

CITY OF WILLMAR

**Planning and Development Services
City Office Building
333 SW 6th Street
Willmar, MN 56201
320-235-8311**

COUNCIL ACTION REQUEST

DATE: August 23, 2016

SUBJECT: Proposal to Construct Waste Bioconversion Facility Near WWTP

RECOMMENDATION: N/A

BACKGROUND: Energy and Organic Systems, LLC (EOS) proposes to build a waste conversion facility at or near the WWTP. Representatives of EOS will present information about their proposal, as well as request City consideration of the leasing of land and providing biosolids. Because of the impact on the WWTP, this development proposal was directed to the Public Works/Safety Committee.

FINANCIAL CONSIDERATION: No municipal financial participation is requested.

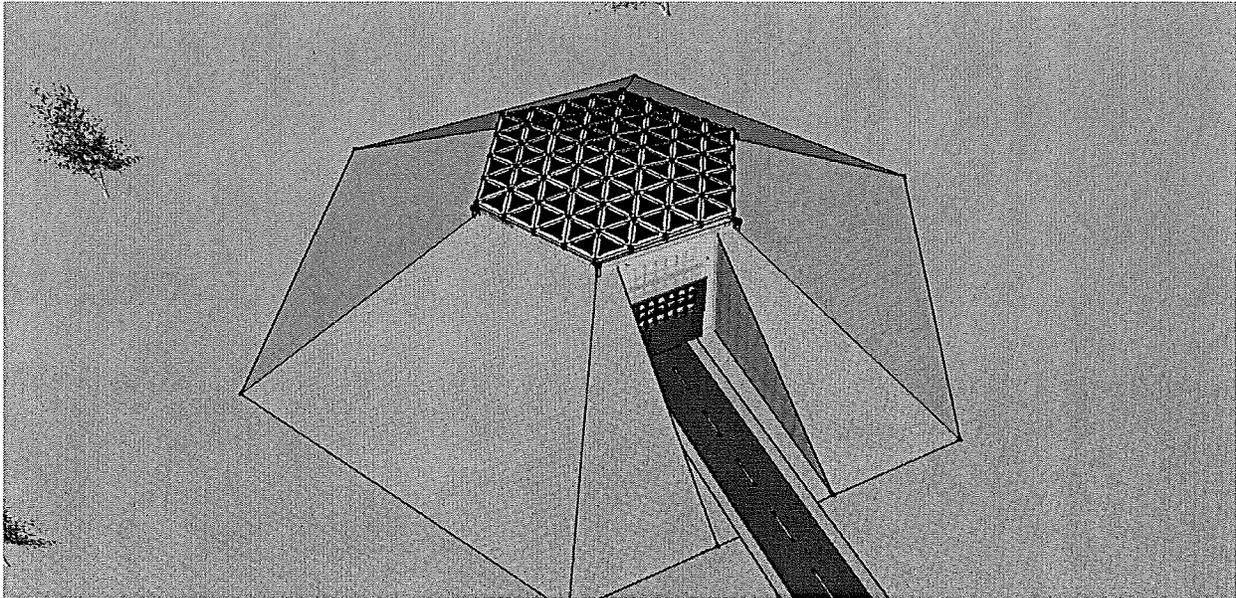
LEGAL: Specific issues will require legal agreements.

DEPARTMENT/RESPONSIBLE PARTY: Bruce D. Peterson, AICP – Director of Planning and Development Services

Facility Development Proposal

(Preliminary)

July 26, 2016



EOS 1stLight18sv Organic Waste Bioconversion Facility

To: City of Willmar, Kandiyohi County, MN

From: Energy & Organic Systems, LLC (EOS)

Proposed: Energy & Organic Systems, LLC (EOS , Minneapolis, MN) proposes to the City of Willmar (Kandiyohi County, MN) to build and operate, in perpetuity, a 1stLight 18 cell waste bioconversion facility (1stLight 18lv) on the Brush Creek Site, adjacent the wastewater treatment facility currently in operation on the site.

The Specifications of the 1stLight 18lv facility proposed herein are:

Containment Cells: 18 ea. Large volume HDPE plastic, interconnected digestion cells

Facility Maximum Volume: 160,974 gallons

Facility Operating Volume: 156,949 gallons

Anticipated Daily Feedstock Input: 16,239 gallons

Average Estimated Feedstock Digestion Time (SRT): 4.04 days

If it receives preliminary approval from the City of Willmar, EOS will immediately begin work on:

(a.) Lease Agreement: A lease agreement with the City of Willmar that will provide access to a land parcel (plus easement) at the Brush Creek Site on which to build and operate a 1stLight 18lv facility. The parcel required will be between 1 and 1.5 acres to accommodate the 188’ diameter hexagonal facility and a 275 ft. diameter earthen berm to surround the facility. The site must also be suitable for an on-site 200’ diameter x 20’ deep excavation remaining above the water table. The specific location, lease cost and term will be suitable to both parties.

(b.) Engineering Drawings: Prepare a complete set of engineering drawings covering all details of facility construction and operation.

(c.) Feedstock Contracts: Prepare contracts to define the acquisition and processing of specific feedstock varieties and volumes suitable for the successful operation of the facility in perpetuity, estimated to be 95%+.

Below is an estimate of the feedstock types and volumes suitable for the successful operation of a 1stLight 18lv facility, including the industrial biosolids, municipal biosolids, presumed MSW materials from the Brush Site plus one other possible feedstock from the area:

Brush Creek Facility Feedstock Volumes			Feed Dry Weight	
Selected Feedstock	Daily	Annual	Daily	Annual
Municipal Biosolids	226 tons 54161 gallons	8,240 tons 1,976,872 gallons	16 tons	555 tons
Industrial Biosolids	282 tons 67485 gallons	10,278 tons 2,463,218 gallons	14 tons	521 tons
Jennie O Turkey Fat	130 tons 31155 gallons	4,745 tons 1,137,139 gallons	98 tons	3,538 tons
Grass & Tree Clippings	40 tons 9586 gallons	1,460 tons 349,890 gallons	24 tons	876 tons
Volume Totals	67.8 tons 16,238.7 gallons	24,732.4 tons 5,927,119.7 gallons	151 tons	5,520.7 tons

(d.) Facility Product Sales Contracts: Identify and begin negotiations with potential buyers of the green products generated by the 1stLight 18lv facility. It is anticipated that the potential products of value will include many – or all – of the following:

- 1) Methane-rich biogas
- 2) Green CNG (Compressed Natural Gas)
- 3) Liquid Organic Fertilizer

- 4) Granular Dry Organic Fertilizer
- 5) Distilled Water
- 6) Irrigation Water
- 7) Compressed (Bottled) Carbon Dioxide
- 8) Solar Panel Electricity (Facility Rooftop)
- 9) Remediation (Tipping) Fees:

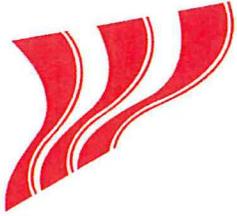
Below is the estimated daily and annual production output from the proposed 1stLight 18lv facility:

Bush Creek Facility Production		
1stLight Production	Daily	Annual
Green CNG:	303.3 mmbtu	110,714.5 mmbtu
Liquid Organic Fertilizer :	7,525 gallons	2,736,663.7 gallons
Distilled Water :	6,000.0 gallons	2,190,000.0 gallons
Discharge (Irrigation) Water:	0.0 gallons	0.0 gallons
Solar Panel Power :	1,200.0 KWH	439,900.0 KWH

The following statements will further define the terms of this proposal:

1. All of capital required to build the 1stLight 18lv facility shall be the obligation of EOS and its investors.
2. All revenues earned by the 1stLight 18lv facility shall be the property of EOS and its investors.
3. All costs associated with operating the 1stLight 18lv facility shall be the obligation of EOS and its investors.

4. EOS anticipates the hiring of one or two employees from the Willmar area to assist in plant supply & operation.
5. EOS anticipates that the components for the construction of this first facility will, in large part, be assembled in the Willmar area, and that the EDC or other affiliates of the City, will assist EOS with this task.
6. EOS anticipates that Willmar and/or Kandiyohi County will provide EOS and/or the 1stLight 18lv facility, with tax advantages and/or other inducements for locating the company's 1st facility and initial component manufacturing in the Willmar Area.
7. EOS is obligated to successfully build and operate the 1stLight 18lv facility for a period of time to be negotiated with the City. If, for any reason, EOS fails to successfully build and/or operate the facility, the company and its investors will remove the facility and restore the building site to its original state.
8. EOS expects that the bioconversion (digestion) of some or all of the feedstock passing through the plant will result in reducing one or more operating costs for the City and/or its industrial affiliates. If so, EOS expects to receive a significant share of these savings, which may include one or more of the following:
 - a. Remediation Costs associated with biosolids processing.
 - b. Remediation Costs associated with MSW processing. *grass & brush & leaves*
 - c. Remediation Costs associated with Kandiyohi County industries.
 - d. Biogas supplied by the 1stLight 18lv facility to Willmar municipal entities (i.e. WWT Facility) and/or Kandiyohi County industries.
 - e. CNG (transportation fuel) supplied to Willmar municipal entities (i.e. WWT Facility) and/or Kandiyohi County industries.
 - f. Water resources supplied to Willmar municipal entities (i.e. WWT Facility) and/or Kandiyohi County industries.
 - g. Excess electric power supplied to Willmar municipal entities (i.e. WWT Facility) and/or Kandiyohi County industries.



WILLMAR



Police Chief

Willmar Police Department
2201 23rd Street NE, Ste 102
Willmar, MN 56201
Main Number 320-214-6700
Fax Number 320-231-6556

COUNCIL ACTION REQUEST

DATE: August 23, 2016

SUBJECT: Walmart Grant Application for DARE program

RECOMMENDATION: Recommend approval for the Willmar Police Department to apply with the Wal-Mart Foundation for a \$1,000 grant for the DARE program.

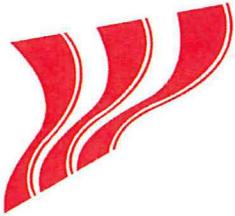
BACKGROUND: The Willmar Police Department has been active in the DARE program since 1990, teaching 5th grade students in the Willmar Schools. The Wal-Mart Foundation has been a regular contributor for over 10 years to the DARE program. If approved, grant funds would be used for instructor training and development and curriculum materials for students.

FINANCIAL CONSIDERATION: Current funding for the DARE program is a combination of the Wal-Mart Foundation grant, miscellaneous donations and drug fine proceeds received by the court which varies through fines collected. If not approved, alternate grants & donations may be needed for funding.

LEGAL: N/A

Department/Responsible Party: Jim Felt, Police Chief

Reviewed By: Larry Kruse, City Administrator



WILLMAR

Police Chief

Willmar Police Department
2201 23rd Street NE, Ste 102
Willmar, MN 56201
Main Number 320-214-6700
Fax Number 320-231-6556

COUNCIL ACTION REQUEST

DATE: August 23, 2016

SUBJECT: Walmart Grant Application for Shop with a Cop program

RECOMMENDATION: Recommend approval for the Willmar Police Department to apply with the Wal-Mart Foundation for a \$1,000 grant for the Shop with a Cop event.

BACKGROUND: The Willmar Police Department has participated with the Willmar Wal-Mart for over 10 years in the Shop with a Cop program. For this program, officers volunteer their time to assist an underprivileged child in shopping for holiday gifts for the child's family. Gift cards for merchandise are provided through the grant.

FINANCIAL CONSIDERATION: No matching grant requirements or other financial obligations. All Willmar PD time is volunteered.

LEGAL: N/A

Department/Responsible Party: Jim Felt, Police Chief

Reviewed By: Larry Kruse, City Administrator



WILLMAR

Public Works Director

City Office Building
333 SW 6th Street
Willmar, MN 56201
Main Number 320-214-5160
Fax Number 320-235-4917

COUNCIL ACTION REQUEST

DATE: August 23, 2016

SUBJECT: Projects of Regional Significance Sales Tax Marketing Discussion

RECOMMENDATION: It is respectfully requested the City Council consider the following recommendation:

Receive for information only.

BACKGROUND: Discussion of marketing strategies for projects of regional significance.

FINANCIAL CONSIDERATION: N/A

LEGAL: N/A

Department/Responsible Party: Sean E. Christensen, Public Works Director

Reviewed By: Larry Kruse, City Administrator