
	20 kW	40 kW	Photovoltaic	Thermal		
Typical system investment	\$100,000	\$150,000	\$80 - 160,000	\$100 - 200,000	\$2 - 3 million	70 to 80% more than conventional
Cost per kWh/ MMBtu generated	\$0.12 to \$0.15/kWh		\$0.15 to \$0.25 /kWh	depends on raw fuel cost	varies	7% less than conventional
System capacity range, kW, or tons	10 to 40 kW		limited by available space usually 10 - 20 kW	200 Mbtu/hr	any capacity	available in any size
Payback period, years	15 - 20 years	15 - 20 years	15 - 25 years	15 - 25 years	depends on fuel source	35 years, using life cycle costs
Life of system	25 - 30 years	25 - 30 years	25 - 40 years	20 - 30 years	15 - 20 years	30 years - heat pumps 50+ years - well field or loop
Cash incentives	Production Incentive credit MN Dept. of Commerce \$0.015 /kWh	Production Incentive credit MN Dept. of Commerce \$0.015 /kWh	Xcel Energy rebate; Mn Dept. of Commerce \$2.25/watt \$22,500 cap	none	limited	\$10 per ton, utility prescriptive rebate
Considerations	Tower height Mechanical failure Susceptibility to lightning strikes Noise generation Ice formation on blades Bird migratory patterns Permitting and regulatory approvals		Location of panels Appearance of support structure Ice/snow removal from panels	Use of low grade heat during summer months Location of panels Appearance of support structure System maintenance	Purchasing/ delivery of biomass materials Ash disposal Emission control Permitting and regulatory approval	Space for core pipe loop or well field Difficulty of application to centralized steam system

December, 2008

